ELWM



Final Environmental Impact Statement

Elwha River Ecosystem Restoration

Olympic National Park • Washington

June 1995

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Final Environmental Impact Statement

Elwha River Ecosystem Restoration

Purpose and Need: The Elwha River ecosystem and native anadromous fisheries are severely degraded as a result of two hydroelectric dams (projects) and their reservoirs built in the early 1900s. Congress has mandated the full restoration of this ecosystem and its native anadromous fisheries through the Elwha River Ecosystem and Fisheries Restoration Act (Public Law 102-495). The Department of the Interior therefore finds there is a need to return this river and the ecosystem to its natural, self-regulating state, and proposes removing both dams to accomplish this purpose and fulfill the congressional mandate.

Proposed Action: The U.S. Department of the Interior proposes to fully restore the Elwha River ecosystem and native anadromous fisheries through the decommissioning of Elwha Dam and Glines Canyon Dam and removal of all structures necessary, including all or part of both dams, powerhouses, reservoirs, and associated facilities to achieve this purpose. The proposed action is located in Clallam County, on the Olympic Peninsula, in Washington State.

Lead agency: National Park Service

Cooperating agencies: U.S. Fish and Wildlife Service, U.S. Bureau of Reclamation, U.S. Bureau of Indian Affairs, U.S. Army Corps of Engineers, and the Lower Elwha S'Klallam Tribe

Type of statement: This is a final environmental impact statement. In preparing this, the Department of the Interior has adopted the majority of a draft environmental impact statement titled "Proposed Elwha (FERC No. 2683) and Glines Canyon (FERC No. 588) Hydroelectric Projects, Washington" as updated and renamed Draft Staff Report in March 1993 prepared by the Federal Energy Regulatory Commission. Also incorporated into the record of this environmental impact statement is the Elwha Report and its appendixes, prepared by the U.S. departments of the Interior and Commerce and the Lower Elwha S'Klallam Tribe (Jan. 1994). This environmental impact statement supersedes both the Federal Energy Regulatory Commission environmental impact statement and the Elwha Report.

Abstract: In addition to the proposed action, four other alternatives are examined. They are: Dam Retention with mitigation measures installed for fish passage, Removing Glines Canyon Dam only and installing fish passage measures at Elwha Dam, Removing Elwha Dam only and installing fish passage measures at Glines Canyon Dam, and No Action (dams are retained without fish passage measures). The proposed action is also the Department of the Interior's "preferred alternative." Short term negative impacts from removing both dams could occur from sediment built up behind them. If sediment is allowed to erode naturally, the finer grained particles, such as silt and clay, could temporarily but significantly impact fish or other aquatic organisms. Impacts on water quality, river morphology, native anadromous and resident (i.e., trout and char) fisheries, living marine resources, wildlife, threatened and endangered species, vegetation, cultural resources, land use, recreation, esthetics, socioeconomics and river ecology are also examined in this environmental impact statement. Alternatives other than the proposed action may also have significant impacts on each of these resources.

Difference between the Final and Draft Environmental Impact Statement: Comments were taken both orally and in writing for a period of 60 days on the draft environmental impact statement released in October 1994. The comment period ended December 23, 1994. Substantive comments were responded to both in a question and answer format and/or by making changes, additions or corrections in the text of the draft environmental impact statement. The changed draft is this document, Interior's final environmental impact statement.

United States Department of the Interior • National Park Service • Denver Service Center

Summary





Elinor Chittenden displays a steelhead caught in 1907, before the Elwha Dam was constructed.
(Asahel Curtis photo, Washington State Historical Society)

Previous page: Glines Canyon Dam construction, caption: "water overflowed -- workers rescued"
(Clallam County Historical Society)

Summary

In the early 1900s, the free-flowing Elwha River on the Olympic Peninsula in Washington State was blocked with two hydroelectric dams (See Figure 1). The Elwha Dam was built 4.9 miles from the mouth of the Elwha River beginning in September 1910. It impounded the reservoir known as Lake Aldwell. Construction on Glines Canyon Dam, 8.5 miles farther upstream, began in 1926, creating the reservoir known as Lake Mills. Although the dams helped in the early development of the peninsula, the presence and operation of the hydropower projects cause severe problems for anadromous fish, the ecosystem, and the Lower Elwha S'Klallam Tribe.

The dams block the migration path for several species of salmon and trout, which, after maturing in the ocean, return to the Elwha to lay their eggs (spawn). Migrating fish such as these are anadromous. The dams also prevent or limit the downstream flow of nutrients, sediment, and woody debris the fish need to successfully spawn and rear juveniles, inundate fish habitat and result in elevated temperatures downstream. The Elwha River was used by 10 runs of salmon and trout before the dams were built. The fish fed more than 22 species of wildlife and were the basis of much of the culture and economy of the Lower Elwha S'Klallam Tribe.

Chances for restoring 9 of the 10 runs of fish are rated as either "good" or "excellent" if both dams are removed.

Because of the dams, the flow regime of the river changed from active meandering in many places to less active and more channelized. Reduced sediment supply from the river has caused the eastern edge of the pre-dam Elwha delta to erode, and the barrier beach at Freshwater Bay to recede and steepen. It has also contributed to the erosion of Ediz Hook, the sand spit that protects Port Angeles Harbor.

In recognition of these problems, the Department of the Interior finds, consistent with congressional intent expressed in the Elwha River Ecosystem and Fisheries Restoration Act (P.L. 102-495; see Appendix), a need to fully restore the native anadromous fisheries and Elwha River ecosystem. For the purposes of Elwha River restoration, "full restoration" is interpreted by the Department of the Interior to mean reestablishment of natural physical and biological ecosystem processes, including recovery of the terrestrial and riverine habitat currently inundated by the reservoirs. Since the wildlife habitat and river upstream of the dams are in nearly pristine condition, removing the dams and fully restoring the 10 runs of salmon and trout would fully restore the Elwha River ecosystem. It would also return the cultural and economic focus of the Lower Elwha S'Klallam Tribe, uphold the federal trust responsibility to affected Indian tribes, and provide substantial long term benefits to sport fishing, tourism, and the local economies associated with these activities.

The National Park Service has the lead in preparing this final environmental impact statement, which is a programmatic or policy environmental impact statement. The majority of the March 1993 Federal Energy Regulatory

Commission Draft Staff Report was adopted as part of this document. The Elwha Report and its appendixes, prepared by the U.S. departments of the Interior and Commerce and the Lower Elwha S'Klallam Tribe (Jan. 1994), were also incorporated. Material in this document supersedes both that in the Draft Staff Report and in the Elwha Report.

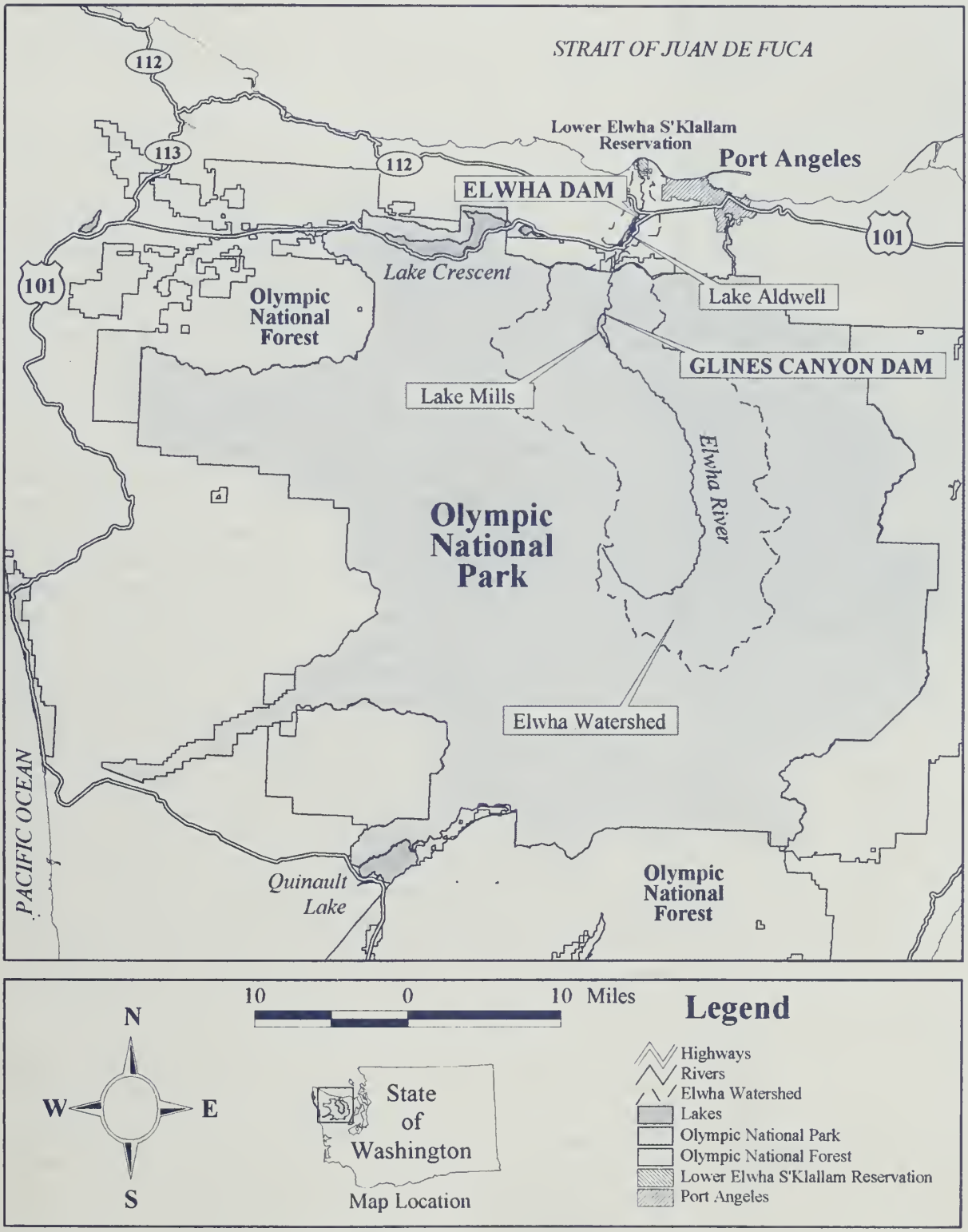
If the decision maker, the secretary of the interior, chooses the Proposed Action of removing both dams, the National Park Service will prepare a second environmental impact statement, the "Implementation EIS," that would examine options for implementing the decision.

Several alternatives for restoring fish habitat are examined in this programmatic impact statement. Only one alternative has the potential to fully restore Elwha native anadromous fisheries--the **Proposed Action** of removing both the Elwha and Glines Canyon dams. Chances for restoring nine of the ten runs of fish are rated as either "good" or "excellent" if both dams are removed (sockeye salmon suffer from potential stock limitation and habitat problems outside the confines of the Elwha River project and, therefore, have only "poor" to "fair" chances of returning in pre-dam numbers). Removing both dams would also restore natural flow conditions in the Elwha River.



Elwha Dam and Power Plant, 1995. (Maggi Johnson photo)

Figure 1. *Location Map*
Olympic National Park
United States Department of the Interior • National Park Service
DSC • June 1995 • 149 • 20055A



Because federal agencies examine a full range of reasonable alternatives in an environmental impact statement, the National Park Service also analyzed leaving the dams in place and installing fish passage facilities, as well as removing each dam separately. These alternatives are **Dam Retention** (with passage facilities installed at both dams), **Removal of Elwha Dam**, and **Removal of Glines Canyon Dam**. **No Action**, or leaving the dams in place without mitigation measures (as they are now), was also analyzed to provide a basis for comparing all action alternatives.

The chances of restoring native anadromous fish drop substantially under each of these alternatives. None of the ten runs has a good or excellent chance of full restoration if fish passage measures are installed (i.e., the **Dam Retention** alternative) or if **Elwha Dam alone is removed**. Although there is a good chance that both winter and summer runs of steelhead could be restored if **Glines Canyon Dam were removed**, the remaining eight runs do not fare as well. For all alternatives except **Proposed Action**, mortality associated with fish passage and poor habitat is likely to drive the Elwha pink salmon stock to extinction (if it is not already) and chum salmon stock to extremely low levels or extinction.

Anadromous fish populations would return to normal if the dams were removed, and other features of the ecosystem would benefit as well. Natural sediment transport conditions would be reestablished if the dams were removed. This would restore needed spawning gravel and woody debris for fish, and also replace sand missing from the river's estuary, nearby beaches, and the nearshore environment as far east as Ediz Hook. The estuary would grow to its pre-dam size and once again serve as an important transitional habitat between fresh and salt water for many species of fish and other aquatic organisms. Instead of a stable channel, the Elwha River would return to its active meandering morphology, creating the riffles, pools, and slower moving side channels that many anadromous fish prefer for spawning and rearing.

Draining the reservoirs and returning the river and surrounding land to pre-dam conditions would reduce downstream temperatures in the river, immediately restore more than five miles of stream habitat, and provide access to 70 miles of usable river, greatly benefiting fish. Within three years, revegetation of the reservoir lands would take firm hold; natural succession of a mix of riparian and upland terrestrial habitat would start. Now, 715 acres of potential wildlife habitat are occupied by the reservoirs and dam facilities. If the dams were removed, these acres would return for use by native mammals and other terrestrial species.

With the reintroduction of salmon and trout throughout the river's length, wildlife would again benefit from the year-round, stable food source these fish once provided. Threatened or endangered animals such as bald eagles would benefit directly from an increase in available prey, others from the creation of additional habitat. Eventually, restored forest lands would benefit the threatened marbled murrelet and northern spotted owl.

Some negative impacts might occur from the **Proposed Action.** The dams are considered a historic resource, as they are examples of early hydropower plants. Although important features would be documented and recorded, removal would result in the loss of the dams and power plants. The average annual power produced, 172 gigawatts, or 43% of the power needs for the Daishowa paper and pulp mill in Port Angeles, would also be lost. The reservoirs, which would be drained if the dams are removed, are a recreational resource to flat-water boaters and anglers, as well as winter habitat for the trumpeter swan.

With the dams gone, sediment built up over the last 80 years would be released into the river, though finer sediment could be dredged and removed. If fine sediments (silt and clay) were released uncontrolled, they could kill adult and juvenile fish, their eggs, and other aquatic life. This would be a temporary but severe impact.

Released sediment could also affect surface water users, including the city of Port Angeles and its industrial customers. Several mitigation options are under consideration for analysis in the Implementation EIS, but the Department of the Interior is bound by the Elwha Restoration Act (i.e. the Elwha River Ecosystem and Fisheries Restoration Act; PL 102-495) to ensure that municipal and industrial users are protected from adverse impacts to existing water quality and availability that might occur if the dams were removed.



Cedar Tree, Elwha River.
(Clallam County Historical Society)

If the dams were removed and upstream sediment flowed into the middle and lower river, the riverbed itself might rise to pre-dam levels, which has been estimated to be on the order of 1 to 5 feet above the present level. A raised riverbed would raise the water level also, and localized flooding could occur more frequently.

In addition to achieving the congressionally mandated goal of restoring both the native anadromous fisheries and ecosystem, the **Proposed Action** would have long-term positive impacts on the local economy through increases in tourism, commercial and recreational fishing; river recreational access; improvement of esthetics; uncovering of tribal cultural resources now buried or inaccessible; and aiding the very depressed tribal economy. Any potential safety risk posed by the dams (although now considered safe, earthquake risk is being reexamined) would be eliminated. The volume of water currently available to users, and high flow volumes (i.e., large floods) would remain the same as now, as the dams have a very limited ability to store water.

The following discussion summarizes environmental problems that each alternative might create for a particular resource (such as water quality). A comparison of impacts, or the extent of these problems, for each alternative is located in chart form beginning on p. 22 of this document.

Summary of Issues

Issues are environmental problems which might occur if the **Proposed Action** or any of the alternatives are undertaken. The expected extent of these problems is called impact. Impact analyses predict how severely a particular environmental resource (i.e., water quality) would be affected with implementation of each alternative. A description of issues follows; impacts are discussed in the chapter titled "Impacts of Each Alternative".

Geology, River Morphology, Hydrology & Water Quality

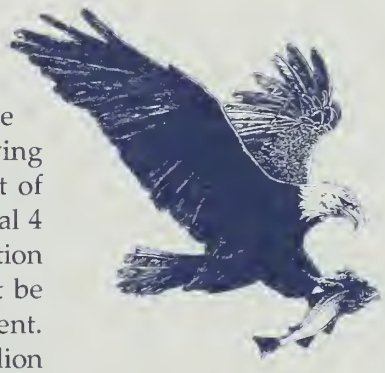
The dams have limited coarse-grained sediment and woody debris from flowing downstream of river mile 13.4, the location of Glines Canyon Dam. As a result, cobbles, gravel, and sand have built up in deltas where the river or tributaries enter the reservoirs. Salmon and trout are denied the spawning gravel needed to successfully reproduce. Erosion of coastal features such as Ediz Hook and beaches near the mouth of the river is exacerbated.

Approximately 17 million cubic yards of clay, silt, sand, gravel, and cobbles are now (1994) trapped in the two reservoirs, most behind Glines Canyon Dam. Some portion of this sediment would be released into the river should the Proposed Action or single dam removal alternatives be implemented. The Elwha Report investigates three ways to manage this sediment: (1) eroding the material to the Strait of Juan de Fuca, (2) mechanically removing the material by dredging and slurrying to either a terrestrial or saltwater site, or (3) stabilizing the sediments within the confines of the existing reservoirs.



Fishing the Elwha in the 1920's. (Asahel Curtis photo, Washington State Historical Society)

Any of these options for implementing the Proposed Action would return gravel and help halt erosion of coastal features over time. However, each may have different short-term impacts to both fisheries and water quality.



The erosion option would supply material to the river, but would also have a potentially adverse impact on water quality and on spawning or rearing fish through the release of fine-grained sediment (silt and clay). The stabilization and removal options would not have these impacts to the same degree, but restoring spawning gravel would take longer. Removing only Elwha Dam would allow the release of a relatively small amount of sediment (2 to 3 million cubic yards; or one-half to two-thirds of the total 4 million cubic yards estimated behind Elwha Dam) into a relatively short section (4.9 miles) of river. This material would wash out to the strait and not be replenished since Lake Mills would continue to trap upstream sediment. Removing only Glines Canyon Dam would release a larger volume (7-9 million cubic yards; or one-half to two-thirds of the total approximately 13 million cubic yards behind Glines Canyon Dam) of sediment into the middle river. Until Lake Aldwell filled, this material would be trapped behind Elwha Dam. However, sediment eventually would pass through the penstocks and over the spillways of Elwha Dam and flow into the lower river and nearshore marine environment.

Removal of both dams would positively affect native anadromous fish by returning spawning gravels throughout the lower and middle Elwha River, lowering water temperatures, and restoring fish habitat. Returning anadromous fish would also cause changes to river water over the long term through the addition of organic material and nutrients such as phosphorus and nitrogen. Biological productivity would increase as a result.

Water users could be affected by silt and clay for a short time, but the Elwha Restoration Act requires mitigation for adverse impacts to municipal and industrial users.

Water quality may also change over time. Although a portion of suspended sediment now flows over the dams and downstream, removing the dams would result in a larger fraction of this finer material being transported to the middle and lower river and out to sea. However, since elevated turbidity levels from the natural river would generally occur only during high flow periods, there would be little if any noticeable effect during low flow periods.

Releasing stored sediment behind either or both dams would also cause the riverbed to "aggrade" or rise in some places. This would elevate river levels as well, possibly causing more frequent localized flooding.

Native Anadromous and Resident Fisheries Resources

Currently, there are no salmon or seagoing trout in either the middle (between the dams) or upper (upstream of Lake Mills) reaches of the river because of the dams. Installing fish passage facilities on the dams could provide native anadromous fish access to unused habitat in the Elwha. At the same time, passage measures could harm or kill juveniles trying to reach the sea or adults moving upriver. Juveniles would also experience increased mortality negotiating the reservoirs, even with passage measures. Different levels of mortality due to passage for each species would be expected under different alternatives.

Sources of either Elwha native or very closely related stocks of all ten runs are available. With in-river fishing controls and management of the species' ocean harvest, nine of ten have good or excellent chances of full restoration if the dams are removed. This is because freshwater habitat, not conditions in the marine environment, is the primary limiting factor for North Coast anadromous fish over the long term.



Glines Canyon before dam. (Daishowa/ James River Company Photo)

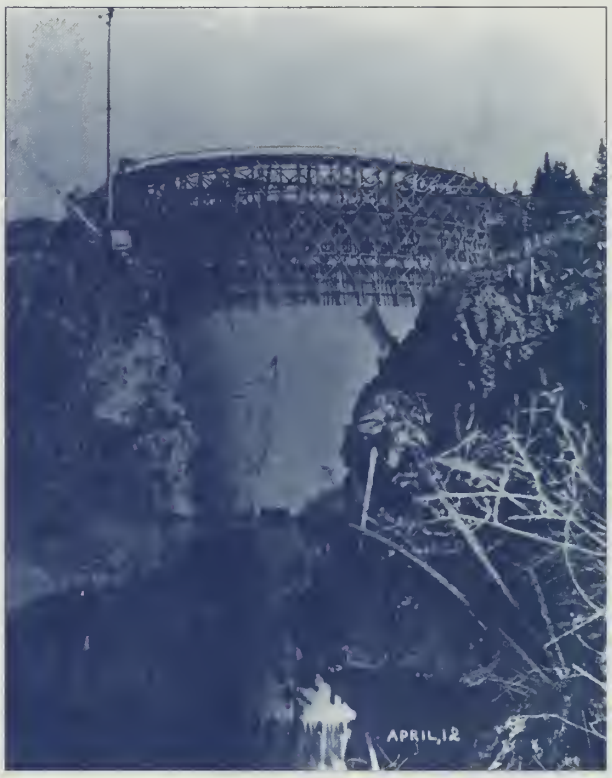
Elwha sockeye salmon require access to Lake Sutherland to complete their reproductive cycle. Removing the dams would allow unobstructed access to Lake Sutherland, but stock availability may limit restoration success.

The single dam removal alternatives and the Dam Retention with mitigation (i.e., fish passage facilities) alternative all pose passage problems that cause high levels of mortality for all runs. These would not restore habitat to the same extent as the Proposed Action. Removing Glines Canyon Dam would restore natural transport of spawning gravel and woody debris to the middle river, but Elwha Dam would continue to block material from entering the lower river or marine

environment. The 2.8 miles of still water in Lake Aldwell and fish passage at Elwha Dam would be difficult for sockeye and chinook to navigate and virtually impossible for pink and chum.

Removing Elwha Dam would not restore natural transport of gravel, as Glines Canyon Dam would remain in place with approximately 2.5 miles of potentially very high quality river habitat still inundated by Lake Mills. Navigating fish passage at Glines Canyon Dam or swimming through the reservoir during downstream juvenile migration would severely affect chinook, pink, chum, and coho. Retaining either reservoir would also continue to inundate important spawning and rearing habitat, especially for pink and chum salmon.

Implementing the Proposed Action would eliminate passage problems posed either by the dams or the reservoirs, restore natural transport of spawning gravel and large woody debris, return 5.3 miles of inundated river to high quality pool and riffle habitat for fish, reduce elevated water temperatures and the risk of disease, and recreate the large estuary at the mouth of the river used as a fish nursery by salmon juveniles before entering their saltwater phase. Short-term impacts to fish from the release of sediment are discussed in the "Geology, River Morphology, Hydrology & Water Quality" section.



Glines Canyon Dam from Lake Mills, no water.
(Daishowa/James River Company Photo)

Of the ten runs originally occupying the pre-dam Elwha River, none have good or excellent chances of restoration if either the Dam Retention or Elwha Dam Removal alternative is implemented. Two have good chances (none have excellent) if Glines Canyon Dam Removal is selected. Nine of ten runs have good or excellent chances of full restoration in the river if the Proposed Action is implemented.

Living Marine Resources

Removing both dams would send sand, gravel, and lesser amounts of cobble back into Freshwater Bay at the mouth of the river. As a result, the amount of sand-gravel type habitat would increase. The present community would change from species preferring rocky substrates (kelp, rock crabs, clingfish, gunnels, barnacles, and mussels) to those preferring a sandy substrate (eelgrass, Dungeness crab, flatfish, and hardshell clams). Dam removal would also contribute to the restoration of the delta, estuary, and associated shellfish habitat, increasing the shellfish fishery.

In the short term, marine organisms unable to move, such as algae or shellfish, might be smothered if suspended sediments were allowed to wash out naturally. However, nearshore currents would carry some portion of these sediments in suspension into Puget Sound where they would be diluted and have little impact.

Wildlife and Vegetation

All action alternatives would reintroduce salmon and seagoing trout to the middle and upper Elwha River. Since many of these fish spawn and die, they would provide a source of food for a variety of birds and mammals, perhaps increasing populations of some in the Elwha River basin.

Removing either dam and draining and revegetating the reservoir lands would add terrestrial acreage. Some of the wetlands near the reservoir shoreline may be eliminated; those that existed along the river before the dams were built would be restored. Species such as the trumpeter swan that presently use the reservoirs would lose that habitat within the Elwha River basin. Species such as the threatened marbled murrelet and bald eagle that depend on forest habitat and feed on salmon would benefit in time.



Elwha River, no date. (Clallam County Historical Society)

Land Use, Recreation and Esthetics

Land may be needed for disposal of dam and dredge material under any of the dam removal alternatives, although ocean disposal and other uses for the rubble would be explored in the Implementation EIS.

Prior to removing either or both dams, project land (that land associated with the dams, reservoirs, and their facilities) would be acquired by the Department of the Interior. The Elwha Restoration Act states that land acquired inside Olympic National Park boundaries will be kept by the park and managed according to park policies. The act also dictates that acquired river banks, whether in or out of the park, will be managed according to the declared policy of Section 1(b) of the Wild and Scenic Rivers Act. Lands outside the park may be added to the park, placed in the National Wildlife Refuge System, or held in trust for the Lower Elwha S'Klallam Tribe. The impacts of each land disposition option would be explored in the Implementation EIS if the secretary decides to remove the dams.

Hikers, campers, and anglers in the Elwha subdistrict of Olympic National Park would be temporarily kept out of the project area during fish passage construction or dam removal. All dam removal alternatives would require some fishing restrictions to restore the native anadromous salmon and trout to their historic ranges in the Elwha River and would eventually improve fishing. These fish would compete with and result in fewer resident trout, consistent with a natural system.

Whitewater boaters would be able to float additional sections of the river if either or both dams were removed. If the dams were removed, reservoirs now used by flat-water boaters and anglers would be drained.

Some hikers or campers might find the drawn-down reservoirs ugly because tree stumps and barren land would be evident for a few years following dam removal. Others might find fascination in the scene of a river returning to its

natural state. In the long term, recreationists seeking a river experience would find the Elwha attractive if the dams were removed.



View of Lake Mills from Observation Point. (Maggi Johnson Photo)

Socioeconomics

Total benefits of the Proposed Action greatly exceed total costs. Business benefits associated with recreation and tourism, including sport fishing, would total $133 million over 100 years of project life (at 3% rate of discount). Commercial fishermen would obtain $3.5 million per year of net economic benefits after fish stocks were restored, amounting to $30 million over project life. Approximately $1 million over the life of the project would be saved in erosion control costs at Ediz Hook, and shellfish harvest would likely be more abundant. Removal of both dams would also substantially improve material and cultural circumstances of the Lower Elwha S'Klallam Tribe.

Activity associated with removal of both dams would generate between 760 and 1,067 jobs in Clallam County, $21-29 million of personal income, and between $40 and $55 million in business activity in Clallam County over the 10-year period of river restoration activity. A recent study also estimated restoring the river ecosystem would provide substantial non-market benefits to U.S. citizens.

After restoration was complete, 446 annual jobs and a payroll of $4.6 million would be generated in the Clallam County recreation and tourism sector, increasing local sales taxes by $296,000 per year.

The Dam Retention alternative would generate 37 jobs during construction, increase property tax revenue by $639,000, and generate $1.07 million in fisheries business benefits. To install fish passage measures would cost an estimated $38 million. Factored into the increased cost of power, the mill now using hydropower from the dams would pay an additional $196.7 million over the 100-year life of the project.

Removing Glines Canyon Dam only would provide 172 person-years employment, increase property tax revenue by $243,000, and increase fisheries benefits to $1.97 million after restoration was complete. It would cost an estimated $86 million, including $31 million for fish passage and mitigation. Factored into the increased cost of power (fish passage and mitigation), the mill would pay an additional $281.6 million over the 100-year life of the project.

Removing only Elwha Dam would provide 84 person-years of employment, increase tax revenues by $166,000, and increase fisheries benefits to $1.57 million after restoration was complete. It would cost an estimated $65 million, including $25 million in fish passage and mitigation. Factoring the cost of these required actions into the cost of replacement power, the mill would pay an additional $187.6 million over the life of the project.

The Proposed Action is estimated to cost between $75 and $101 million; this includes $29.5 million to acquire both dams (determined by Congress). It would increase fisheries benefits to $3.5 million, and would do so more quickly than other action alternatives, as restoration would be completed without passage losses imposed by the dams and reservoirs. The increased cost of replacement power over the 100-year life of the project would amount to $171.9 million. Although property tax could decline by $230,000, payments to the local energy utility would increase $561,000.

Cultural Resources

Cultural resources include structures, landscapes, traditional cultural properties, archeological sites, ethnohistoric sites, and contemporary resources such as fish and cedar used for cultural purposes. Ethnographic and ethnohistoric research shows that Elwha S'Klallam settlements were located along the Elwha River and coastal portions of the project area. Archeological research has demonstrated native occupation of the area for centuries prior to the arrival of Euro-American settlers. Though the aboriginal S'Klallam harvested a variety of plants and animals, salmon were their most important source of food, both for immediate consumption and for seasonal storage. Restoring the salmon would restore an important traditional economic and social base for the tribe.



Non-Indian settlement of the Elwha region began in the 1860s when home sites were established in the lower part of the Elwha valley. Homesteads were developed by both S'Klallam and Euro-American settlers.

In the late 19th and early 20th centuries, the Elwha S'Klallam continued to rely on their fisheries as the mainstay of their economy, but also made their living along with the non-Indian population by cultivating crops and orchards, raising stock and selling surplus produce and dairy products, lumber and shake mill work, packing, guiding, employment in Port Angeles and elsewhere, and providing much of the labor force to construct bridges and county roads in the vicinity. The development and construction of the dams was a major event in the valley during the early 20th century.

The tribe also has cultural properties that now lie under the reservoirs or have been made inaccessible by them. Removing the dams could eventually uncover inundated or buried cultural resources and reestablish access to currently inaccessible sites.

The historic resources of the area include structures at the Elwha Ranger Station Historic District, a bridge, the hydroelectric projects themselves, and others. Prior to removal, each dam would be fully inventoried, documented according to Historic American Engineering Record standards, and photographed. If both dams were removed, a wider meandering river and higher elevation riverbed might result; mitigation for potential flooding of the Elwha Ranger Station and other historic properties would be needed.

Safety

Inspections by the Federal Energy Regulatory Commission and the U.S. Army Corps of Engineers have resulted in additional strengthening and securing of the two dam structures over the years. The Washington State Department of Ecology Office of Dam Safety indicates that both dams currently meet state safety standards for both probable maximum floods and earthquakes. However, additional investigation of deep and shallow faults in the Port Angeles region and re-examination of earthquake safety standards are currently underway. The results of these investigations could change the ratings of either or both dams.

If the dams were removed, the Elwha River would be resupplied with sand and gravel, elevating the riverbed and water elevation. The river would more often overflow its banks in some places and also meander more frequently across a wider swath of the floodplain. Some existing facilities (residences, well heads, roadways, and levees) on the outwash plain near the river mouth might need to be raised and reinforced or other mitigation employed (e.g., flood insurance) to provide the same level of flood protection as is now available.

Asbestos has been detected in the power cables, residences, and offices of the dam facilities. One of the soil samples taken at the Glines Canyon Dam switchyard contained low levels of polychlorinated biphenyls (PCBs). Any hazardous material would be handled and disposed of in a safe manner consistent with federal regulations.



Elwha Dam and Power Plant, 1911. (Daishowa/James River Company Photo)

Ecosystem and Stream Ecology

Before the dams were built, native anadromous salmon and trout entered, spawned, and exited the Elwha River throughout the year. Removing both dams would reestablish this year-round supply of food to at least 22 species of birds and mammals. Vital nutrients released from decaying fish carcasses would also be restored, increasing the biological productivity of the entire aquatic ecosystem. The 715 acres of terrestrial habitat, including riparian and wetland acreage, would be restored to support wildlife if the dams were removed. In addition, 5.3 miles of high quality stream habitat inundated by the reservoirs would be returned to fish and other aquatic organisms.

These treaty reserved interests of the four Indian tribes to take fish as well as to access usual and accustomed fishing places are property interests subject to the federal trust responsibility which cannot be abrogated or diminished without the specific action of Congress.

Removing only one dam or installing fish passage measures on the existing dams would help reestablish some fish runs and hence improve the condition of the ecosystem and stream ecology, but to a lesser extent than the **Proposed Action**.

Indian Trust Assets

In addition to ecological damage, the dams dramatically reduced the treaty fisheries of at least four federally recognized Indian tribes--the Lower Elwha S'Klallam, the Port Gamble S'Klallam, the Jamestown S'Klallam, and the Makah--and blocked access to treaty-reserved usual and accustomed fishing places. These treaty-reserved interests of the four tribes to take fish as well as to access usual and accustomed fishing places are property interests subject to the federal trust responsibility which cannot be abrogated or diminished without the specific action of Congress. This issue is discussed in various appropriate places throughout this document (water quality, fisheries, land use, etc.). Impacts to the Indian trust assets are not discussed in a separate impact section.

The tribes have a federal reserved water right in the Elwha River in an amount necessary to propagate native anadromous fisheries and to meet the purposes of the Lower Elwha Indian Reservation (see discussion of sediment, river morphology, and water quality). The Elwha hydropower project has operated for more than 80 years with loss of tribal access to usual and accustomed fishing places, with significant loss of both freshwater and marine fisheries resources, and with no consideration for preservation of river hydrology or morphology for the needs of the fisheries.

In general terms, removing both the Elwha and Glines Canyon dams would fully restore the Elwha River ecosystem and native fisheries, and uphold the federal trust responsibility to affected Indian tribes. All other action alternatives would partially restore the ecosystem and native fisheries in varying degrees, but would not uphold the federal trust to affected tribes relative to the fisheries resource and access to usual and accustomed fishing places (Department of the Interior, 1994).

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IN REPLY REFER TO:

JUL 24 1995

Dear Interested Party:

Enclosed you will find the Elwha River Ecosystem Restoration final environmental impact statement (FEIS). The draft EIS was released for public comment in October 1994, and the comment period ended on December 23, 1994. Public meetings were held in Port Angeles and Seattle, Washington, in November 1994.

This FEIS contains copies of the letters and other written correspondence received during the public comment period. Responses to substantive comments are provided in the form of questions and answers. In some cases, the EIS text has been revised in response to substantive issues raised during the public comment period.

The National Park Service proposes to fully restore the Elwha River ecosystem and native anadromous fisheries by removing the Glines Canyon and Elwha Hydroelectric Projects. This is a programmatic EIS which examined a range of reasonable alternatives for restoration of the Elwha River ecosystem.

A second EIS will examine specific methods to remove the dams and manage the accumulated sediment. The public will have an opportunity to comment on the draft Implementation EIS later this year. Continued public participation in the restoration of the Elwha River ecosystem is encouraged and appreciated.

Questions on this EIS should be directed to:

Sarah Bransom, National Park Service (303) 969-2210 or Brian Winter, Olympic National Park (360) 452-0302.

Ecosystem and Stream Ecology

Before the dams were built, native anadromous salmon and trout entered, spawned, and exited the Elwha River throughout the year. Removing both dams would reestablish this year-round supply of food to at least 22 species of birds and mammals. Vital nutrients released from decaying fish carcasses would also be restored, increasing the biological productivity of the entire aquatic ecosystem. The 715 acres of terrestrial habitat, including riparian and wetland acreage, would be restored to support wildlife if the dams were removed. In addition, 5.3 miles of high quality stream habitat inundated by the reservoirs would be returned to fish and other aquatic organisms.

Removing only one dam or installing fish passage measures on the existing dams would help reestablish some fish runs and hence improve the condition of the ecosystem and stream ecology, but to a lesser extent than the **Proposed Action**.

Indian Trust Assets

These treaty reserved interests of the four Indian tribes to take fish as well as to access usual and accustomed fishing places are property interests subject to the federal trust responsibility which cannot be abrogated or diminished without the specific action of Congress.

In addition to ecological damage, the dams dramatically reduced the treaty fisheries of at least four federally recognized Indian tribes--the Lower Elwha S'Klallam, the Port Gamble S'Klallam, the Jamestown S'Klallam, and the Makah--and blocked access to treaty-reserved usual and accustomed fishing places. These treaty-reserved interests of the four tribes to take fish as well as to access usual and accustomed fishing places are property interests subject to the federal trust responsibility which cannot be abrogated or diminished without the specific action of Congress. This issue is discussed in various appropriate places throughout this document (water quality, fisheries, land use, etc.). Impacts to the Indian trust assets are not discussed in a separate impact section.

The tribes have a federal reserved water right in the Elwha River in an amount necessary to propagate native anadromous fisheries and to meet the purposes of the Lower Elwha Indian Reservation (see discussion of sediment, river morphology, and water quality). The Elwha hydropower project has operated for more than 80 years with loss of tribal access to usual and accustomed fishing places, with significant loss of both freshwater and marine fisheries resources, and with no consideration for preservation of river hydrology or morphology for the needs of the fisheries.

In general terms, removing both the Elwha and Glines Canyon dams would fully restore the Elwha River ecosystem and native fisheries, and uphold the federal trust responsibility to affected Indian tribes. All other action alternatives would partially restore the ecosystem and native fisheries in varying degrees, but would not uphold the federal trust to affected tribes relative to the fisheries resource and access to usual and accustomed fishing places (Department of the Interior, 1994).



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Elwha Canyon near Port Angeles, no date.
(Clallam County Historical Society)

Previous page: Elwha River, no date.
(Clallam County Historical Society)

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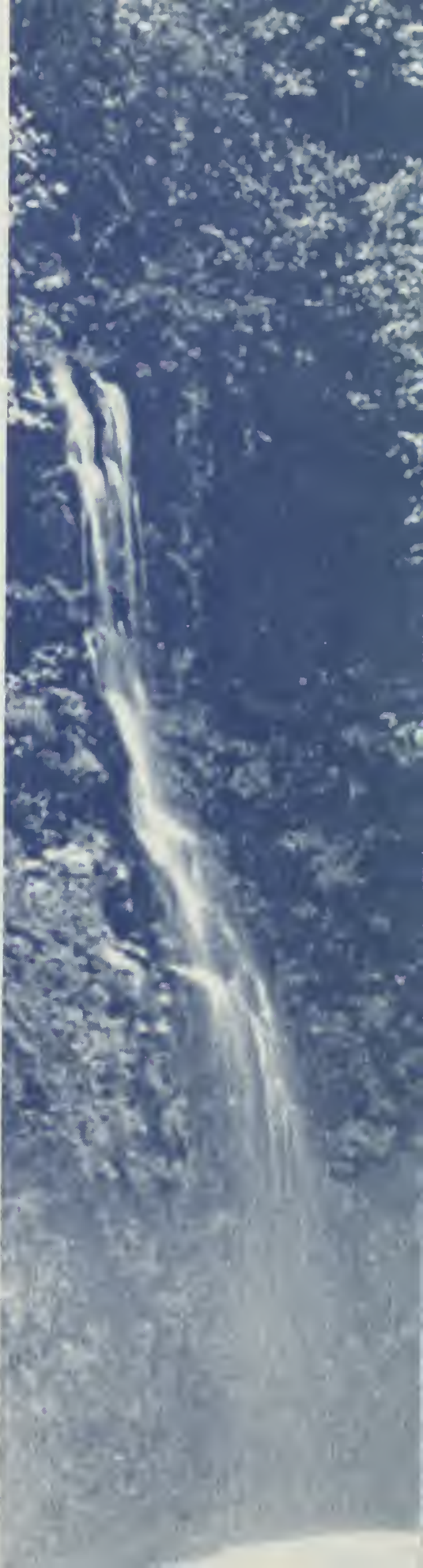
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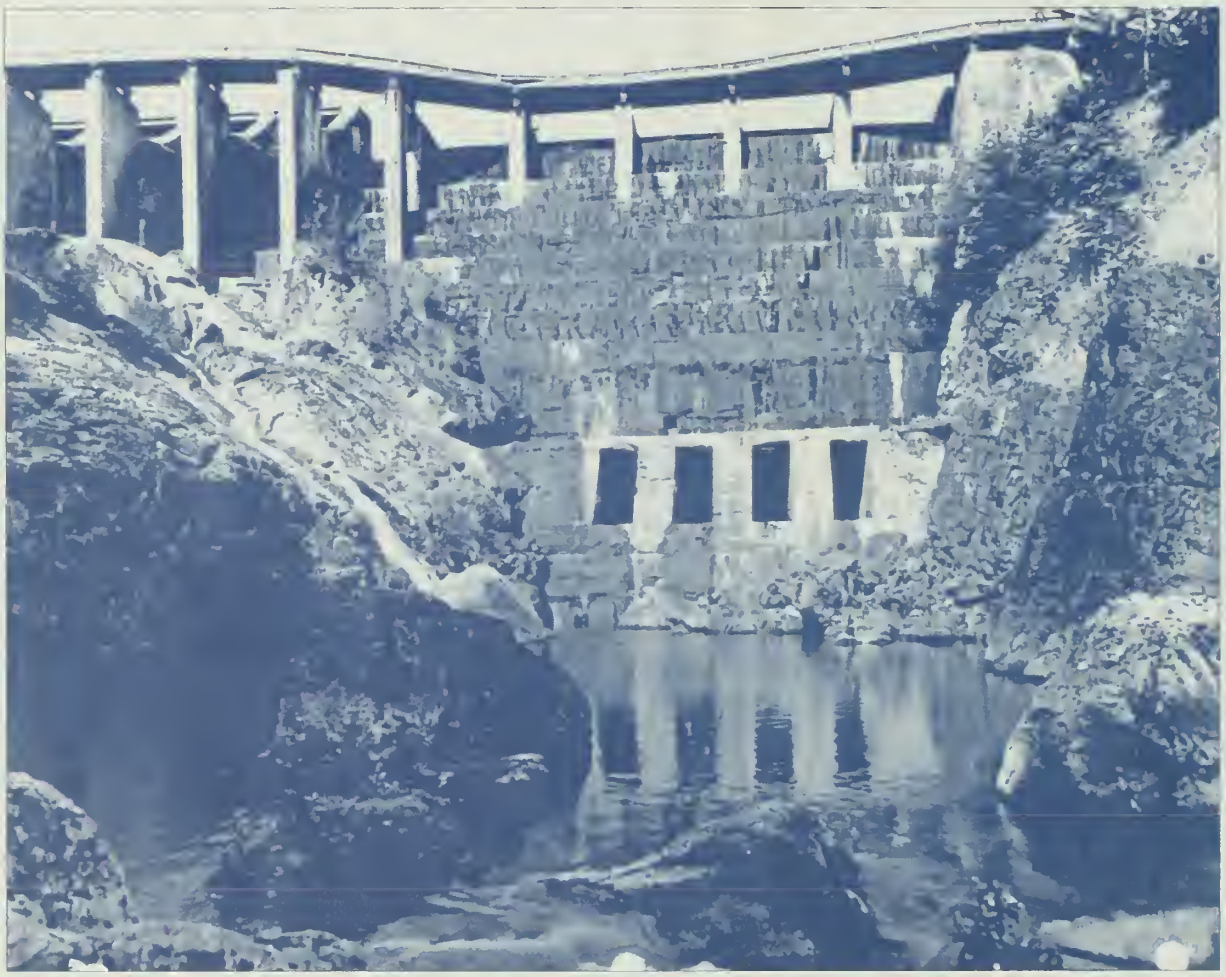
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Introduction



Elwha Dam, no date. (Daishowa/James River Company Photo)

Previous page: Site of present Elwha Dam prior to construction of bridge, circa 1895-1900.
(Daishowa/James River Company Photo)

Introduction



In the early 1900s, the free-flowing Elwha River on the Olympic Peninsula in Washington State was dammed with two hydroelectric dams. Built without fish passage facilities, they blocked the upstream migration path for all of the species of native anadromous salmon and trout that had used the river for spawning. The dams also interrupted the downstream movement of gravel needed for spawning and, through inundation, destroyed important river salmon and trout habitat.

By 1930, the dams supplied a portion of the power needs for a pulp and paper mill in Port Angeles, Washington, currently owned by the Daishowa America Corporation. In 1968, the owner and operator of the dams (then, Crown Zellerbach Corporation and now, James River Corporation) submitted an application to license the Elwha Dam and in 1973 an application to relicense the Glines Canyon Dam with the Federal Energy Regulatory Commission (commission). Licensing was controversial and a number of parties challenged the commission's jurisdiction to relicense the Glines Canyon Dam primarily because of its location in Olympic National Park.

Before the commission could take action, it first had to comply with the National Environmental Policy Act. In 1991, a draft environmental impact statement was published and circulated for public review (Proposed Elwha [FERC No.2683] and Glines Canyon [FERC No. 588] Hydroelectric Projects, Washington). Comments on the draft were received and responded to by either modifying or adding information to the draft or by answering questions in the "Responses to Comment" section. The revised draft and "Responses" section would normally have been circulated as the final environmental impact statement prior to a licensing decision, but was never released by the commission.

Congress responded to the controversy by enacting Public Law 102-495, the Elwha River Ecosystem and Fisheries Restoration Act, in October 1992. Under the act, the secretary of the interior was directed to study ways to restore the native anadromous fisheries and ecosystem of the Elwha River. The resultant Department of the Interior study was named the "Elwha Report." The act stayed the Federal Energy Regulatory Commission licensing process. The Department of the Interior requested the amended environmental impact statement and responses to comments to aid in its preparation of the study. The two volumes were retitled "Federal Energy Regulatory Commission Draft Staff Report" (Draft Staff Report).

In the Elwha Act, Congress called for the secretary of the interior to consider whether full restoration of the fisheries and ecosystem was possible only if both dams were removed and, if so, to establish a "definite plan" for removal. In late 1993 and early 1994, the Elwha Report was reviewed by the public, finalized by Interior, and submitted to Congress. In it, the secretary determined

that removing the dams was both feasible and necessary to restore the fisheries and ecosystem and to uphold the federal trust responsibility for affected Indian tribes. The Elwha Report examined several options for dam removal.

NEPA Issues. While the Elwha Report reached certain conclusions about potential river restoration, further evaluation of issues, alternatives, and potential river impact was needed for the secretary of the interior to make a final decision. A full range of alternatives to the proposed removal of both dams, and the environmental impact of each alternative, has been analyzed. Much of this information and analyses is contained in the Draft Staff Report and the Elwha Report and their appendixes.

The commission's purpose in preparing an environmental impact statement was to determine whether to license the two dams. Interior's responsibility, as defined by the Elwha Act, is to decide whether to remove the dams and fully restore the fisheries and ecosystem. Both agencies are bound by requirements to be objective and study all reasonable alternatives, even those outside their jurisdiction. Therefore, although the commission licenses non-federal hydropower dams and requires fish passage, its environmental impact statement examined the alternatives of removing each dam separately or removing both dams. Likewise, although the secretary of the interior is considering removing both dams to achieve full restoration of the Elwha ecosystem and native fisheries, this environmental impact statement also examined single dam removal scenarios and the installation of fish passages on the dams. Thus, the range of alternatives in both the commission and Interior documents is substantially the same.

Since much of the required analyses had been conducted by the commission, Interior adopted the commission's environmental impact statement (as updated and re-named Draft Staff Report in March 1993) in preparing its own environmental impact statement (40 CFR 1506.3). Also, since the Elwha Report postdates the Draft Staff Report, Interior incorporated it and its appendixes.

Information from these two documents considered important to understand impacts is summarized in this "Elwha River Ecosystem Restoration Final Environmental Impact Statement" (final environmental impact statement). Sections and pages of the Draft Staff Report and Elwha Report are cited so that readers can find more information. This final environmental impact statement also contains new data and analyses not found in either of the earlier reports. Material in this document supersedes both the Draft Staff Report and Elwha Report.

Public meetings on the draft environmental impact statement were held in Port Angeles and Seattle in November, 1994; responses to substantive comments received both at those meetings and subsequently in writing are incorporated both as text changes and appear in a question-answer format in this final environmental impact statement.

This final environmental impact statement focuses on impacts to those resources Congress requested Interior to evaluate--fisheries and the ecosystem. By adopting the commission Draft Staff Report and incorporating the Elwha Report, this document will provide the secretary with enough information to decide whether to remove the dams. It is therefore referred to as a "policy" or "programmatic" statement.

Since the Draft Staff Report also details a full dam removal alternative, the secretary could decide to begin removal of the dams based on this environmental impact statement. Yet to be determined, however, are less expensive, lower impact dam removal alternatives.

To give the secretary a broad range of feasible options, Interior will write a second environmental impact statement. If the secretary chooses dam removal as the best alternative, the second document would examine several ways to implement this decision. It would analyze the economic and environmental costs and benefits of each, and be reviewed by the public. The second environmental impact statement will be referred to as the "Implementation EIS" throughout this document.



Elwha River - Island Camp, May 27, 1907. (Asahel Curtis photo, Washington State Historical Society)

For legal purposes, this final environmental impact statement cites pages of the Draft Staff Report that Interior will adopt to aid the secretary in making his decision. All pages will be adopted except: 2-8 to 2-16 (Applicant Proposal), 2-28 to 2-44 (Cost-Benefit Analysis), 5-29 to 5-38 (FERC Staff Conclusions) and Appendix E (Cost Material). The entire Elwha Report and its appendixes are also incorporated in this document.

A limited number of the two-volume Draft Staff Report is available from the Denver Service Center of the National Park Service (Sarah Bransom at 303/969-2210). The Federal Energy Regulatory Commission documents are also available at most public libraries and offices of the National Park Service in Seattle or Port Angeles. The Elwha Report is available from Dr. Brian Winter, Elwha Project Coordinator, Olympic National Park, (360/452-0302).

Purpose and Need





Elwha River, no date. (Clallam County Historical Society)

Previous page: Glines Canyon Dam spillway, no date.
(Clallam County Historical Society)

Purpose and Need

Background

The 45-mile Elwha River and its tributaries were once rich in salmon and trout. These fish were used by Native Americans for thousands of years before the first European explorers reached the Northwest Coast. Today the Lower Elwha S'Klallam Indian Reservation, occupying 574 acres of land at the mouth of the river, is the homeland of the Lower Elwha S'Klallam Tribe, which bases much of its culture and economy on the salmon in the Elwha River. The salmon also provide substantial commercial and recreational catches to both tribal and nontribal fishermen in the ocean approaches to the river. The fisheries resources of the Elwha are subject to the treaty reserved interests of four Indian tribes: the Lower Elwha S'Klallam, the Port Gamble S'Klallam, the Jamestown S'Klallam, and the Makah.

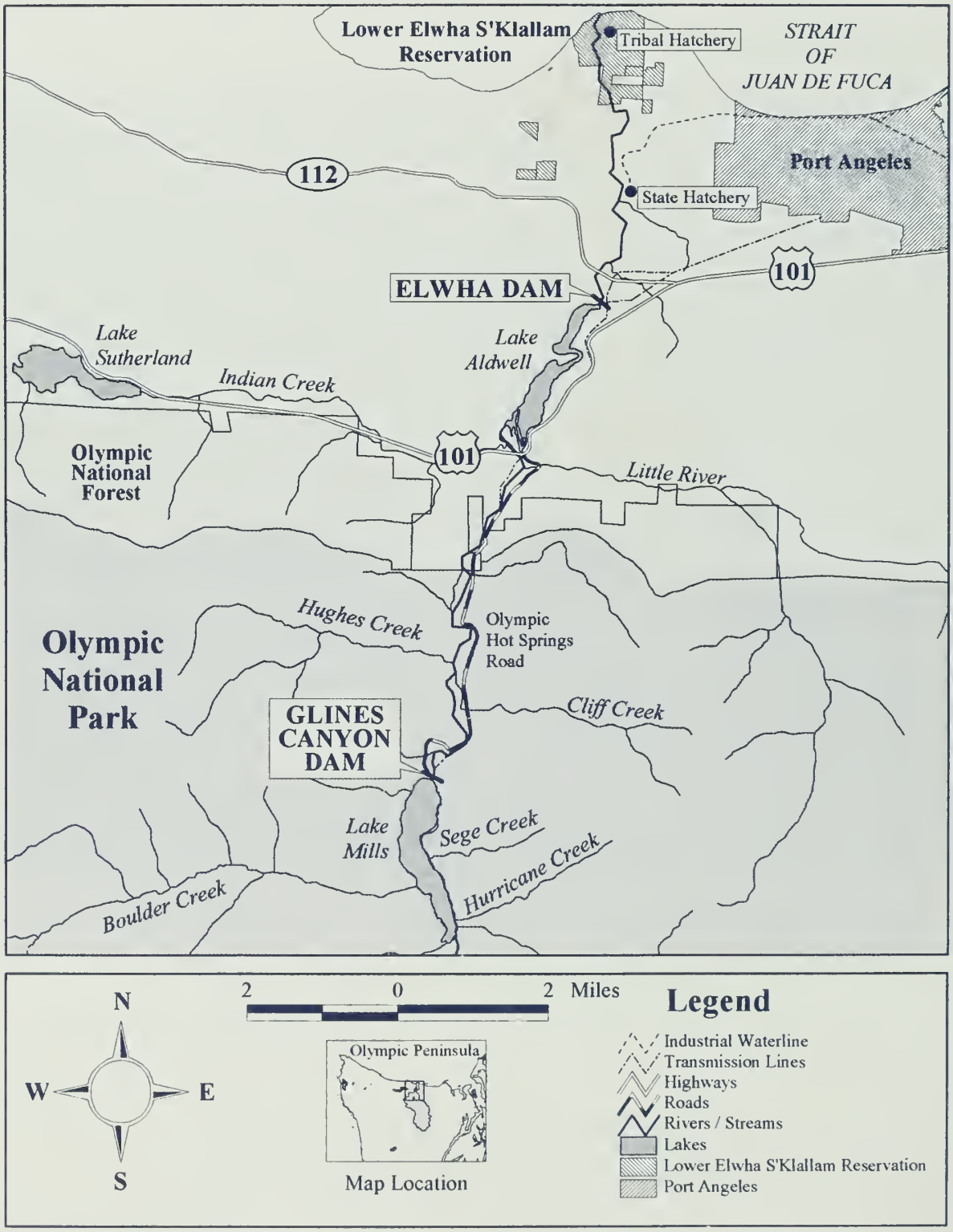
The fisheries resources of the Elwha River are subject to the treaty reserved interests of four Indian tribes.

In 1913, the first of two dams was completed 4.9 miles from the mouth of the river. A second dam was built 8.5 miles farther upstream in 1926 (see Figure 2). The Elwha Dam created a reservoir, Lake Aldwell, and the Glines Canyon Dam created a reservoir, Lake Mills. Glines Canyon Dam is now within the boundary of Olympic National Park, its presence in conflict with park policies. Both dams were built without fish passage facilities. The numbers of Elwha native anadromous fish have declined drastically since the dams were built, a direct result of past and continued impacts of the dams.

The relative health of North Coast salmon stocks is erratic and depends on a combination of the conditions in the ocean and freshwater environments. Conditions in the ocean environment tend to fluctuate over time, producing long-term cyclic changes in the size of salmon populations. However, the ability of the freshwater environment to support fish is largely dependent upon the amount and quality of spawning and rearing habitat available. Available high quality freshwater habitat in the North Coast area has been declining steadily over the years, with a corresponding steady decline in salmon production. Agricultural, industrial, residential, and other land use and development such as logging send silt and pollutants into rivers. Water diversions, development of estuaries, channeling for flood protection, and other factors eliminate stream habitat that salmon and steelhead need to successfully reproduce. Dams and reservoirs, even those with fish passage facilities, are a primary source of mortality for both spawning adults and outmigrating juveniles.

On the Elwha River, the dams have completely blocked upstream passage to 93% of the salmon and steelhead spawning and rearing habitat. Populations, primarily sustained through hatchery operations, exist in very low quality habitat in the remaining lower 4.9 miles of river. Surface releases from the

Figure 2. *Project Area*
Olympic National Park
United States Department of the Interior • National Park Service
DSC • June 1995 • 149 • 20057A



reservoirs raise temperatures 2-4 degrees C in warm summer months, a condition strongly correlated with a higher than average incidence of disease in Elwha chinook. Redds, or spawning nests, are much more crowded than under natural conditions. Gravel needed for spawning and large woody debris required for rearing are held back by the dams. The river's estuary or fish "nursery," which once included one-half mile of habitat, is now confined to the first 300 feet of the river. More than five miles of stream habitat have been inundated by the two reservoirs.

The river downstream of the dams has also changed in character since they were built. Where the Elwha was once an active, meandering river with alternating pools and riffles ideal for fish, it now flows in a stable, armored channel.

By changing habitat downstream and barring fish from quality habitat upstream, the dams have altered the entire ecosystem of the Elwha River valley. Terrestrial wildlife that previously fed on the salmon lost a year-round, stable supply of food. Since decaying salmon carcasses are an important source of nitrogen and phosphorus to the aquatic food chain, their absence has altered the river ecology as well.

Unlike other dammed rivers in the northwest surrounded by development, the bulk of the Elwha River system is within the Olympic National Park and remains in a natural condition. Because of this, the **Proposed Action** provides a rare opportunity to restore an entire ecosystem through the single action of removing the dams. Congress has recognized this in passing the Elwha River Ecosystem and Fisheries Restoration Act (Public Law 102-495), which mandates the study of, and a definite plan for, the removal of the dams to restore the Elwha River fisheries and ecosystem.

Unlike other dammed rivers in the northwest surrounded by development, the bulk of the Elwha River system is within the Olympic National Park and remains in a natural condition.

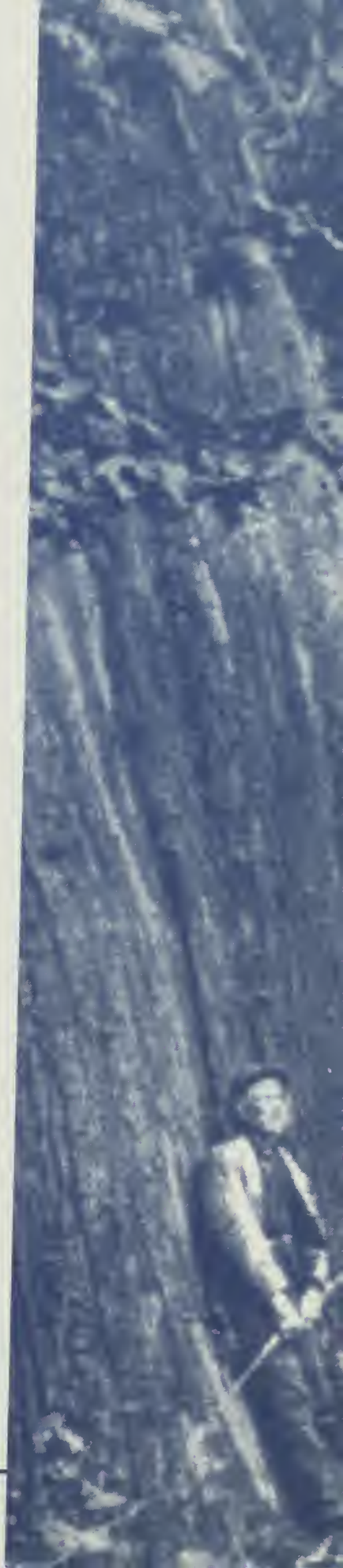
Congress established Olympic National Park in 1938, and expanded its boundaries in 1940, including the Glines Canyon project. The presence and operation of the project is inconsistent with National Park Service policy to "...restore natural aquatic habitats and the natural abundance and distribution of native aquatic species, including fish, together with the associated terrestrial habitats and species" (National Park Service Management Policies, 1988). The project also conflicts with park objectives to "...conserve, maintain, and restore, where possible, the primary natural resources of the park and those ecological relationships and processes that would prevail were it not for the advent of modern civilization" (Olympic National Park Statement for Management, 1989). These policies and objectives are more than just local or even national concerns, since in 1976, the park was designated as an International Biosphere Reserve and in 1981 gained the distinction of being named a World Heritage Site.

Both Lake Mills and Lake Aldwell have inundated or made inaccessible sites of cultural and religious significance for the Lower Elwha S'Klallam Tribe. The dams are also inconsistent with the federal trust responsibility to the four



Glines Canyon Dam and Powerhouse, 1924. (Daishowa/James River Company Photo)

Description of the Alternatives





Excavation for Glines Canyon Dam Spillway, June 29, 1926. (Daiwhowa/James River Company Photo)

Previous page: Cedar trees, caption: "Cedar Trees in the Elwha Valley, Washington. The tree on the right is 48 feet 8 inches in circumference". No date. (Clallam County Historical Society)

Description of the Alternatives

This chapter will describe each of the five alternatives that Interior has analyzed and summarize both the impacts and the degree to which each accomplishes the Interior objectives, identical to congressional mandates, first identified in the "Purpose and Need" chapter.

The Elwha Dam, built 4.9 miles from the mouth of the Elwha River, began operation in 1913. The concrete structure, consisting of a central gravity-type section with an adjacent buttress-type intake section flanked by spillways at each abutment, is 450 feet long at its crest and 105 feet high. Lake Aldwell, the 2.8 mile impoundment created by the dam, has a total storage capacity of approximately 8,100 acre-feet. The total installed power generation capacity of the dam is 12.6 megawatts. The Elwha Dam has never been licensed.

Glines Canyon Dam, located 8.5 miles farther upstream, began operation in 1927. It is a varied radius, single-arch concrete dam 210 feet high, varying in width from 55 feet at its base to 270 feet at its crest. The 2.5-mile Lake Mills reservoir provides approximately 30,000 acre-feet of active storage, with drawdowns up to 4,000 acre-feet during extreme low flows. The total installed capacity is 16.0 megawatts. The Glines Canyon Dam has operated under an annually renewed federal license since 1976.

Description of the Alternatives

Proposed Action

Removing both Elwha and Glines Canyon dams would require the acquisition and decommissioning of the two projects, draining the reservoirs, and removing all or parts of the dams, powerhouses, and auxiliary structures. As required by the Elwha River Ecosystem and Fisheries Restoration Act, the quality and availability of downstream municipal and industrial water supplies would be protected.

Specific steps to remove the dams (described in detail in the Elwha Report, pp. 70-90) include diverting the river through or around the dams to drain the reservoirs; decommissioning and removing all structures necessary for safety or for fish passage; and draining the reservoirs and managing the 17 million cubic yards of sediments that have accumulated behind the dams for the past 80 years. Several scenarios to manage sediment and divert the river were investigated in the Elwha Report. The river could be routed by way of a tunnel, surface diversion channel, low level diversion through the dam structure, or by notching the dam down from the top. Sediment could be transported naturally by the river, stabilized on site, or dredged and moved

(probably by slurry pipeline) off site. Some historically important structures could be left in place.

Some of these options were investigated in the Elwha Report. Many of these, as well as other alternatives, would be further explored in the Implementation EIS if the **Proposed Action** is selected by the secretary of the interior. The Implementation EIS also would address specific fisheries and ecosystem restoration, protection of the quality and availability of existing water supplies, flood control, and disposition of acquired lands.

If the Department of the Interior acquires the dams, interim management consistent with policy direction in the Elwha Restoration Act might be required while the Implementation EIS or other planning is underway. Interior could begin its native anadromous fisheries restoration efforts by planting some species in the middle and upper river while the dams were still in place. To accommodate juvenile downstream migration of these species, turbines or turbine runners may need to be removed at both dams.

At Glines Canyon Dam, initial reservoir drawdown would include the use of the spillway and penstock. Releases through the penstock would be limited, and passage for any outplanted anadromous fish hazardous if the turbines remain. To accommodate both drawdown and fish passage, the turbines may be removed and a large control gate installed. This alternative may require the construction of an energy dissipator to prevent severe channel erosion downstream of the control gate (due to larger flows). Two options have been considered for locating the large control gate: one is to install it within the power plant where the turbine formerly had been located; the other is to install it at the end of a steel bypass pipe branching off the penstock outside of the power plant. In the latter case, the control gate and an energy dissipator would be installed near the power plant on land that has been disturbed and lies outside the river channel. Typical construction vehicles required for this work would include a mobile crane, a front end loader, flatbed trucks, and concrete mixers. These vehicles would use existing roads and the parking lot as a staging area. All standard practices to ensure that fuel or leaks were contained would be followed.

At Elwha Dam, initial reservoir drawdown would include the use of both spillways and penstocks. The turbine of the larger penstock could be removed to provide additional release capacity and provide improved passage for outplanted salmon and trout. A control gate would not be required, as flow can be controlled to a great extent by the use of the spillways on both the left and right abutments. If turbines were removed, they could be cut up and sold for salvage value.

The environmental impacts of removing the turbines would be minor--temporary impacts to air quality from construction vehicles and ground disturbance associated with the bypass around the Glines powerhouse. Oil or fuel used on site to construct the bypass or energy dissipator, should they be required, would be physically prevented from entering the river by berms or

other means.

Removing the turbines would also mean the loss of an average 18.7 megawatts of power the hydroelectric plants now produce. Costs of replacement power are analyzed in the socioeconomic section of this document, and the possible environmental impacts of different sources of replacement power in the Draft Staff Report (pp 4-213 to 215) and Elwha Report (pp 128-129).

No Action Alternative

Review of this alternative provides an analysis of existing conditions against which to compare all action alternatives. For the purposes of this environmental impact statement, **No Action** means that Interior would take "no action;" the two dams, powerhouses, reservoirs, and auxiliary structures would remain as now, without fish passage or other mitigation. The **No Action** alternative described here (as opposed to No Action = No Dams) is used because it provides a context or yardstick against which to compare impacts of proposed actions.

The implementing regulations of the National Environmental Policy Act also ask agencies to consider possible ensuing actions if No Action is the selected alternative. The Department of the Interior legally challenged the authority of the Federal Energy Regulatory Commission in relicensing the Glines Canyon hydroelectric project within Olympic National Park before Congress passed the Elwha Restoration Act. This and other litigation may result if this alternative is selected and the commission resumes the relicensing process.

Dam Retention Alternative

To achieve fullest possible restoration, Interior has added mitigation measures to those proposed by the commission to better pass fish over the dams. These measures, described in detail on pp. 29-31 of the Elwha Report, are summarized here. This alternative is very similar to that described as "Applicant's Proposal with Supplemental Measures" in the Draft Staff Report.



Penstock and powerhouse, no date. (Clallam County Historical Society)

Elwha Dam would be fitted with a fish ladder, ladder entrance, holding and sorting pools, and an inclined bar rack at the powerhouse tailrace exit portals to prevent fish entry into the draft tubes where the adults could be delayed or injured while migrating upstream. To convey juveniles downstream, all water would be passed through modified spillways and screens would be installed on intake structures. A bypass pipe and vertical traveling screen facility, an open channel flume, and a concrete pool and weir structure would be built.

A trap-and-haul operation to convey fish past the 190-foot vertical lift at Glines Canyon Dam would be used to transport adults upstream. This system would include an electric weir to direct fish into the traps, holding and sorting pools, and a hoist to load fish onto a transport truck as well as other features (Elwha Report, p. 30). A year-round release of 450 cubic feet per second would flow over the Glines Canyon Dam spillway to help pass juveniles, and a screened or relocated intake for the power plant would be installed. The year-round release and the screened or relocated intake are additional mitigation not described in the Draft Staff Report, but required by Interior.

In addition to fish protection, this alternative includes the enhancement of 898 acres of applicant (James River Corporation) property outside Olympic National Park for wildlife benefits and the construction of three remote boat-in campsites on the east side of Lake Aldwell.

Removal of Glines Canyon Dam Alternative

Glines Canyon Dam would be decommissioned, the reservoir drained and features of the dam, powerhouse, and auxiliary structures necessary for safety and for fish passage removed. The mitigation measures described in the **Dam Retention** scenario for Elwha Dam would be installed. Sediment management and river diversion options, as well as land disposal, fish restoration, and water quality mitigation measures for this alternative would be further examined in the Implementation EIS if the secretary chooses this option.



Removal of Elwha Dam Alternative

Features of the Elwha Dam project would be removed as necessary for safety or fish passage as described above, and the trap-and-haul and other mitigation measures for fish would be installed at Glines Canyon Dam. Sediment management and river diversion options, as well as land disposal, fish restoration, and water quality mitigation measures for this alternative would be further examined in the Implementation EIS if the secretary chooses this option.

Alternatives Considered But Rejected

Several of the alternatives described in the Elwha Report (pp 78-89) would have relied on truck transportation of coarse sediment to a terrestrial site. These include options #1 and 2, estimated to cost between $200 million and $300 million. Interior has rejected truck transportation of sediment to a disposal

site because it has no environmental advantage over the less expensive option of slurrying sediment via a pipeline.

Also, the concept of transporting and storing fine sediments away from the river at a terrestrial location has been eliminated as technically and economically infeasible. Such an alternative would require a large amount of land--more than 200 acres if sediment is stored 20 feet high. Since the sediments would be watery, it would take extensive erosion control measures to keep the silt and clay from returning to the river. The Federal Energy Regulatory Commission rejected land disposal of fine sediment away from the river as economically infeasible for these reasons. Interior, upon re-examination of the commission's analysis (not included in, but prepared in conjunction with the Draft Staff Report) agreed. If fine sediments are disposed of on land, the technically and economically preferred option would be within the drained reservoir lands and out of the floodplain. This is referred to as the stabilization alternative in this environmental impact statement.

Finally, several alternatives were suggested by commentors on the draft of this statement. Interior has considered the merits of each, and would examine several further in the Implementation EIS if appropriate. Several were rejected as infeasible. See the Response to Comments section of this document, "Alternatives" questions for more information.

Only by removing both the Elwha and Glines Canyon Dams would the Elwha River ecosystem and native anadromous fisheries be fully restored.

Meeting Department of the Interior Objectives

In the "Purpose and Need" chapter, the congressional mandates spelled out in the Elwha Restoration Act, and hence Interior's objectives in taking action at this time, were first introduced. Here, each alternative is evaluated against these criteria to see how well it performs. The objectives are:

1. Fully restore all runs of Elwha River native anadromous fish.
2. Restore the Elwha River ecosystem.

In general terms, only by removing both the Elwha and Glines Canyon dams would the Elwha River ecosystem and native anadromous fisheries be fully restored. Other action alternatives would partially restore the ecosystem and fisheries to varying degrees.

The following is a summary of how effectively each alternative meets the specific objectives:

Objective #1. Fully Restore All Runs of Elwha River Native Anadromous Fish

Very few runs of native anadromous salmon and trout would be restored to the Elwha unless both dams were removed. Only winter and summer steelhead

have a "good" chance for restoration in any of the partial restoration alternatives. All others have "fair," "poor," or "no chance" of restoration. If both dams were retained without mitigation (**No Action**), self-sustaining runs of salmon would never be restored to the river.

No Action (current conditions)

Elwha River anadromous salmon and steelhead exist in only 7% of their pre-dam freshwater habitat, as construction of the Elwha Dam eliminated access to 93% of the historical habitat. Spawning gravel and woody debris, both required for successful spawning and rearing, are largely or completely absent in these 4.9 miles of available river. More than five miles of quality freshwater fish habitat are inundated by the two reservoirs. Upstream releases of reservoir water elevate stream temperatures as much as 4° C in warm months, a condition strongly associated with higher than average incidence of disease in chinook. Chinook redds, or spawning nests, are five times more crowded than under natural conditions, and populations are maintained only through hatchery production. If both dams were retained without fish passage, self-sustaining runs of wild salmon or steelhead would never be restored on the Elwha.

Continuing the present course would particularly hurt the Lower Elwha S'Klallam Tribe, since many of its members are unemployed or economically depressed and depend on the fisheries for food and income.

Dam Retention

If mitigation as described in the "Alternatives" chapter of this document is added, three runs might be partially restored in the long term: coho salmon and the winter and summer steelhead. However, none has even a "good" chance for full restoration. Partial restoration would include (as do all alternatives) phasing out hatchery production and enforcing fishing restrictions in the short term. Although populations of wild coho and steelhead would be dispersed throughout the river's length in greater numbers than today, the total number of anadromous fish in the river would decline.

The seven other runs of salmon and trout have poor or unknown chances of restoration if both dams were retained and mitigated with fish passage measures. This would be a result of unavoidable passage losses, inundated riverine habitat, and poor habitat quality between and below the dams.

Removal of Glines Canyon Dam

If the Glines Canyon Dam were removed, chances of restoring steelhead, coho, and chinook would be higher than in the **Dam Retention** alternative. The chances of fully restoring both winter and summer steelhead are considered good, but this is not true for any other runs. Since these species are commercially valuable, this alternative would be economically beneficial, but to a far lesser degree than if both dams were removed.

Removing this dam would provide passage to the upper river; recreate 2.5 miles of riverine habitat now inundated; reduce artificially high water temperatures; restore gravel, nutrients, and organic debris needed in the middle stretch of the river; and remove Lake Mills, a serious barrier to juvenile outmigration for some species. Fish such as pink and chum salmon, unable to survive passage through Lake Aldwell, would fare poorly even if Glines Canyon Dam were removed. Passage success for cutthroat and native char is unknown. Approximately 2.8 miles of river habitat for fish would continue to be inundated by Lake Aldwell.

Removal of Elwha Dam

Since the **Removal of Elwha Dam** would leave Glines Canyon Dam in place, chinook, coho and steelhead would not fare as well under this alternative as the **Glines Canyon Dam Removal** alternative. On the other hand, since passage over the mitigated Elwha Dam is unlikely for pink, chum, and sockeye salmon, these species would be expected to have a better chance for restoration if Elwha Dam were removed than if Glines Canyon Dam were taken out. Economic benefit from fisheries would be about equal to the **Glines Canyon Dam Removal** scenario, but again, to a lesser degree than if both dams were removed.



Elwha Dam, 1995. (Maggi Johnson Photo)

If Elwha Dam were removed, Glines Canyon Dam would continue to block nutrients, spawning gravels, and woody debris from the majority of the watershed and affect water temperature. It would also present major passage problems for species unable to migrate through the still waters of the reservoir (many use the stream current to move downstream) or withstand losses from the spillway or trap-and-haul process. Lake Mills would continue to inundate 2.5 miles of river habitat for fish.

Proposed Action

Removing both dams would allow native anadromous fish to spawn upstream and allow nutrients, sediment, and debris to flow unobstructed downstream into currently impoverished parts of the river. River temperatures would return to normal, and more than five miles of high quality freshwater anadromous fish habitat would be restored.

Removing the dams would immediately restore the 93% of the freshwater anadromous fish habitat lost when the Elwha Dam was built. A source of native Elwha River or closely related stock is available for all 10 runs, and agency and tribal-enforced fishing restrictions are in place.

With the exception of sockeye salmon, all species have a good to excellent chance of full restoration if both dams are removed. Sockeye stand a fair or poor chance of restoration.

The four affected Indian tribes and Clallam County businesses would benefit economically and culturally from the full return of the native anadromous fishery. It is estimated that this alternative would restore at least four times as many wild salmon and trout to the Elwha as the single dam removal alternatives.



Objective #2. Restore the Elwha River Ecosystem

An ecosystem is composed of physical and biological pieces mutually dependent upon or interactive with one another. Fully restoring an ecosystem means all are balanced, healthy, and functioning naturally.

In the Elwha River basin, the role of the ten runs of salmon and trout that occupied the river before the dams were built is critical to ecosystem restoration. These fish brought nutrients from the sea, in the form of biomass or body weight, which they spread throughout the river as they migrated. Their eggs and especially their carcasses supplied food to an abundance of birds and mammals along the river. Just as the fish carcasses supported the terrestrial wildlife, nutrients from decomposing carcasses were the base of an aquatic food cycle which eventually fed the juvenile salmon themselves.

As a result of competition for spawning sites, food, and limited rearing habitat, salmon and trout evolved staggered timetables; adults of different species enter and spawn and juveniles leave the river at different times of the year. The terrestrial and aquatic ecosystems were provided food and nutrients throughout the year, even when other food was scarce.

No alternative except full dam removal would reestablish this pre-dam species distribution, or provide terrestrial and aquatic life with the nutrients they need to fully use other features of the natural habitat within Olympic National Park.

No Action

Native anadromous salmon and trout now never reach beyond the Elwha Dam or first 4.9 miles of the Elwha River. Fish produced by hatcheries return to crowded, poor quality stream conditions to spawn, where they are subject to physiological stress, disease, high water temperatures, and inadequate spawning or rearing habitat. Since adults are collected to maintain hatchery production, even fewer salmon carcasses, eggs, and juveniles are available to wildlife in the lower river. Birds and mammals in the middle and upper river completely lack the prey resource these fish once provided, and riparian and upland habitat once available to them is now degraded or inundated.

The river channel and flow characteristics are also altered by the dams. Before the dams were built, much of the middle river (between the dams) was an active, meandering channel with sand, gravel, and cobble bars. The riverbed was composed of sand, gravel, cobbles, and boulders, with most of the finer grained material (silt and clay) washing through the system (FERC, p. 3-11). The sand and gravel would move during higher flows, preventing permanent vegetation from taking hold on in-river sediment bars.

Since the dams were built, sand and gravel in both the lower and middle reaches of the rivers have become trapped in the reservoirs. Bedload is now composed primarily of cobbles and boulders that rarely move. The river meanders less and the channel has become more stabilized and less active. In some places, the channel has degraded (lowered) as much as 1 to 5 feet. In the absence of moving pulses of sand and gravel, "islands" of sediment have become vegetated, some with mature trees.



Elwha Canyon near Port Angeles, no date. (Clallam County Historical Society)

The estuary at the mouth of the river, used by all juvenile native anadromous fish during transition from fresh water to salt water, is also affected by the dams. It has decreased by approximately one-half mile from its pre-dam size, is deeper, and consists mostly of larger cobbles and boulders. In addition, the beaches and nearshore area east to Ediz Hook are sediment starved and eroding.

Dam Retention

Although mitigation measures would allow some fish to pass over the dams and swim upstream, impacts to the ecosystem would largely remain. Water temperature related distress, disease, and fish mortality would persist. The flow of the river would remain unnaturally modified, sediments would not reach the middle or lower Elwha or the estuary at its mouth, beaches east to Ediz Hook would remain sediment-starved, and river and upland habitat would remain flooded by the reservoirs. Some wild anadromous fish would reach wildlife in the upper Elwha that use them for food, but far fewer fish (due to passage mortality, fewer fish runs, and inundated habitat) would be available than under pre-dam conditions, and their migrations would be clustered into certain seasons rather than dispersed throughout the year.

With both dams removed, barriers are removed for fish migrating upstream and nutrients flowing downstream.

Removal of Glines Canyon Dam

Glines Canyon Dam is located within the boundary of Olympic National Park. Its impacts are in direct conflict with park policy to "conserve, maintain, and restore, where possible, the primary natural resources of the park and those ecological relationships and processes that would prevail were it not for the advent of modern civilization," (Statement for Management, 1989). Dam removal would eliminate the obvious presence of modern civilization and restore natural ecological processes to the Elwha River valley to some extent within park boundaries. The river would, however, continue to be negatively affected by the Elwha Dam. Because it presents passage problems for the native anadromous fish, wildlife and the aquatic ecosystem would be denied more than 500,000 pounds of fish biomass during critical times of the year (Elwha Report, p. 36). In addition, Lake Aldwell would continue to inundate important riverine and terrestrial habitat and affect quality in the lower river by elevating water temperature during late summer and fall.

Stream flow regime and transport of nutrients, gravels, and debris would resume, but only as far as Elwha Dam, to be blocked until Lake Aldwell filled with sediment and began to flow through the penstocks and spillways. This would not result in natural, pre-dam conditions, however, as sediment stored in Lake Aldwell and its delta would remain permanently.

Although some fish would pass the Elwha Dam and be reintroduced into the middle and upper Elwha, species would not distribute themselves throughout the year and might not be available during critical wildlife feeding periods.

Nor would they provide the year-round fishery that the Lower Elwha S'Klallam Tribe historically relied upon.

Removal of Elwha Dam

This alternative adds approximately 27,000 pounds of sockeye biomass (Elwha Report, p. 36) to the projected total for the Removal of Glines Canyon Dam alternative. Poor habitat in the middle and lower would preclude full restoration of any other anadromous fish species. Species distribution of salmon and anadromous trout would not approximate pre-dam conditions.

Stream flow and river channel characteristics would remain modified by the presence of Glines Canyon Dam. The estuary and beaches east to Ediz Hook would remain sediment starved. Salmon and anadromous trout would not be distributed along the river corridor throughout the year, depriving wildlife and tribal fishermen of a resource they historically relied upon.

Proposed Action

Only this alternative would fully restore the Elwha River Valley ecosystem since it restores all of the natural biological and physical processes of the river. Removing the dams would restore important riverine and terrestrial habitat now inundated or made inaccessible by the reservoirs and recreate natural species distribution and abundance of native anadromous fish.

With both dams removed, barriers are removed for fish migrating upstream and nutrients flowing downstream. Water temperatures would return to normal. Approximately 800,000 pounds of fish biomass would return to the middle and upper Elwha River and, with it, 13,000 pounds of recycled nitrogen and phosphorus in the form of decaying carcasses (Elwha Report, p. 36). These nutrients would help support the aquatic food chain, and the fish themselves feed an abundance of wildlife. Since nine of the ten runs have good or excellent chances of full restoration, the river would be filled with salmon or trout all year, providing a necessary food source for some wildlife, especially during the critical late fall and winter months.

With no dams, the stream flow would return to its normal, dynamic state--naturally moving sand and gravel downstream, flooding, changing course, undercutting riverbanks, and filling the bed with coarse sediment as storms wash material from upstream. The estuary would be restored and the process of beach erosion would be reversed.

The chart below summarizes impacts of each alternative so that readers may evaluate their comparative merits. This information is from the "Impacts of Each Alternative" chapter.

Table 1. *Impact Summary Chart*

	ALTERNATIVES				
	No Action	Dam Retention	Glines Canyon Dam Removal	Elwha Dam Removal	Proposed Action
FLUVIAL PROCESSES					
channel morphology	static	static	middle section dynamic	static	entire river dynamic
aggradation	none	none	1-5 ft. between reservoirs short term, entire river after 50 years if Lake Aldwell fills *	temporary	1-5 ft., (pre-project conditions) *
sediment & organic matter transport	limited	limited	restored to middle river, in 50 years to all of river if Lake Aldwell fills	limited	fully restored
Reservation beaches	erosion continues, overall reduction of beach area	erosion continues, overall reduction of beach area	erosion continues, overall reduction of beach area	erosion continues, overall reduction of beach area	reduced rate of erosion, some land area restored
Ediz Hook	erodes at present rate	erodes at present rate	erodes at present rate	erodes at present rate	reduced rate of erosion
WATER QUALITY					
turbidity: long term	periodically turbid	periodically turbid	periodically turbid	periodically turbid	some increased turbidity
turbidity: short term	no change	some during construction of fish passage measures	some during construction; may be significant in river below Glines Canyon Dam depending on sediment management scenario used	some during construction; may be significant in river below Elwha Dam depending on sediment management scenario used	some during construction; may be significant in river below Glines Canyon Dam depending on sediment management scenario used
temperature	elevated during summer	elevated during summer	near normal	elevated during summer	return to normal

* Preliminary estimate only

Table 1. *Impact Summary Chart (continued).*

	ALTERNATIVES				
	No Action	Dam Retention	Glines Canyon Dam Removal	Elwha Dam Removal	Proposed Action
FISHERIES					
Restoration potential					
pink salmon	none	none/poor	none/poor	poor	good
chum	none	none/poor	none/poor	poor	good
searun cutthroat	none	unknown/poor	unknown	unknown	good
native char	none	unknown/poor	unknown	unknown	good
summer/fall Chinook	none	poor	fair/good	poor/fair	excellent
spring Chinook	none	poor	fair/good	poor/fair	good
coho	none	fair	fair/good	fair	good/excellent
summer steelhead	none	fair	good	fair	good
winter steelhead	none	fair	good	fair	excellent
sockeye	none	none/poor	none/poor	poor/fair	poor/fair
spawning habitat gravels	5.3 miles of river habitat inundated; limited spawning gravels in mid - and lower river	5.3 miles of river habitat inundated; limited spawning gravels in mid- and lower river	2.8 miles of river habitat inundated; limited spawning gravels below Elwha Dam	2.5 miles of river habitat inundated; limited spawning gravels in mid- and lower river	5.3 miles of river habitat restored; spawning gravels restored to mid- and lower river
impacts to resident trout population	unnaturally large population	reduce population	reduce population	reduce population	reduce population
LIVING MARINE RESOURCES					
marine community	favors organisms that prefer offshore rocky substrate	favors organisms that prefer offshore rocky substrate	favors organisms that prefer offshore rocky substrate	favors organisms that prefer offshore rocky substrate	sandy substrate restored, favors organisms that prefer sandier substrate, hardshell clams may be restored

Table 1. *Impact Summary Chart (continued).*

	ALTERNATIVES				
	No Action	Dam Retention	Glines Canyon Dam Removal	Elwha Dam Removal	Proposed Action
WILDLIFE AND VEGETATION					
Restoration potential					
terrestrial wildlife - prey and habitat	habitat underutilized	habitat underutilized	habitat more fully utilized, prey partially restored	habitat more fully utilized, prey partially restored	habitat fully utilized, prey fully restored
threatened and endangered species - prey and habitat	habitat inundated, prey lost	habitat inundated, prey lost	some prey, habitat partially restored	some prey, habitat partially restored	prey returned, habitat fully restored
vegetated area	no change, 715 acres inundated or unavailable	no change, 715 acres inundated or unavailable	425 acres recovered	290 acres recovered	715 acres recovered
wetlands	none	none	26 acres new	22 acres new, small portion of 36 acres may be lost near reservoir	48 acres new, 122 acres wet channel restored, small portion of 43 acres may be lost near reservoir
riparian lands	553 acres inundated and unavailable	553 acres inundated and unavailable	restore 287 acres	restore 246 acres	restore 533 acres
LAND USE, ESTHETHICS AND RECREATION					
Land Use					
Olympic National Park	conflicts with park policy	conflicts with park policy	Elwha Dam somewhat inconsistant with park policy	Glines Dam conflicts with park policy	consistent with park policy
Puget Sound Salmon Management Plan	inconsistent with plan	largely inconsistent with plan	largely inconsistent with plan	largely inconsistent with plan	fully consistent with plan
Clallam County Comprehensive Plan	inconsistent with plan	largely inconsistent with plan	largely inconsistent with plan	largely inconsistent with plan	fully consistent with plan
Esthetics					
views	lake views	lake views	river and lake view	river and lake view	river view
Recreation					
park recreation	lake oriented	lake oriented	river and lake oriented	river and lake oriented	river oriented
fishing	only resident fish above dam	anadromous fish increase, fewer resident trout	anadromous fish increase, fewer resident trout	anadromous fish increase, fewer resident trout	full restoration of native anadromous salmon & trout, resident trout decrease

Table 1. *Impact Summary Chart (continued).*

	ALTERNATIVES				
	No Action	Dam Retention	Glines Canyon Dam Removal	Elwha Dam Removal	Proposed Action
CULTURAL					
tribal	tribal river focus lost	tribal river focus lost	tribal river focus partially restored	tribal river focus partially restored	tribal river focus fully restored
cultural properties	inundated and innaccessible	inundated and innaccessible	inundated and innaccessible	some uncovered and accessible	most uncovered and accessible
historic structures	historic structures remain unmodified; on National Register of Historic Places	dams modified, but eligibility for Register unaffected	one dam removed and other modified but eligibility for Register unaffected	one dam removed and other modified but eligibility for Register unaffected	both dams removed but fully inventoried, loss of historic structures
SOCIOECONOMIC					
property taxes	$231,000 (1994)	increase of $639,000	increase of $295,000	increase of $166,000	none
construction jobs	0 (now)	32 person years	172 person years	84 person years	763 - 1,067 person years
FERC cost estimates	$0	$38M	$86M	$65.1M	$75M - $101M**
base year (1997) local real cost replacement power (millions of dollars) *	$2.1M	$8.1M	$9.3M	$6.7M	$4.8M
annual fisheries benefits	$.84M	$1.1M	$2M	$1.6M	$3.5M

* Preliminary estimate only

** From recent estimates in Meyer, et. al., 1995 and U.S. Bureau of Reclamation, 1995.

Table 1. *Impact Summary Chart (continued).*

	ALTERNATIVES				
	No Action	Dam Retention	Glines Canyon Dam Removal	Elwha Dam Removal	Proposed Action
SAFETY AND FLOODING					
hazard potential	high	high	high	high	nonexistent
ability to withstand maximum probable flood	safe	safe	precautions needed during dam removal	precautions needed during dam removal	precautions needed during dam removal
earthquake* **	both considered safe	both considered safe	Elwha Dam considered safe	Glines Canyon Dam considered safe	N/A
localized floods	occur now	same frequency and impact as now	higher flood stage in middle reach	temporary higher flood stage in lower reach	higher flood stage
hazardous materials	asbestos at both sites; very low PCB levels at Glines Canyon Dam	asbestos at both sites; very low PCB levels at Glines Canyon Dam	asbestos, PCB's removed from Glines Canyon Dam sites and disposed; asbestos remains at Elwha Dam site	asbestos removed from Elwha Dam site and disposed; asbestos and PCBs remain at Gline Canyon Dam site	all asbestos and PCB's are removed and disposed
ECOSYSTEM					
biomass (1,000 lbs. of salmon/trout)	0	109	284	312	818
nitrogen & phosphorous (pounds)	0	1,800	4,770	5,200	13,000
number of runs with "good" or better restoration potential	0	0	2	0	9
river ecology	nutrients & debris blocked, flow regime altered	nutrients & debris blocked, flow regime altered	nutrients & debris blocked below RM 4.9, flow regime natural to RM 4.9	nutrients & debris blocked, flow regime altered	nutrients & debris transported along entire river, flow regime restored

*** Ongoing research to both assess the hazard from newly discovered faults in the area and revise earthquake safety standards may require re-evaluation of the safety of the dams

Impacts of Each Alternative





Elwha River, no date. (Clallam County Historical Society)

Previous page: Starting of construction at the base of the Elwha Dam, circa 1910.
(Daishowa/James River Company Photo)

Impacts of Each Alternative

This chapter will first present a description of existing environmental conditions for each resource (sediment, water quality, etc.), and, second, a discussion of impacts expected to the resource if the alternatives were to be implemented. The existing conditions are termed "Affected Environment."

Sediment, River Morphology and Water Quality

Affected Environment

The Elwha River is 45 miles long, has 100 miles of tributary streams, and drains 321 square miles of the Olympic Peninsula (See Figure 3). Eighty-three percent of the drainage lies within Olympic National Park, comprising approximately 20% of the total park area. Impoundment of the river in Lake Mills and Lake Aldwell has inundated 5.3 miles of riverine and 715 acres of lowland habitat.

The Elwha River, its tributaries, Lake Mills and Lake Aldwell are classified by Washington Department of Ecology as Class AA waters, signifying waters having "extraordinary" water quality.

Annual precipitation in the Elwha River basin ranges from 220 inches in its upper reaches to 56 inches near the mouth of the river. Average annual daily discharge is 1500 cubic feet per second. Discharge is influenced by early winter storms and spring snowmelt, and by baseflow conditions during the summer. The lowest flow period is during late summer and early fall.

The Elwha River, its tributaries, and Lake Mills and Lake Aldwell are classified by the Washington Department of Ecology as Class AA waters, signifying "extraordinary" quality. Overall, the Elwha has relatively low concentrations of dissolved and suspended sediment loads, nutrients, and organics. Changes in natural water quality occur in the lower part of the watershed, mostly as a result of reduced sediment load and elevated water temperatures during the summer. Suspended sediment concentrations and turbidity of the lower river are related to flood flows, logging, agricultural practices, and bank erosion.

The city of Port Angeles holds 200 of the 206 cubic feet per second of state-issued water rights on the Elwha River; a 50 cubic feet per second groundwater right for municipal purposes at a Ranney well next to the river; and a 150 cubic feet per second surface right covering a diversion structure and canal approximately 3 miles upstream from the river mouth. This surface diversion provides water to three industrial users, two large paper and pulp mills, and the Washington Department of Fish and Wildlife fish rearing channel. Private landowners and the Lower Elwha S'Klallam Tribe hold rights to the other 6 cubic feet per second. The United States holds additional water rights in trust for the tribe that are not issued by or registered with the state.

These rights protect sufficient water to support treaty fisheries and the purposes of the Lower Elwha Indian Reservation.

Sediments in the Elwha River drainage basin are dominated by glacial deposits and recent alluvium. These sediments, developed in the last 8,000 years as glacial deposits, range in size from clay to cobble and provide much of the material transported by the Elwha. Upstream from Lake Mills, the riverbed material consists of sand, gravel, cobbles, boulders, and, in some places, bedrock outcrops. Downstream from both dams, the volume of sand and gravel is much reduced.

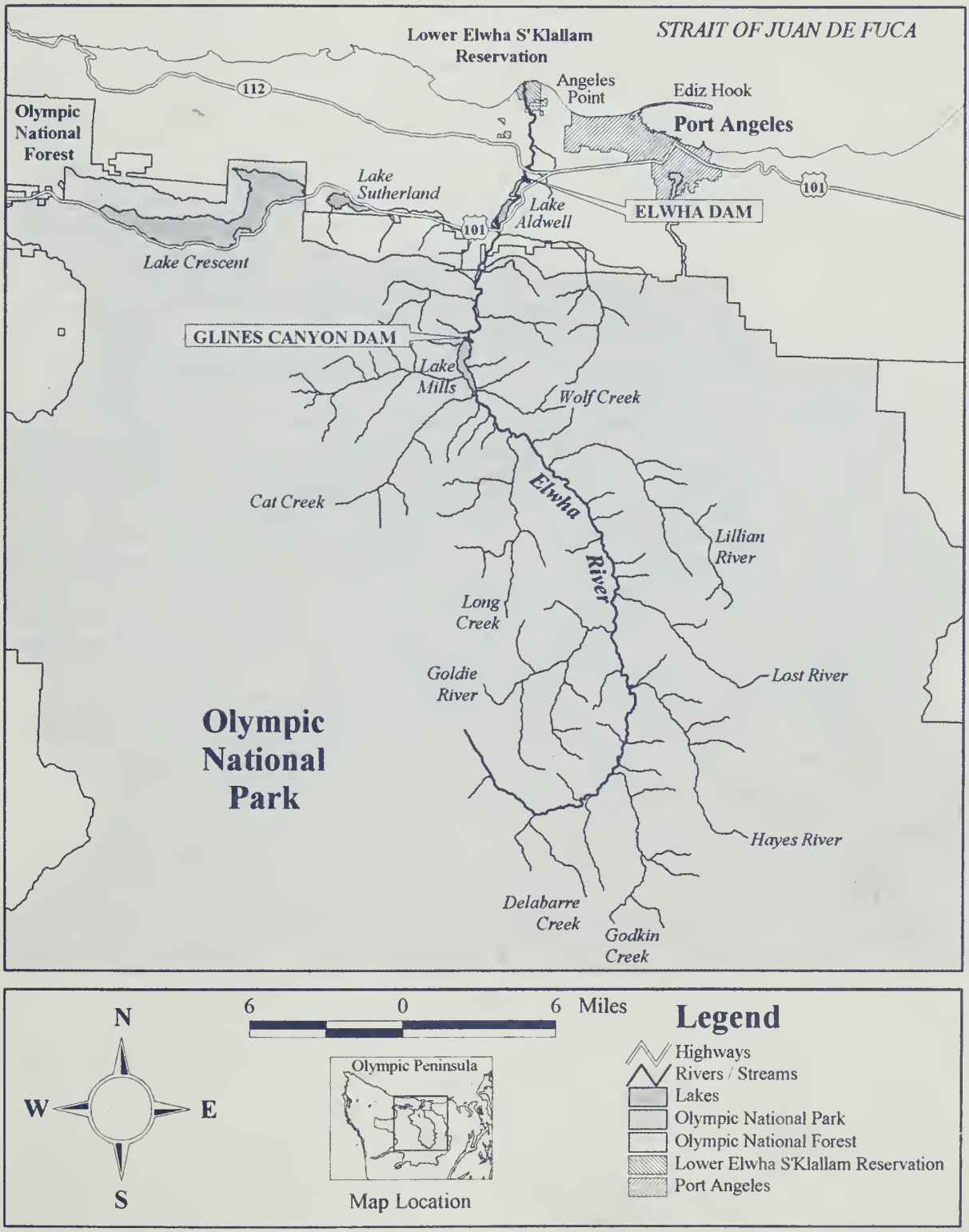
The Elwha River has a steep slope--steepest at the headwaters (16% average gradient) and generally decreasing in the downstream direction. The river flows through several steep, narrow, bedrock canyons. Between these canyons, the channel is more mildly sloping and has wider reaches with floodplains. Near the mouth, the river has the widest floodplain and the flattest slope.

The sometimes high and variable sediment loads carried by the upper Elwha make this natural reach dynamic, with bank erosion, channel migration, and gravel and cobble bars that erode and are later re-formed. Although the river below the dams was once the same, the greatly reduced coarse sediment load has changed the formerly dynamic lower reach to one that is static, with stable gravel bars and mature, woody vegetation established in the floodplains.

Near what is now Lake Mills, the pre-dam river gradient was less steep than immediately up- or downstream. In this natural bottom or flatter area, the Elwha River was a meandering and locally braided channel with gravel and cobble bars. These bars were maintained with high sediment input from upstream and from erosion of the surrounding floodplain and valley walls. Sand and gravel are currently trapped by Lake Mills and the riverbed in the middle stretch has become armored with only larger cobbles and boulders. Without the natural upstream sediment supply, local channel migration has decreased and many floodplains have become well vegetated. Conditions are similar in the first two miles below Elwha Dam.

Below these two miles, the river flows out into a wide, wooded floodplain with soils of sands, silts, and cobbles. This floodplain is bound on the west side by steep cliffs more than 150 feet high. Here, the pre-dam river channel migrated throughout its entire floodplain, 1.2 miles wide near the mouth of the river, preventing the establishment of mature evergreen forest. Currently, channel migration near the mouth is constrained by dense, woody vegetation in the floodplain and on the east by a setback levee constructed in 1989. This levee is located beyond the limits of the current meander-belt width (based on empirical relationships and historical evidence from aerial photographs); however, it is not considered structurally capable of constraining channel migration if that meander belt is widened, as it may be if the dams were removed (U.S. Army Corps of Engineers, 1994). A 600-foot-long levee that extends downstream from the high river bluffs on the west side of the river

Figure 3. *Elwha River System*
Olympic National Park
United States Department of the Interior • National Park Service
DSC • June 1995 • 149 • 20056A



near its mouth also restricts the floodplain. It may be necessary to modify (i.e., strengthen) these levees if the dams are removed.

Erosion and river transport for 9,000 years delivered an estimated 280,000 cubic yards of sediment annually to form an extensive delta at the river mouth before the Elwha Dam was completed in 1914. Currently, the only sources of delta sediment are those in the three miles upstream from the mouth, i.e., erosion of loose material (alluvium) and of the bluffs that lie along the west side of the river. As a result, sediment yields to the delta have dropped to 5,900 cubic yards per year, or approximately 2% of the pre-dam volume, and the beaches east of the river mouth have eroded substantially (75-150 feet of shoreline recession, FERC, p. 3-19).

Material from the historic Elwha delta helped to create and feed Ediz Hook, an above-surface extension of sand, gravel, and cobbles that forms the bayward side of Port Angeles Harbor (FERC, p. 3-20). It has also nourished beaches and nearshore areas. The drastic reduction in supply from the river has caused some erosion of both beaches and the western edge of Ediz Hook.

The U.S. Army Corps of Engineers, which spends approximately $100,000 annually to control further erosion of Ediz Hook (U.S. Army Corps of Engineers, Jan. 1995), estimates contribution from the river before the dams were built to have been between 50,000 and 80,000 cubic yards per year. Currently, the river contributes a negligible volume of sediment to the Hook. A set of marine cliffs east of the river mouth also helped form and sustain Ediz Hook, but this source, too, has been vastly reduced. In 1930 and again in 1958, the cliffs were stabilized to control erosion and protect the city's water supply line at their base. Based on updated information, the Army Corps now believes the dams have reduced sediment to the coastal area from the Elwha River mouth to Ediz Hook by 35%, and stabilization of the marine cliffs by 55% (US Army Corps of Engineers, personal communication, 1995).

Material from the historic Elwha delta helped to create and feed Ediz Hook...

Impacts

The dams and reservoirs have altered and continue to alter the character of the river; these impacts are the impacts of the **No Action** alternative. The morphology of the Elwha River has been modified by the presence of Lake Mills and Lake Aldwell. The meandering and braided channels that existed prior to the dams have been downcut and are armored. Dam construction has resulted in trapping of sediment, large woody debris, and nutrients in the reservoirs; inundation of native anadromous fish habitat; and alteration of aquatic habitats downstream from the dams. The marine nearshore is also different as a result of the dams (see Living Marine Resources). Deposits in the intertidal and shallow subtidal zone are now primarily cobble instead of sand.

Although a portion of the fine sediment (clays and silts) has escaped the dams and been transported downstream, the dams have retained larger sized sediment, and much less sand and gravel exists in the lower and middle

reaches than before the dams were built. As a result, the riverbed may be as much as 1 to 5 feet lower than under pre-dam conditions (FERC, p. 4-2) and is composed primarily of cobbles and boulders which move only during very high flood events. River elevation has also dropped and, as a result, is more often contained within its channel during moderate flow conditions.

As of 1994, the volume of sediment trapped behind Glines Canyon Dam was estimated to be 13 million cubic yards (J. Gilbert and R. Link, U.S. Bureau of Reclamation, personal communication, March 1995). If averaged over the years since it was completed (1927 to 1994), approximately 190,000 cubic yards per year has been trapped in the reservoir. It is unlikely that uniform transport of material has been the annual norm since there is evidence of upstream landslides during this same period.

All of the coarser grained gravel, sand, cobbles, and boulders and a portion of the finer clays and silt have settled in or immediately upstream of the reservoirs. In Lake Mills, silt and clay deposits have an average thickness of 12 feet. The delta at the upper end of the lake consists primarily of sand and gravel (with smaller amounts of clay, silt, and boulders) and is as much as 70 feet thick (FERC, p. 3-11).

The volume of sediment trapped in Lake Aldwell and its delta is estimated to be 4 million cubic yards (Gilbert and Link, personal communication, 1995). Approximately one-half of these deposits were trapped in the reservoir prior to construction of the Glines Canyon Dam.

The **No Action** alternative would continue to impact water quality in the river by trapping nutrients and organic material and by raising temperatures through surface releases of reservoir water. Because a large portion of the finer grained sediment (clay and fine silt) remains suspended, the river is turbid during high flows regardless of the dams. Water temperatures in the middle and lower river would continue to be elevated 2 to 4 degrees C during late summer and early fall (FERC, p. 3-24). Warmer temperatures in the middle and lower portions of the river have been linked to the occurrence of *Dermocystidium salmonis*, a disease that has caused increased mortality in the lower Elwha population of chinook salmon.

River flow rate downstream of the dams is very similar to that naturally occurring (i.e., before the dams) since the dams are almost always operated in a "run-of-the-river" mode. Thus, the reservoirs reduce the effects of only the shortest duration and most minor floods. Otherwise, the rate that water enters and exits the reservoirs at any given time is roughly the same.

Although some additional sediment would be introduced into the middle and lower Elwha River during construction of fish passage measures, the long-term impacts of the **Dam Retention** (with mitigation) alternative on sediment transport and water quality would otherwise be identical to those described for the **No Action** alternative.

If only **Glines Canyon Dam** were removed, 7 to 9 million cubic yards of sediment (one-half to two-thirds of the total) would be expected to naturally erode. The majority of finer grained sediment (silt and clay) would wash out within the first six months following dam removal. Although some would settle in Lake Aldwell, most fine sediment would stay in suspension and flow out to the lower river and into the marine environment. The larger-sized material would wash into the middle river and settle in Lake Aldwell and its delta. If sediment was released from Lake Mills, the resulting sedimentation in Lake Aldwell would reduce that lake's capacity by 40 to 60%. Restoration of the natural sediment transport regime would result in the filling of the remaining reservoir capacity within an estimated 40-50 years.

Since the intake for water to the powerhouse is located near the surface of Lake Aldwell, the power plant would theoretically remain operative until nearly the entire reservoir was filled. However, larger-sized sediment such as sand would begin to pass through the penstocks, dulling and ultimately destroying the turbine runners. Although it would be possible to routinely replace runners as they were destroyed, the cost of doing so would probably prohibit the ongoing operation of the Elwha power plant. In the long run, sediment could flow through the spillway and penstocks and into the lower river and marine environment.



Elwha River, no date. *(Clallam County Historical Society)*

Under the **Removal of Elwha Dam** alternative, 2 to 3 million cubic yards of sediment (one-half to two-thirds of the total) would be expected to wash into the lower river and coastal zone if naturally eroded. This volume would be washed away within one to ten years. Since Glines Canyon Dam would remain in place, normal sediment transport would not be reestablished in the middle or lower river.

If sediment was released from Lake Mills, the resulting sedimentation in Lake Aldwell would reduce that lake's capacity by 40 to 60%.

If the **Proposed Action** were implemented, the natural transport of sediment from upper to lower river would be restored regardless of the type of sediment management selected. However, the volume of material entering the river and/or marine environment in the short term would vary depending on the method of sediment management. This environmental impact statement presumes sediment would be naturally eroded under each of the single dam removal alternatives. A full spectrum of sediment management options, including natural erosion, mechanical removal via a slurry pipeline, and stabilization of sediments in place in the reservoir area, are possible means of implementing the Proposed Action. The feasibility of several of these options was analyzed in the Elwha Report.

Allowing all sediment behind the dams to wash out naturally would result in the largest amount of sediment in the river in the short term. Although it depends heavily on the degree of mitigation needed to protect industrial and municipal water supplies, at this time, it also appears to be the lowest cost option (Elwha Report, pp 140-141, as updated by Bureau of Reclamation, 1995). Mechanically removing sediment or stabilizing it on site before the dams are removed could be the most costly (Elwha Report, pp. 138-139, as updated by BOR, 1995) but potentially result in the smallest amount of sediment entering the river in the short term. Combinations of these approaches are possible and some would be analyzed in the Implementation EIS.

If both dams were removed, up to 9 to 12 million cubic yards of sediment (one-half to two-thirds of the total) could be introduced into the river system. The **Proposed Action** is the only alternative which would return near-natural (a city diversion structure near the mouth of the river may remain) sediment transport conditions to the Elwha River. Following removal of both dams and revegetation of the reservoir area, channel activities and substrate conditions would eventually return to pre-dam conditions (see "Affected Environment"). Increased sediment to the coastal areas would create shoals and bars, and supply sediment to the river delta, Angeles Point, and Ediz Hook. Over time, some or all of these features would be partially or fully restored (FERC, p. 4-93).

Aggradation, or the degree to which the riverbed rises, differs with each alternative. **No Action** or **Dam Retention** (with mitigation) would continue to deny sediment to the middle and lower river, with the riverbed remaining artificially lowered and armored. If either **Removal of Glines Canyon Dam** or the **Proposed Action** were selected, preliminary estimates suggest the riverbed and river elevation could rise 1 to 5 feet in some places, potentially

causing more frequent localized flooding and/or a wider meander across the floodplain. Residences, well heads, and roadways may require raising or some other means of flood proofing. Downstream levees might need to be raised 2-4 feet and strengthened with riprap to withstand increased channel meandering (Elwha Report, pp. 36-37). **Removing only Elwha Dam** could result in temporary aggradation. However, since natural transport conditions would not be restored, sediment would eventually wash out of the lower river and return the riverbed to its present altered condition.

All action alternatives would affect water quality in the short term, primarily through increases in turbidity. In some cases, these increases could have severe impacts on aquatic life or water quality which would require mitigation. Construction of fish passage measures, such as those required in the **Dam Retention** or **Single Dam Removal** alternatives, would require work in the river and/or reservoir, resulting in some temporary increases in suspended sediment and other pollutants in the river. Removing either or both dams would release stored sediment. Suspended sediments would be washed out immediately into the river, with the majority of impacts ending within six months after dam removal. Larger sediment (sand, gravel, cobbles) would be carried downstream over several months or even years.

Case studies have shown river systems generally recover completely from extreme sediment events within two to seven years of the time the event is complete (i.e., higher than average loads cease) (FERC, p. 4-92; and see "impacts to fisheries" in this environmental impact statement).



Increases in suspended solids, especially under the **Remove Glines Canyon Dam** or **Proposed Action** scenarios, could kill large numbers of fish, their eggs, and other aquatic life in the short term. In addition, short term increases in organic matter, bacteria, and nutrients would occur in the middle and lower reaches of the Elwha (FERC, p. 4-96), potentially causing periodic lethal or harmful decreases in dissolved oxygen for aquatic life in the river. If dam removal were sequenced over several years, fish could experience periodic lethal or harmful doses of silt and clay for as many as four or more years. Mechanical removal of fine-grained sediment or complete stabilization of sediments on site before the dams were removed would reduce or eliminate fish kills. Either or both of these options may be more fully examined in the Implementation EIS.

In the long run, water quality would be similar to existing conditions. During high flows, the river would be turbid as it is now. Increases in nutrients and organic material would result from the return of the anadromous fisheries. This, in turn, would increase aquatic invertebrate diversity and productivity of the river below the dams. **Removing either Glines Canyon Dam** or **both dams** would reduce downstream water temperatures as much as 4° C in the late summer and early fall. This would help reduce disease and increase reproductive success of anadromous fish in the lower river.

Users who draw on surface water (industrial users and fish hatcheries) could also be directly affected by sediment in the short term (FERC, p. 4-97). Water is currently treated before use by the Rayonier and Daishowa mills since the river is turbid under high flow conditions. The Washington Department of Fish and Wildlife rearing channel is fed directly from surface flow. Although the tribe's hatchery is supplied with an underground infiltration gallery, water in it is only slightly less turbid than surface water because the gallery is located in coarse backfill and buried close to the surface.

Port Angeles's domestic water is filtered by underground gravels and sands before it reaches a Ranney collector well, and is expected to be only slightly affected (FERC, p. 4-97). If a high sediment load were carried by the river during dam removal, filtering of the sediment from the water by the underground gravels and sands could slightly reduce the capacity of the Ranney collector well. The state is currently evaluating whether the city's supply could be contaminated through surface water sources of organisms such as *Giardia lamblia*, *Legionella*, or viruses (Washington Dept. of Health letter to U.S. Bureau of Reclamation, 1994).

The volume of water would not change with any alternative, although the location of the river or its meander pattern might. The river is currently migrating away from the Ranney installation, causing reduced water yield. Removing the dams could cause more frequent or wider meanders, further reducing Ranney collector well yield.

Most private wells would be unaffected regardless of alternative. The bedrock underlying both reservoirs is nearly impermeable and the ground water gradient (flow direction) is toward the river. Therefore, reservoir water is not recharging the surrounding upland aquifers where most of the private wells are located.

The water source for a few wells located above Lake Aldwell is in the river alluvium, within the confluence basin of Indian Creek and the Elwha River. These wells might have lower water levels if the lake were drained. The water levels in wells located in the Elwha River valley would be expected to have greater and more frequent fluctuations if the river returned to a more dynamic natural state. Wells located on and near tribal land in the lower Elwha valley would be expected to have slightly higher water levels due to riverbed aggradation and higher river levels.

Mitigation

Mitigation for impacts on municipal and industrial water users from removing the dams is required by the Elwha River Ecosystem and Fisheries Restoration Act. It mandates protection of "...existing quality and availability of water from the Elwha River for municipal and industrial use from possible adverse impacts of dam removal," and goes on to say that the costs to design, construct, operate, and maintain these water quality control facilities "...will be federal costs at the discretion of the Secretary of the Interior" (See section 4(3)(b)).

A much more extensive analysis of mitigation and preferred options for each of the sediment management alternatives would be presented in the Implementation EIS. However, only feasible and cost-effective mitigation options are being considered. Water quality mitigation costs are inverse to sediment management costs, i.e., the more spent to reduce sediment in the river, the less water quality mitigation required. Costs to protect water quality for municipal and industrial users range as high as $34 million and depend on sediment management (costs to protect water quality are inversely related to those for sediment management).

The following mitigation measures are technically feasible and, if implemented, would fulfill the congressional directive. They are analyzed in the Draft Staff Report (pp. 4-102 to 4-104) and the Elwha Report (pp. 98-100).

If necessary, the Port Angeles municipal water supply could be protected through the construction and use of additional Ranney wells. Periodic back-flushing of the Ranney well collectors might be necessary to prevent clogging. The city's water supply and quality for industrial users could be maintained by constructing an infiltration gallery, a new inlet and settling basin, additional Ranney wells, or a diversion inlet with chemical pretreatment and a settling basin. Improving or adding to the treatment facilities currently used by the mills could be another option to protect water quality.

Water supplied to the tribal fish hatchery would be protected if the existing infiltration pipe was relocated, a new or additional infiltration gallery built, and the original protection dike enlarged to control changes in the channel.

During public review of the draft environmental impact statement, several homeowners expressed concerns that their property could be subject to flooding and degraded water quality if the dams were removed. Measures that would mitigate impacts to water quality and flooding for the Elwha Place Homeowners Association, including reinforced levees and other means of floodproofing, would be evaluated in the Implementation EIS. The Dry Creek Water Association's water supply could be protected by modifying or replacing the wells closest to the Elwha River. Mitigation for private well users is also being investigated.



In order to protect the water supplied to the mills and the Washington Department of Fish and Wildlife fish rearing channel, diversion facilities could be modified to correct existing fish passage problems at the industrial diversion dam and facilitate downstream sediment transport. A flood protection barrier could also be constructed between the river and the rearing channel.

Raising the U.S. Army Corps of Engineers flood control levee by as much as 4 feet in some places (again, based on preliminary estimates) and armoring it with riprap would maintain the 200-year flood level of protection for residents against possible additional downstream flooding and meandering of the river (U.S. Army Corps of Engineers, 1994). A second homeowner's levee on the

west side of the same part of the Elwha floodplain might also need to be raised and/or armored to preserve its present level of protection.

Cumulative Impacts

Water quality in the lower Elwha River experiences some degradation from other sources. Indian Creek, a major tributary which enters the Elwha above Lake Aldwell, drains a watershed that has been logged, farmed, and developed residentially. Little River, another tributary above Elwha Dam, travels through a watershed highly disturbed by logging. Both of these streams bring sediment and may carry trace quantities of pesticides, fertilizers, and other contaminants.

Conclusions

Present estimates, based on the interpretation of visual evidence of terraces downstream of the dams, are that the riverbed may be 1 to 5 feet lower and more channelized because of the dams. Water is generally clear and of high quality, although it is cloudy during rainy or high flow seasons. Releases of warmed surface water from the reservoirs have increased late summer water temperatures 2 to 4 degrees C above pre-dam conditions.

Removing either or both dams would release stored sediment.

Construction of fish passage measures, such as those required in the **Dam Retention** or **Single Dam Removal** alternatives, would require work in the river and/or reservoir and would result in temporary increases in suspended sediment and other pollutants in the river. Removing either or both dams would release stored sediment. Suspended sediments would be washed out immediately into the river with the majority of impacts ceasing within six months following dam removal. Larger sediment (sand, gravel, cobbles) would be carried downstream over several months or even years.

Increases in suspended solids, especially under the **Remove Glines Canyon Dam** or **Proposed Action** scenarios, could kill large numbers of fish, their eggs, and other aquatic life. In addition, short term increases in organic matter, bacteria, and nutrients would occur in the middle and lower reaches of the Elwha (FERC, p. 4-96), potentially causing periodic harmful decreases in dissolved oxygen for aquatic life in the river. Although more expensive, mechanically removing sediments or stabilizing them in place would reduce the amount of sediment in the short term.

In the long term, removing both dams would reintroduce spawning gravel and nutrients for fish and return the river to a meandering, dynamic state. It would also result in pre-dam water temperatures, and could raise the riverbed and result in localized flooding. **Removing only Glines Canyon Dam** would do much the same, but would not return sand and gravel to the estuary, beaches, or Ediz Hook in the foreseeable future. **Removing only the Elwha Dam** would not substantially change river morphology or water quality from existing conditions in the long term. Only the **Proposed Action** would restore natural sediment transport regime and channel morphology.

Native Anadromous and Resident Fisheries

Since the impacts to native anadromous fish are rated somewhat differently in the Draft Staff Report than in the Elwha Report, a discussion of the Department of the Interior methodology for assessing impacts is presented below. Also, this section is organized differently than other sections to make it easier to read. Following a discussion of Interior methodology is a summary of both affected environment and impacts to Elwha salmonids. This includes a concise analysis of restoration potential and harvest restrictions for each run of salmon or anadromous trout. For readers who wish more information on each species, a more detailed section organized by run follows the summary of restoration potential. This section is titled "Species Specific Impacts."

Department of the Interior Impact Methodology

In assessing impacts to native anadromous fish under each alternative, the Draft Staff Report and Elwha Report address three primary factors: available stock; ability for adults to pass over the dams as they migrate upstream and juveniles to pass downstream on their way to the sea; and the condition of the stream habitat. A fourth, the ability to manage harvest to achieve restoration, would depend on how well the fish survive passage, condition of stream habitat, marine survival, and the number of years restoration is expected to take. For the purposes of this environmental impact statement, the ability to manage harvest to achieve restoration is referred to as the ability to withstand fishing pressure. Hatchery supplementation of each species is presumed to end once restoration goals have been met for any of the alternatives.

Restoration potential for each run is classified based on how successfully the run was rated under each of these factors, similar to the approach used by the Federal Energy Regulatory Commission. However, there are some differences. The commission rates losses less than 20% for passage mortality as "favorable", while Interior disagrees and believes mortality should be kept as low as technologically possible. Further, the availability of native Elwha River genetic stock is not as important in driving restoration potential, since the Elwha Report has identified several alternative sources of genetic material Interior believes to be appropriate for restoring runs.

With these caveats, the Department of the Interior generally agrees with the following rating:



Any rated as "none" = No chance of restoration
Any rated as "unfavorable" = Poor chance of restoration
Two or three factors "marginal" = Fair chance of restoration
Two factors "favorable" = Good chance of restoration
Three factors "favorable" = Excellent chance of restoration

Table 2. *Restoration Potential of Elwha Salmonids for Each Alternative*

Dam Removal Alternative	Factors Contributing to Salmonid Restoration Potential				Salmonid Restoration Potential
	Factor Remains Constant	Factors Varying Per Alternative			
	Stock Availability	Ability to Withstand Fishing Pressure	Upstream Passage	Habitat Quantity & Quality	
Dam Retention					
Summer/Fall Chinook	●	◒	○	○	poor
Spring Chinook	○/◒	◒	○	◒/●	poor
Coho	◒	○/◒	◒	◒	fair
Winter Steelhead	◒/●	●	◒	◒	fair
Summer Steelhead	◒	●	◒	◒/●	fair
Pink Salmon	○/◒	○/◒	○	○	none/poor
Chum Salmon	◒	○/◒	○	○	none/poor
Sockeye Salmon	○/◒	○/◒	○/◒	○/◒	none/poor
Searun Cutthroat	unknown	●	unknown	◒	unknown/poor
Searun Char	◒	●	unknown	◒	unknown/poor
Glines Canyon Dam Removal					
Summer/Fall Chinook	●	◒	◒	◒	fair/good
Spring Chinook	○/◒	◒	◒	◒/●	fair/good
Coho	◒	○/◒	◒/●	◒/●	fair/good
Winter Steelhead	◒/●	●	◒/●	◒/●	good
Summer Steelhead	◒	●	◒/●	◒/●	good
Pink Salmon	○/◒	○/◒	○	○/◒	none/poor
Chum Salmon	◒	○/◒	○	○/◒	none/poor
Sockeye Salmon	○/◒	○/◒	○/◒	○/◒	none/poor
Searun Cutthroat	unknown	●	unknown	◒	unknown
Searun Char	◒	●	unknown	◒/●	unknown
Elwha Dam Removal					
Summer/Fall Chinook	●	◒	◒	○/◒	poor/fair
Spring Chinook	○/◒	◒	○	◒/●	poor/fair
Coho	◒	○/◒	◒	◒/●	fair
Winter Steelhead	◒/●	●	◒	◒	fair
Summer Steelhead	◒	●	◒	◒	fair
Pink Salmon	○/◒	◒	◒/●	○/◒	poor
Chum Salmon	◒	◒	◒/●	○/◒	poor
Sockeye Salmon	○/◒	●	●	○/◒	poor/fair
Searun Cutthroat	unknown	●	unknown	◒/●	unknown
Searun Char	◒	●	unknown	◒/●	unknown
Proposed Action					
Summer/Fall Chinook	●	●	●	●	excellent
Spring Chinook	○/◒	●	●	●	good
Coho	◒	◒	●	●	good/excellent
Winter Steelhead	◒/●	●	●	●	excellent
Summer Steelhead	◒	●	●	●	good
Pink Salmon	○/◒	●	●	●	good
Chum Salmon	◒	●	●	●	good
Sockeye Salmon	○/◒	●	●	○/◒	poor/fair
Searun Cutthroat	unknown	●	●	●	good
Searun Char	◒	●	●	●	good

KEY
- ● Favorable
- ◒ Marginal
- ○ Unfavorable

All species of native anadromous fish... ...are confined to the 4.9 miles downstream of the dam... ...This habitat is in poor condition: water temperatures are abnormally high during summer and early fall; spawning fish are unnaturally crowded and subject to disease

Table 2 summarizes the restoration potential in light of each of these factors, including ability to withstand fishing pressure. It should be noted that identical ratings of ability to withstand fishing pressure do not mean that identical fisheries would be in place. The amount of fishing that can take place differs under each alternative. For example, if both dams are retained, the ability of winter steelhead to withstand fishing pressure is rated as favorable. However, this may mean that the fishery must be managed for the "catch and release" of wild fish. On the other hand, under the Proposed Action, it will be possible to catch and keep wild fish (see the species specific impact section of this document.)

The Elwha Report presumes that either dam, if left in place, would be mitigated to a greater degree than does the commission. These mitigation measures include increased flows over the Glines Canyon Dam spillway, screens on a relocated water intake at Glines Canyon Dam, and the possible importation of gravel to the middle and lower river if that dam is not removed. Even so, the Elwha Report predicts poorer chances of restoring most runs than does the Draft Staff Report with either dam left in place (Elwha Report, pp. 36-58, 96-105, Appendix G). Since the Elwha Report contains more current information than the Draft Staff Report, material from the Elwha Report is summarized when there is a discrepancy between the two.

Summary of Affected Environment and Impacts to Fisheries

Summary of Affected Environment

All species of native anadromous fish are presently prevented by Elwha Dam from accessing more than 70 miles of the Elwha River and usable tributaries, and are confined to the 4.9 miles downstream of the dam, known as the lower river. This habitat is in poor condition: water temperatures are abnormally high during summer and early fall; spawning fish are unnaturally crowded and subject to disease; nutrient flow necessary for invertebrate (food) production and the transport of large woody debris important for cover during the winter is diminished; spawning gravels essential for successful natural reproduction are missing because they are trapped in each reservoir; and the estuary, which serves as a nursery for juvenile salmonids, is reduced in size and quality.

Hatchery operations below Elwha Dam presently produce chinook and coho salmon and steelhead, although there is some natural spawning of each of these and other species in the lower river.

Impacts All Native Anadromous Fish Share

Like most other natural resources, anadromous fish would experience great benefits in the long term, but may be subject to adverse impacts in the short term if both dams are removed. The short term effects would arise primarily as a result of sediment stored behind the dams washing into the river. Particularly the finer-grained sediments, such as silt and clay, at very high

concentrations could affect fish by smothering adults, filling spaces between spawning gravels and making them unavailable to eggs, and limiting dissolved oxygen concentrations necessary for incubating salmon and trout eggs.

The degree and timing of sediment releases into the river, and thus the impacts on native anadromous fish, would depend on the selected dam removal and sediment management alternatives. Several alternatives for each are examined in the Elwha Report as required by the Elwha River Ecosystem and Fisheries Restoration Act. A few of these methods will be expanded and analyzed in the Implementation EIS.

If both dams were removed and most of the accumulated sediment washed out by winter storms within one year, there would be the potential for loss of an entire brood year of naturally spawned native anadromous fish, although multiple year classes of some fish and efforts to remove some fish to hatchery facilities would mitigate this loss. If dams were removed sequentially and sediment managed by downstream coffer dams or stabilized on site, adverse impacts to fish would be further limited. Dredging and slurrying fine sediments would substantially reduce the amount of sediment entering the river.

For comparison purposes, Interior examined recovery after other actions that resulted in larger than usual amounts of sediment in Pacific Northwest rivers used by salmonids. Although clearcut logging can send 2.5-3 times (approximately 3,200 cubic yards per square mile) the material into streams as would naturally be transported in the Elwha River (an estimated 1,200 cubic yards per square mile), using it for comparison would underestimate the impacts of releasing sediment now stored behind the Elwha dams. The May 18, 1980, eruption of Mount St. Helens and aftermath would overestimate the impact more than 50-fold, but may serve as a useful comparison.

The volcanic eruption caused a debris flow that sent an estimated three billion cubic yards of material into the upper 17 miles of the North Fork Toutle River basin and approximately 50 million cubic yards into the South Fork Toutle River (Lucas 1985). Approximately 90% of the upper North Fork and tributaries previously accessible to salmon were buried up to 213 yards deep by mud flows. Riparian vegetation, important to fish because it shades streams and keeps water temperatures cool, was completely wiped out along the Toutle. In contrast, the total estimated sediment accumulation within the two Elwha reservoirs is 17 million cubic yards, and existing riparian vegetation along the Elwha would be unaffected should the **Proposed Action** be implemented.

The eruption devastated most of the anadromous fish habitat in the Toutle River; initially, many adult salmonids avoided entering it because of high sediment loads and strayed to other Columbia River tributaries (Lucas 1985). However, natural fish recovery began quickly. The first adult summer steelhead was observed in the North Fork Toutle River in August 1980, only three months after the eruption. Steelhead redds (spawning nests) were observed in a North Fork and many South Fork Toutle River tributaries. Fry (juveniles) were later

captured in these tributaries, indicating successful reproduction (Rawding 1995). The numbers of yearling and older steelhead increased ten-fold from 1981 to 1984 in a South Fork tributary (Lucas 1985). Despite the devastation wreaked on the Toutle River anadromous fishery by the eruption, recovery began immediately and continues today. Conditions in the Elwha River, even under the worst of circumstances for short-term impacts to fish (i.e., natural erosion), would be far better and restoration expected to occur much more quickly.

By run, the restoration potential for Elwha species if the Proposed Action were implemented is summarized below. More information is available in the section "Species Specific Impacts."

Summary of Impacts

As explained above, four factors were evaluated to determine a species' chances of restoration--available stock, passage mortality, habitat and fishing pressure. A summary of the impacts of each of these factors on restoration potential for Elwha River salmon and seagoing trout is presented below.

Available Stock: One of these factors--available stock--remains constant regardless of the alternative. The Elwha Report (Appendix G) lists 28 different options for restoring the 10 original Elwha fish stocks. In addition, this environmental impact statement includes more information on sources of stock in the Responses to Comment section on "Fisheries."

Availability of suitable stocks are considered:
"favorable" for summer/fall chinook salmon;
"marginal/favorable" for winter steelhead;
"marginal" for coho and chum salmon, summer steelhead and searun char;
"unfavorable/marginal" for spring chinook, pink and sockeye salmon; and
"unknown" for searun cutthroat trout. (See Elwha Report, Appendix G).

Passage: As noted under the "Methodology" section, Interior has assumed state-of-the-art fish passage measures for the purposes of this environmental impact statement. Yet, Interior disagrees with the Draft Staff Report assumption that up to 20% mortality from passage is "favorable," and so also disagrees with commission findings on the impacts of fish passage to Elwha anadromous fish.

Although passage mortality varies among species, pink, chum, and sockeye salmon would be expected to encounter the most problems at Elwha Dam. Both pink and chum salmon produce juveniles that begin migrating downstream within hours of hatching. Because they are very small, they would be unable to effectively negotiate the reservoirs and could suffer significant mortalities at screens proposed for the penstocks. If Elwha Dam were removed, the middle stretch of river would become available to pink and chum, although habitat quality in this stretch would remain poor.

The Elwha Dam now blocks travel to and from Lake Sutherland for sockeye salmon that need the lake to reproduce. Although fish passage measures at Elwha Dam would allow sockeye to complete the journey, smolts of this species lose their scales at a higher rate than all other salmon species, and descaling during passage at Elwha Dam could be significant. **Removal of Elwha Dam** or **Proposed Action** would allow sockeye salmon unimpeded access to Lake Sutherland.

Based on studies conducted at Lake Mills, spring and summer/fall chinook salmon juveniles would likely suffer significant losses migrating downstream through the reservoir and past Glines Canyon Dam. Also, a large number of adult spring chinook salmon would die while migrating upstream past fish passage facilities (the trap-and-haul facility at Glines Canyon Dam) because these fish are sensitive to handling following their entry into fresh water. Passage survival is rated as "unfavorable" for spring chinook if either the **Dam Retention** or **Removal of Elwha Dam** alternative is selected. Summer/fall chinook salmon, more tolerant of handling, are rated "marginal" if the **Removal of Elwha Dam** alternative is selected.

Research and experience with searun cutthroat trout and char at fish passage facilities are limited. Further investigation is necessary to define the criteria for effective passage of these fish. Until then, Interior has rated the ability of these fish to pass the facilities proposed for the Elwha and Glines Canyon Dams as "unknown."

Pink, chum, sockeye, spring and summer/fall chinook salmon, searun cutthroat trout, and char have poorer chances for restoration under the mitigated **Dam Retention** alternative (Elwha Report, p. 35) than if one dam is removed. Only coho salmon and winter and summer steelhead are thought to have even a "marginal" chance of surviving passage, and are rated as having "fair" restoration potential if both dams remain. In all alternatives that retain at least one dam, passage survival limits chances of restoration.

Habitat: The third factor, habitat, is particularly important to the long-term sustainability of all runs of salmon and trout. Currently, both the middle and lower sections of the river have very little spawning-size gravel the fish need to lay their eggs. Riffles and pools, important for juvenile rearing, are far less abundant than before the dams were built. Water temperatures are higher than under pre-dam conditions because the still waters of the reservoirs are warmed by the sun and store heat, which is later released downstream. The two dams also limit the downstream transport of nutrients and woody debris essential to aquatic invertebrates and fish. Glines Canyon Dam bars the natural transport of these materials into the middle reach as well as the lower 4.9 miles below Elwha Dam; reservoirs inundate habitat which was riverine and used by fish before the dams were built. These conditions would largely continue under the **No Action**, **Dam Retention** (with mitigation), or **Removal of Elwha Dam** alternatives.



Removal of the Glines Canyon Dam would restore habitat in the middle stretch of river between the dams and allow natural transport of nutrients and debris as far as Elwha Dam. **Removal of the Elwha Dam** would release up to 4 million cubic yards of sediment deposited in Lake Aldwell, but would not affect the significant amounts of sediments, nutrients, and woody debris trapped in Lake Mills. Gravel released by removing Elwha Dam would probably wash out to sea, returning the lower river to its current armored condition.

If the **Proposed Action** were implemented, habitats would improve to pre-dam conditions over the long-term for all species except sockeye salmon. Sockeye require a freshwater lake to complete their life cycle; the only one accessible from the Elwha River, Lake Sutherland, has been degraded by development along its shoreline. Removing the dams would only improve the riverine habitat for this species.

Under any of the scenarios where the dams remain in place, the dams themselves reduce the number of fish, leaving fewer salmon and trout for harvest

Ability to Withstand Fishing Pressure- Of the four factors evaluated, fishing pressure is a regional concern which is not directly addressed in the Elwha Restoration Act. Some specific information on fishing pressure or ability to manage harvest to achieve restoration is presented throughout this section. More generalized information on the additive impact of fish pressure in the marine environment is detailed in the cumulative impacts section.

Achieving the restoration goals for the Elwha would require the prudent management of intercepting fisheries in order to ensure that the necessary number of fish survive to spawn each year. The ability to take the realistic management actions to get fish back to the spawning grounds depends in large part on the size of each run. Under any of the scenarios where the dams remain in place, the dams themselves reduce the number of fish, leaving fewer salmon and trout for harvest, thus reducing management flexibility.

If either one or both dams remain in place, the ability to adjust fishing pressure to meet the needs of pink and chum salmon is rated as "unfavorable" or "marginal". Although the fishing pressure on these species is generally very low, the high numbers of fish destroyed by the dams as well as the poor habitat conditions leave virtually no fish for harvest, and allow for no realistic management actions to occur. Coho salmon also have a rating of "unfavorable" or "marginal" if at least one dam remains. Although the number of fish surviving over the dams is relatively high, the number of fish caught in the ocean is also high. Therefore, to ensure adequate numbers of coho return to the river to spawn would require major changes in marine fisheries and a complete closure of the river fishery. Such large scale modifications to fisheries would be very difficult to achieve.

Most other species are rated as "marginal" under any dam retention alternative. That is, the number of fish lost to the dams can be more or less accommodated by realistic changes in fisheries management. For summer and winter steelhead, cutthroat trout, and native char, the effect of fishing pressure is rated as "favorable" under all alternatives. This is because almost

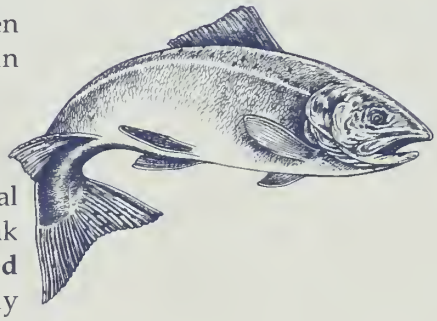
all of the harvest of these fish takes place in the river where the flexibility to manage fisheries is the greatest.

Under the Proposed Action, the effect of fishing pressure is rated as "favorable" for all species except coho salmon, which is rated as "marginal". The "marginal" rating is due to the need to move from a hatchery–based fishery (which does not require as many spawning fish) to a natural stock fishery (which requires more spawning fish). Making this change in management strategy might take several years.

Restoration Potential and Harvest Restrictions of Elwha Salmonids

The Department of the Interior used the same Ricker spawner/recruit models as in the Draft Staff Report with modifications to predict recovery for six major salmon and steelhead runs in the Elwha River (summer/fall chinook, coho, chum, pink, winter steelhead and summer steelhead). Ricker models can predict recovery time, given the number of initial spawners, maximum escapement (i.e., no harvest), rate of increase for each stock, and optimum harvest rate. Interior modifications to the Draft Staff Report analysis reflect present stock conditions and updated harvest rates for Strait of Juan de Fuca stocks, and do not presume any outplanting or hatchery production. The effects of outplanting on the restoration timeframe are noted in the text. The status and recovery of the remaining anadromous salmonid species (spring chinook, sockeye, searun cutthroat and char) is summarized in relation to these models and best available information.

These models of recovery were compared to results at Sunset Falls, an area of stream habitat made available in 1958 by the Washington Department of Fish and Wildlife to anadromous fish in the South Fork Skykomish River. Full utilization--comparable to recovery in the Elwha River--was typically between three and five cycles for most species. Data are presented in tabular form in Table 3.



Summer/fall chinook salmon

The Elwha stock of summer/fall chinook is currently sustained by both natural and hatchery production. Using Ricker curve-based recovery models, peak returns of chinook could occur in five cycles (21-25 years) if the **Proposed Action** were implemented. Total new production would equal approximately 31,360 chinook per year. This modeling assumes no outplanting or hatchery involvement. If both were used to speed restoration of this run in the Elwha, recovery time would fall by one-half.

Under the **No Action** alternative, no new chinook production would result. Adopting the **Dam Retention** alternative would require 29-32 years to recover, adding 16,000 new fish annually. Recovery under the **Remove Glines Canyon Dam** alternative would occur in 29-33 years, creating new production of approximately 25,670 fish per year. **Removing only Elwha Dam** would produce an estimated 20,000 chinook per year after a 29-33 year recovery period.

There are presently no in–river commercial or sport fisheries for chinook salmon in the Elwha River. As many as 150 chinook have been taken from the Elwha in past years during test fisheries, or incidental to fisheries for other species. An additional few are caught in the Strait of Juan de Fuca sport fishery and in net fisheries just to the west of the river mouth. Approximately 61% of the Elwha chinook run is harvested in commercial fisheries in the marine environment (Elwha Report, p. 16).

Under the **Proposed Action**, existing chinook harvest restrictions in the Elwha would likely be in place for the first three complete cycles (10–12 years). Additional harvest restrictions in localized marine fisheries (e.g., area closures in the Freshwater Bay vicinity) might be necessary during the same time period. Harvest restrictions in other Washington sport and commercial fisheries or Canadian fisheries to specifically accommodate Elwha restoration are not probable, as the depressed status of many other native Western Washington and Columbia River chinook stocks is likely to have a larger influence in shaping fisheries for the foreseeable future. Elwha chinook will benefit from management actions aimed at rebuilding these other stocks. Under any of the other options, the above harvest restrictions could be in place indefinitely.

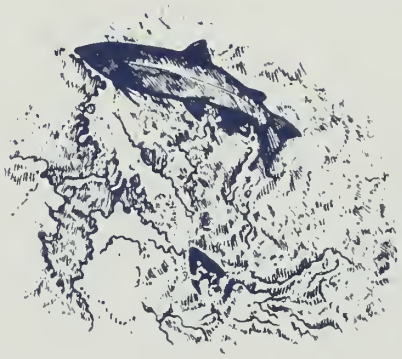
Spring chinook salmon

Elwha spring chinook, if present, are likely only in small numbers. However, Interior scientists predict that some summer/fall chinook entering the Elwha would swim much farther upstream. These individuals would, over several decades, give rise to a spring run. Active outplanting of eggs and young juveniles in the upper river could accelerate the process. Under the **Proposed Action**, no additional harvest restrictions for this stock beyond those already in place for other rebuilding Puget Sound spring chinook stocks would likely be needed. Harvest restrictions under the other alternatives were not examined, as the anticipated recovery time far exceeds the ability to foresee harvest options.

Coho salmon

Elwha coho are currently sustained by both natural and hatchery production, although hatchery fish predominate. Using Ricker models to predict recovery rates, peak returns of wild coho (approximately 34,570 fish per year) could occur in as few as five cycles (15-18 years) if the **Proposed Action** were implemented. Outplanting would reduce recovery time by one-half.

Under the **No Action** alternative, no new coho production would result. The **Dam Retention** alternative would annually produce an estimated 24,960 coho in 29-32 years. Recovery under the **Glines Canyon Dam removal** alternative would yield approximately 31,190 fish per year by 22-25 years. **Removing the Elwha Dam** would annually produce an estimated 27,680 fish in 26-29 years.



Under the **Proposed Action**, and presuming continued hatchery augmentation during the rebuilding phase (Elwha Report, Appendix G), harvest restrictions in the Elwha River would be relatively minor and designed to mitigate impacts suffered during the deconstruction and post-deconstruction period (approximately five years). Harvest restrictions similar to those required for chinook salmon in marine fisheries (e.g., area closures in the Freshwater Bay area) might be necessary during the same five-year period. Also, as with chinook, harvest restrictions in other Washington sport and commercial fisheries or Canadian fisheries to specifically accommodate Elwha restoration are not probable, as the depressed status of other Western Washington and Columbia River coho stocks is likely to have a larger influence in shaping fisheries for the foreseeable future.

Under any of the other alternatives, the length of time harvests in the Elwha River and adjacent marine waters would need to be curtailed is extended. Also, specific accommodation of the Elwha River restoration process might be needed in the Pacific Salmon Treaty forum if present negotiations between the United States and Canada regarding other coho stocks of concern do not result in adequate reductions of fisheries.

Winter steelhead

The early returning portion of the winter steelhead run is heavily supported by hatchery production. The late portion of the run is wild and is considered depressed due to loss of habitat related to the dams. Based on Ricker models (with no outplanting or hatchery influence), peak production (10,100 fish per year) of wild steelhead could occur in as few as five cycles (15-18 years) under the **Proposed Action**. Outplanting of eggs or alevins in the upper watershed would reduce this time by one-half. Harvest restrictions, such as catch and release of wild steelhead, would likely be in place until sufficient numbers of spawners return to the river (12-16 years). No harvest restrictions are anticipated for marine areas.

Under the **No Action** alternative, no new production would result. Under the **Dam Retention** alternative, new annual production would be up to approximately 7,300 fish in 29-32 years. Recovery under the **Glines Canyon Dam** removal alternative would yield an estimated 9,000 winter steelhead per year in 30-35 years. Removing **only Elwha Dam** would produce approximately 8,270 fish within 30-35 years. Under any of these alternatives, catch and release sport fisheries could be required in perpetuity. In addition, in-river net fisheries would need to be limited from present levels, to varying degrees. Again, no restrictions would be anticipated for marine fisheries.

Summer steelhead

The outlook for restoration of summer steelhead would be similar to that of winter steelhead, although the restoration period might be longer (20-25 years) for the **Proposed Action**. Similarly, the restoration period under each of the other alternatives would be similar to the winter steelhead, but extended one or two cycles more. Under the Proposed Action, harvest restrictions would consist of catch and release of wild summer steelhead, as already implemented

throughout the state. Monitoring of adult returns would determine when harvest restrictions could be lifted. Under any other alternative, it is anticipated that the catch and release restriction would be in place indefinitely.

Pink salmon

Elwha pink salmon are a native, wild stock of critical status, as evidenced by chronically low escapements (four returning fish in 1989, none in 1993). Brood stock might come from the adjacent Dungeness River stock, depending on its status. At Sunset Falls (Skykomish River), returns remained low until a population threshold of 2,000 adults was reached, after which numbers increased rapidly. Similarly, new pink production within the Elwha would likely remain low until a minimum threshold was reached. Ricker curve modeling predicts peak production of 274,286 pink salmon occurring in 8-10 cycles (16-20 years) if **Proposed Action** is implemented. Outplanting or remote incubator sites would enhance this effort, shortening the time needed for recovery.

Under the **No Action, Dam Retention, and Glines Canyon Dam removal** alternatives, no increase in the pink salmon population is expected. Some production of pink salmon would be expected to accompany the **Remove Elwha Dam** alternative, but habitat in the lower and middle river would remain in poor condition, limiting the pink salmon as a harvestable resource within the watershed.

The Elwha River is now closed to the harvest of pink salmon. Under the **Proposed Action**, no additional harvest restrictions in marine areas would be anticipated, as the harvest rate is already at the level needed for restoration purposes. Monitoring for pink salmon would determine when in-river fisheries for pink salmon could begin.

Under any of the other alternatives, passage mortality and habitat limitations are likely to drive the Elwha pink salmon stock to extinction. There are no realistic harvest management measures which may be taken to prevent this from occurring.

Chum salmon

The Elwha chum salmon population is estimated at 200-500 returning adults. Chum population dynamics and life histories are similar to that of pink salmon in that spawning occurs over a relatively short period, the eggs incubate concurrently, hatching and emerging from the gravel at approximately the same time. Migration to salt water is accomplished passively and en masse in an attempt to numerically overwhelm predators. However, this requires the production of large numbers of alevins before substantial population increases occur. Like Sunset Falls pink salmon, Elwha chum could remain at low numbers until a large increase in survival allowed rapid population increases. Under the **Proposed Action**, Ricker models predict chum recovery (36,000 fish) in as few as six cycles (18-21 years) without enhancement (outplanting or hatchery) efforts. Outplanting or remote incubator sites would significantly help and shorten the time needed for recovery.

Under the **No Action, Dam Retention, or Glines Canyon Dam Removal** options, no increase in the chum salmon population would be expected. Some production of chum would be expected under the **Removal of Elwha Dam** alternative, but habitat in the lower and middle river would remain in poor condition, limiting the chum as a harvestable resource within the watershed.

Under the **Proposed Action**, it would be necessary to close the sport and commercial harvests of chum salmon in the Elwha during the early years of restoration. This is not considered a significant restriction since the present harvest in the river is estimated to be only in the tens of fish. No additional restrictions of marine fisheries would be expected.

As with pink salmon, passage mortality and habitat limitations under any of the other alternatives are likely to drive the Elwha chum salmon stock to extremely low levels or extinction. There are no realistic harvest management measures which may be taken to prevent this from occurring.

As with pink salmon, passage mortality and habitat limitations under any of the other alternatives are likely to drive the Elwha chum salmon stock to extremely low levels or extinction.

Sockeye salmon

Elwha River sockeye salmon are essentially extinct. Of the various options, only the **Proposed Action** and **Remove Elwha Dam** alternatives would allow sockeye access to Lake Sutherland. Because sockeye require a lake environment to successfully rear, the other alternatives do not restore sockeye salmon to the Elwha River. Sockeye restoration would probably require augmentation of the anadromous component of kokanee (landlocked sockeye) that reside in Lake Sutherland or the importation of a suitable stock. Since the recovery rate of sockeye was not addressed in the Draft Staff Report, a rebuilding curve based on Sunset Falls chum was used to simulate a sockeye recovery. Once sufficient numbers of brood are secured, recovery could occur rapidly, as much as 6,500 adults per year in 3-5 cycles. A remote site incubation station would help boost production of this stock.

Since there is no stock of sockeye in the Elwha at this time, harvest restrictions have not been determined. Restrictions would depend on the recovery success of sockeye in the river and the timing of the stock's return. Harvest restrictions under both the **Proposed Action** or **Remove Elwha** alternative would be identical. As recovery is not likely due to passage and stock constraints for the other options, no attempt to evaluate harvests was required.

Searun cutthroat

The status of Elwha River anadromous cutthroat trout is unknown, although a small population is believed to persist. Since resident cutthroat in the upper Elwha probably produce seagoing smolts, similar to that of resident rainbow trout, restoration is expected to occur naturally. However, the restoration timeframe is unknown for this stock. Under any of the options, a closure of the in-river sport fishery might be needed until the population size has significantly increased.

Table 3. *New Wild Production (Number of fish/year) for Salmon and Steelhead and Time (Years) to Recovery**

	No Action**	Dam Retention	Glines Canyon Dam Removal	Elwha Dam Removal	Proposed Action
chinook	1,500 - 2,000 fish†	16,060 fish 29 - 33 years	25,670 fish 29 - 33 years	20,020 fish 29 - 33 years	31,360 fish 21 - 25 years
coho	<500 fish +	24,960 fish 29 - 32 years	31,190 fish 22 - 25 years	27,680 fish 26 - 29 years	34,570 fish 15 - 18 years
chum	200 - 500 fish	0	0	negligible	36,000 fish 18 - 21 years
pink	0 - 50 fish	0	0	negligible	274,286 fish 16 - 20 years
steelhead	<500 fish	7,297 fish 29 - 32 years	9,017 fish 30 - 35 years	8,272 fish 30 - 35 years	10,100 fish 15 - 18 years
sockeye	0	0	0	6,500 fish 12 - 20 years	6,500 fish 12 - 20 years

* Assuming no outplanting. Outplanting may reduce recovery time by as much as half.

** No Action (existing conditions) would not result in any new wild salmon or steelhead. These figures are estimates of current production of wild anadromous fish in the Elwha River (P. Crain, Lower Elwha S'Klallam Tribal Hatchery, personal communication, 1995).

† All Elwha chinook and coho are considered a composite of wild and hatchery stocks.

Searun char (Dolly Varden and bull trout)

The status and restoration of Elwha River anadromous char are similar to that of searun cutthroat trout, although there is a larger population of char than cutthroat in the upper river. Restoration of this stock is expected to occur naturally. Under any of the options, a closure of the in-river sport fishery might be needed until the population size has significantly increased.

Species-Specific Impacts

This section will examine impacts and restoration potential in more detail than the summaries presented above for each run of salmon or seagoing trout known to historically inhabit the Elwha River. Although this document addresses some species separately, runs that would experience similar problems in traversing the dams are analyzed as groups. The following impact sections generally compare effects resulting from passage first and then to habitat for each of the alternatives. Since stock availability remains constant regardless of the alternative, it is presented in the affected environment portion. Ability to withstand harvest pressure is summarized by run in Table 2 and discussed further in the cumulative impact section of fisheries.

Pink and Chum Salmon

Affected Environment. Pink salmon enter the river from July through September, chum in October and November (see Table 4). Both spawn almost immediately, using smaller sized gravels. The traditional spawning grounds for pink and chum salmon are thought to be primarily the first 16 miles of mainstem Elwha River, as well as tributaries such as Indian Creek and Little River. It is unknown whether these species occupied areas farther upstream. Both pink and chum generally spawn in low gradient side channels and tributaries. Since the two dams block the transport of spawning gravel, habitat downstream of them for pink and chum salmon has been effectively eliminated.

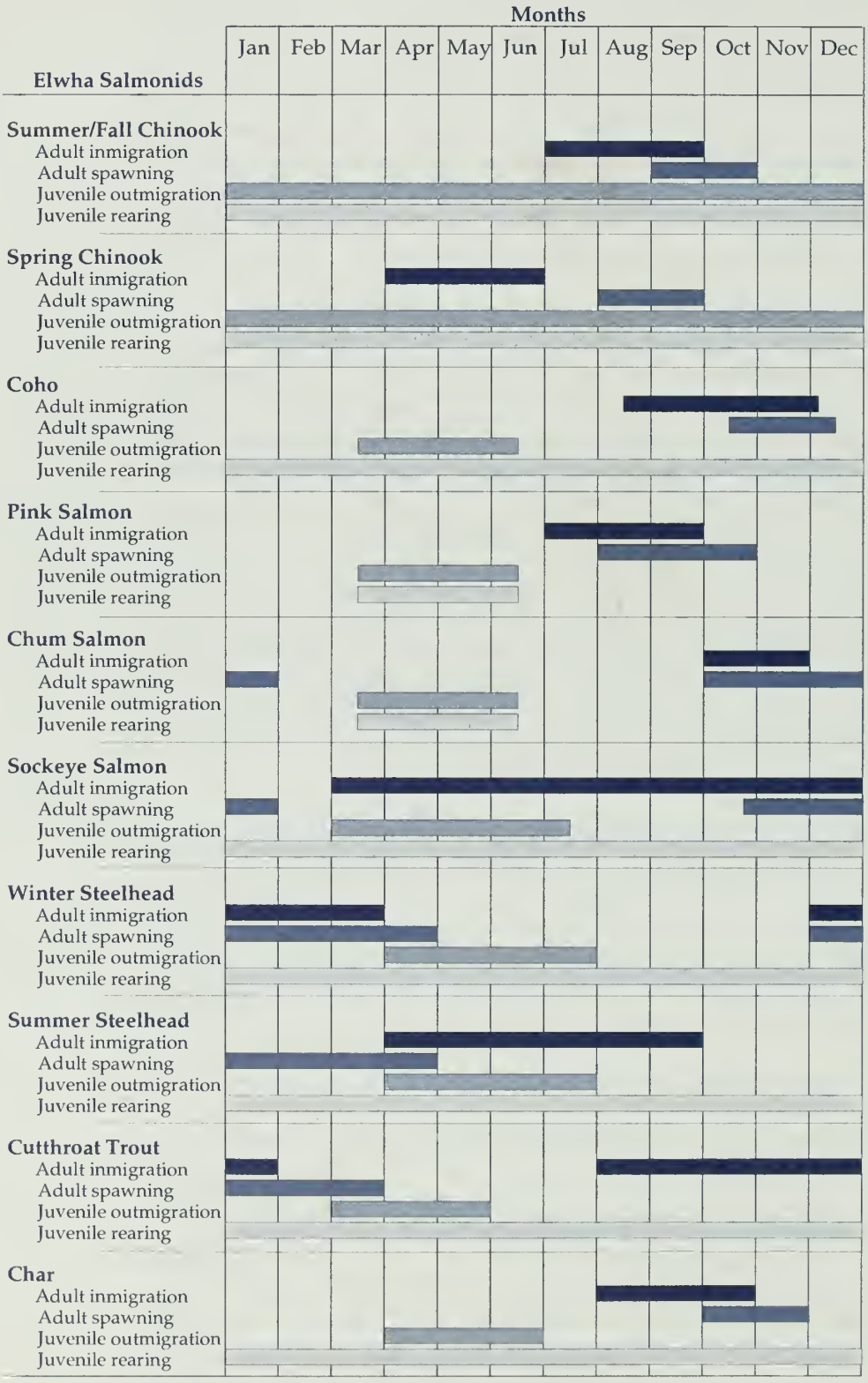
Juveniles swim toward the sea within hours or days of hatching, and usually do not feed on their journey. Because they are so small, they cannot swim as well as older juveniles of other species and are (generally) passively swept to the river mouth by the downstream current. Juveniles of both species usually spend up to two months maturing in estuaries, brackish pools at the mouth of rivers, or nearshore marine habitat. This habitat on the Elwha River is also degraded and reduced in size as a result of the dams blocking natural sediment transport.

Chances of finding the original native stock for pink salmon are considered unfavorable, although the neighboring Dungeness River supports two stocks of pink salmon, at least one of which could flourish in the Elwha River. A small population of native chum remains in the Elwha River, although pink and chum historically represented the largest contribution to the fish biomass returned through the system to the upper watershed.

Impacts. The impacts to pink and chum salmon under the **No Action** alternative have been near elimination of both species. It is estimated that fewer than 50 Elwha pink salmon return in odd years (this species returns only in odd years), but only four were found in 1989, and none in 1993. The total annual chum salmon returns to the river are measured in hundreds (Elwha Report, p. 14). Under any alternative, chum may unable to clear a low diversion structure at river mile 3. Mitigation options or redesign of the structure to resolve this or other potential problems with the diversion intake would be part of the Implementation EIS.

For the **Dam Retention or single dam removal** alternatives, the continuing presence of the reservoirs would present an enormous downstream passage problem for juvenile pink and chum salmon. These small fish cannot navigate their way quickly through either reservoir because the currents do not have the water velocity needed for juvenile migration. A portion would starve before reaching the spillways while many others would be susceptible to predation. Although screens to keep fish from being sucked into the turbines at each dam could potentially be sized to keep juvenile pink and chum salmon out, a survey of dams in the Pacific Northwest revealed no self-sustaining

Table 4. *In-River Life Cycle Stages of Elwha Salmonids.*



populations of pink or chum salmon above major impoundments (J. Meyer, Olympic National Park, personal communication, July 1994). Regardless of efforts to accommodate upstream migration by spawning adults, extremely poor reservoir passage would be expected to eliminate any chance these species have for restoration in the Elwha River if either the **Dam Retention** or **Removal of the Glines Canyon Dam** alternative is implemented.

With **Removal of the Elwha Dam**, several miles of unobstructed river would be opened to pink and chum in their traditional spawning grounds. Although these species might fare slightly better under this scenario than either the **Removal of the Glines Canyon Dam** or **Dam Retention** (with mitigation) alternative, available habitat would still be nearly devoid of spawning-sized gravel due to the continued presence of Glines Canyon Dam.

For these reasons, the chances of restoring pink and chum salmon are rated as "none/poor" or "poor" under all alternatives except the **Proposed Action**, where each is given a "good" chance for restoration.

Searun Cutthroat Trout and Char (Dolly Varden and Bull Trout)

Affected Environment. Cutthroat primarily use tributaries to spawn and rear whereas char may use tributaries or the mainstem river. Except for portions inundated by the two reservoirs, the tributaries are generally in excellent condition. However, the mainstream habitat below Glines Canyon Dam is in poor condition as a result of trapped gravel in the reservoirs, elevated water temperatures, and the limitation of nutrient and woody debris flow.

It is unknown whether original native stock exists for these species. A large population of resident (no sea migration) native char and a smaller population of cutthroat trout exist above Lake Mills. Some of these residents apparently retain the ability to produce juveniles which undergo physiological changes allowing them to exist in a saltwater environment (become smolts); these, in fact, may be descendants of the original Elwha seagoing race. These resident populations may be usable as brood stock to reestablish seagoing runs of both of these species. Because there is a larger population of char than cutthroat in the Elwha River, Interior has rated stock availability as "marginal" for searun char and "unknown" for cutthroat.

Impacts. Searun cutthroat and native char (Dolly Varden and bull trout) are present in the river (**No Action** alternative, or current conditions) below Elwha Dam in low numbers. A small population of land-locked cutthroat and a larger population of native char exist above the Elwha Dam. These species could have problems passing over the dams. Adults, smaller than native anadromous salmon, might not be able to ascend the ladder designed for larger fish at Elwha Dam (Elwha Report, p. 56). Additional investigation is necessary to determine the passage criteria for these fish.

Neither cutthroat nor char adults necessarily die immediately after spawning, but instead often return to the sea. Cutthroat trout may swim upstream without

spawning, return to the ocean, and come back the next summer or fall to spawn. Fish screens proposed by the Federal Energy Regulatory Commission and the joint fish and wildlife agencies (U.S. Fish and Wildlife Service, Bureau of Indian Affairs, National Park Service, National Marine Fisheries Service, Washington Department of Fish and Wildlife, Point No Point Treaty Council, and the Lower Elwha S'Klallam Tribe) to prevent juvenile salmon and trout from entering the turbines may not work well for adult-sized trout, so losses are expected in their downstream migration as well, i.e., for either **Dam Retention** or **single dam removal** alternatives. No tests have been performed to determine whether these seagoing trout can negotiate the dams, and so their ability to withstand passage is "unknown."

The availability and condition of habitat is a potential problem if the dams remain in place. Some of the prime tributaries for cutthroat trout are blocked or inundated by Lake Mills, or lie between the dams. **Removal of the Elwha Dam** or the **Proposed Action** would allow cutthroat access to the tributary habitat between the dams. Habitat is rated at a higher quality with these alternatives than with removal of Glines Canyon Dam.

Although char prefer main channels, this habitat is in poor condition in both the lower and middle river and would not be fully restored unless both dams are removed. Habitat is rated as "marginal" with both dams in place and "marginal" to "favorable" if one is removed.

Chinook and Coho Salmon and Steelhead Trout



If the dams are removed, each of these species would have either a "good" or "excellent" chance for restoration. The pre-dam Elwha River supported early runs and later summer and fall runs of chinook salmon. The same is true for winter steelhead, which swim up the Elwha from December through February, and summer steelhead that swim up in March through August. Summer and winter steelhead and spring and summer/fall chinook are distinct "races" of fish.

The Federal Energy Regulatory Commission estimates that the Elwha once produced more than 31,000 wild chinook (FERC, p. 4-150). Currently, 2,000-4,000 hatchery chinook return to the river, but are restricted to the 4.9 miles below Elwha Dam. This creates crowded conditions for the spawning adults, with approximately five times the density of redds per river mile as in other streams (FERC, p. 3-33).

Chinook, coho, and steelhead are all produced in hatcheries in the Elwha River. Coho have been raised in hatchery operations since 1965, which include plantings from the Dungeness River from 1967 to 1976. The state rearing channel was used to rear and release coho from 1974 to 1982. The Elwha tribal facility has been releasing coho since 1977, and has been the only source of hatchery coho since 1983. Since 1977, coho returns have ranged from 5,000 to 18,000 per year, with the majority being hatchery fish.

Because of the hatchery operation, the Lower Elwha S'Klallam Tribe operates a commercial in-river fishery for steelhead. Steelhead harvests average 1,600 fish per year for the tribe (Elwha Report, p. 17). Approximately 3,800 winter adults enter the river from an average of 80,000 hatchery smolts released each year (FERC, p. 3-41). Sports fishers harvest an estimated 1,150 winter and 460 summer steelhead each year.

Chinook

Affected Environment. Before the dams were built, it is believed that chinook entering the river in the spring swam farther upriver and spawned upstream of Carlson Canyon Falls at river mile 34. Fish entering in the late summer or fall spawned downstream of river mile 34.

Chinook require cool water (below 14° C) and medium-size spawning gravel. They usually lay their eggs in a main channel of the river rather than its side channels or tributaries. Adult chinook die within weeks of spawning, and the juveniles may stay in the Elwha for three months to more than a year before migrating to the sea. All juveniles spend some time in the estuary as they grow and adapt to salt water. Estuary size is shrinking, however, due to sediment trapped behind the dams.

A suitable stock of summer/fall chinook is presently available since this variety is maintained in Washington State hatchery facilities. However, a separate spring entry of spring chinook could be missing altogether in the Elwha River. The genetics of Elwha spring chinook presumably remain intact in the summer/fall stock (Brannon and Hershberger, 1984). Fully restoring the summer/fall run and making spring chinook habitat available upstream of river mile 34 is considered likely to result in separation of the two stocks. For all alternatives, the stock availability for summer/fall chinook was classed "favorable" and for spring chinook as "unfavorable/marginal" (see Table 2).

Impacts to chinook. Juvenile chinook would be expected to experience relatively high mortalities passing through the reservoirs and over both Elwha and Glines Canyon dams. These juveniles need a swift current, not created in reservoirs, to help them navigate their way to the ocean. Resident trout in these reservoirs would feed on the juvenile chinook, reducing the population during the downstream migration. Elevated water temperatures under the **No Action** or **Dam Retention** (with mitigation) alternative would continue to result in increased adult mortalities from diseases in the lower river.

Spring chinook, particularly sensitive to handling after entering the freshwater environment, would encounter the trap-and-haul process at a point 13 miles upstream (Elwha Report, p.54) under the **Dam Retention** or **Removal of Elwha Dam** alternatives. Some summer/fall chinook that enter the river when flows are low and temperatures are high would die as a result of handling.

More chinook losses would be expected at Glines Canyon Dam and Lake Mills than from Elwha Dam and Lake Aldwell. While no passage would occur under the **No Action** alternative, the **Dam Retention** (with mitigation) alternative

would result in losses estimated in the 50% range for both spring and fall chinook. **Removal of the Elwha Dam** would reduce this to approximately 30% (FERC p.4-192), while **Removal of the Glines Canyon Dam** would reduce losses to approximately 15% (FERC, p. 4-164). The **Proposed Action** would result in no fish lost through dam passage or in reservoirs.

Habitat for the spring chinook is relatively intact since it is upstream of both dams. However, sections of the river below the dams in which fall chinook would normally spawn are nearly devoid of spawning-sized gravel. Higher than pre-dam water temperatures in the summer and early fall can kill chinook eggs and aggravate *Dermocystidium*, a potentially lethal disease for fish.

Higher than normal water temperatures would continue to be a problem under all alternatives except **Removal of Glines Canyon Dam** or **Proposed Action**. Spring chinook spawning habitat would remain in favorable condition but inaccessible or marginally available due to passage problems. With the **Proposed Action**, habitat would be fully restored along the entire length of the river, including the reintroduction of spawning gravel and lower water temperatures.

Removal of the Elwha Dam could temporarily send sediment into the lower river and result in fish kills, but it would also alleviate crowded conditions and possibly reduce incidence of *Dermocystidium*. **Removal of Glines Canyon Dam** would release sediment into the middle stretch of the Elwha River, reseeding the area with spawning-size gravel and allowing temperatures to return to pre-dam conditions (Elwha Report, p. 46). No spawning gravel would make it to the lower river, however, and the transport of nutrients and woody debris would continue to be limited.

Overall chances for restoring fall and spring chinook in the Elwha are rated "poor" if both dams are retained, "fair/good" if only Glines Canyon Dam is removed, and "poor/fair" if only Elwha Dam is removed. Restoration potential increases to "good" for spring chinook and "excellent" for summer/fall chinook if both dams are removed.

Coho

Affected Environment. Coho enter the Elwha River from August through December and spawn in the late fall and winter. Juveniles live in the river longer than a year after hatching before they migrate to sea in their second spring. Adults spawn in tributaries and mainstream river channels (with slopes no more than an average 1-3%) and die shortly after spawning. Juveniles live in pools, ponds, and backwater areas before they leave the river. Suitable stock, available both in the river and in the hatchery, is rated "marginal" by Interior.

Impacts to Coho. Like chinook, adult coho would be expected to experience some losses passing the fish ladder at Elwha Dam and undergoing the trap-and-haul procedure at Lake Mills. Some juveniles would remain in the reservoirs (residualize) and many would not make it to the dams before they were eaten by predators. A percentage of those fish arriving at the dams would

be lost either going over the spillways or through the turbines. Estimates of 30% losses from passage of adult and juvenile coho passing both dams compared to approximately 50% for chinook are found in FERC (p. 4-22). Interior rates the coho's ability to survive passage as "marginal" under the **Dam Retention** (with mitigation) alternative.

The Eicher screens proposed by the commission to route salmon and trout away from Elwha Dam turbines were generally successful in tests involving juvenile coho, so losses from downstream migration would be expected to be lower if this dam, rather than Glines Canyon, remained. However, additional tests of the Eicher screen with smaller coho are needed to determine passage effectiveness for these fish. Screens proposed by Interior and other agencies for the Glines Canyon Dam intake would reduce losses of juvenile coho, but losses from navigating the spillways and residualism (disorientation and delay in the reservoir) would remain (Elwha Report, p. 35). Ability to withstand mortality from passage is rated as "marginal" for both single dam alternatives. In the **Proposed Action**, passage problems would be eliminated for all fish.

Ability to withstand mortality from passage is rated as "marginal" for both single dam alternatives.

Although coho prefer spawning in tributaries that are not too steep, they will also use the main river and particularly side channel habitat. Coho habitat now exists in the river upstream of the Lake Mills delta, but much of the habitat in the middle and lower reach not inundated by the reservoirs is either too steep or does not have the small gravel needed for spawning. Under the **No Action** or **Dam Retention** (with mitigation) alternative, the water in the middle reach also would be warmer, contain fewer nutrients, and would not have the large logs and other debris that juveniles seek for winter cover.

Removal of the Glines Canyon Dam would reseed the middle reach with small gravel and, in the long-term, provide several miles of low gradient spawning habitat in the main channel. Woody debris needed for overwintering juveniles would be released naturally throughout most of the river, but would be limited in the lower Elwha. For adult coho that passed over Elwha Dam, nearly 65 miles of tributary and main channel habitat (coho would not be expected to pass Carlson Canyon Falls) would be available for spawning (FERC, p. 4-24). At present, only the 4.9 miles of mainstream river are available for coho to spawn and rear, and the habitat in these miles is in very poor condition.

Removal of the Elwha Dam would provide some gravel to the lower Elwha River, eliminate passage mortality up to Glines Canyon Dam, restore 2.8 miles of currently inundated, low gradient river, and allow access to 8.5 additional miles of habitat. The entire middle stretch would remain gravel deficient and the lower stretch would eventually return to its present poor condition as sediments from behind Elwha Dam washed out to sea.

For both the **No Action** and **Dam Retention** (with mitigation) alternatives, the habitat problems described above become additive. The middle and lower river would remain gravel starved with important tributary space inundated;

woody debris would continue to be blocked and unavailable for juvenile coho wintering in the Elwha River. Habitat is rated as "marginal" for coho under either alternative.

Overall chances for restoration are: "None" for **No Action**; "fair" for **Dam Retention** (with mitigation); "fair/good" for **Removal of the Glines Canyon Dam**; "fair" for **Removal of the Elwha Dam**; and "good/excellent" for the **Proposed Action**.

The Elwha has been stocked with hatchery steelhead since 1965, but a native Elwha River winter steelhead run remains.

Steelhead

Affected Environment. Steelhead are, essentially, a searun race of rainbow trout. Winter steelhead enter the Elwha December through February, and summer steelhead migrate upstream from March through September. Both races spawn in the spring. Most juveniles rear in the river for two years before migrating to the ocean, although some may rear for one to three years. Approximately 5% of adults migrating upstream have spawned before. Adults that spawn and return to the ocean are called "kelts" on their trip out to sea.

Steelhead adults use a wider size range of spawning gravel than coho or chinook. They are also able to spawn in mainstream rivers or tributaries. Steelhead are not expected to have trouble negotiating Carlson Canyon Falls; like chinook, the falls are presumed to be the pre-dam separation point of winter and summer runs. The summer run uses habitats upstream of these falls for spawning, the winter run downstream of the falls.

The Elwha has been stocked with hatchery steelhead since 1965, but a native Elwha River winter steelhead run remains. It is identified by its later entry than hatchery stock, February through March, into the river. Although the native Elwha River winter steelhead is differentiated from hatchery stock by its late entry, summer steelhead stock is not as easy to identify since there is no apparent seasonal separation of transplanted, non-native, hatchery stock. Interior is investigating the possibility of using rainbow trout from the Elwha River above the dams to create a summer steelhead run. These fish are native to the Elwha and may be descendants of summer or winter steelhead. Stock availability for winter steelhead is rated "marginal/favorable" and "marginal" for summer steelhead.

Impacts to Steelhead. Steelhead would be expected to withstand passage losses from **Dam Retention** (with mitigation) as well as coho salmon. Outmigrating steelhead juveniles would be relatively large, strong swimmers not expected to be heavily preyed upon in the reservoirs. Adult losses during upstream fish passage would be about the same as the coho. Kelts that migrate back to sea after spawning may encounter low flow conditions and, consequently, some losses. As with coho, steelhead juveniles would experience some mortality from predation and other factors as they mature in the river, and some would residualize in the reservoirs. Some mortalities would occur during passage past fish screens (FERC, p. 4-25).

Removal of the Glines Canyon Dam would resupply the middle stretch of the Elwha with spawning gravel as well as woody debris. However, the lower Elwha would continue to be gravel starved, and important riverine habitat inundated by Lake Aldwell would not be restored. As with coho salmon, this combination results in a "marginal to favorable" rating for steelhead habitat under this alternative.

Removal of the Elwha Dam would resupply the lower river with gravel from the sediments built up behind Elwha Dam resulting in a short-term improvement in habitat before sediments eventually washed out to sea. Gravel, some woody debris, and nutrients would remain trapped behind Glines Canyon Dam and 2.8 miles of riverine habitat would remain inundated by Lake Mills. Although summer steelhead habitat above Glines Canyon Dam would remain intact and in excellent condition, adults and juveniles would need to negotiate poor quality habitat in the lower and middle reaches. For these reasons, habitat is rated as "marginal" for both winter and summer steelhead.

The **Proposed Action** would eliminate problems with passage and fully restore the habitat for winter and summer steelhead.

Chances of restoring winter steelhead are "excellent" for the **Proposed Action**, "fair" for either the **Dam Retention** or **Remove Elwha Dam** alternative, and "good" for the **Remove Glines Canyon Dam** option. For summer steelhead, chances for full restoration if **Proposed Action** is implemented are "good," "fair" for either **Remove Elwha Dam or Retain Both Dams** and "good" for the **Remove Glines Canyon Dam** alternative.

Sockeye Salmon

Affected Environment. Sockeye salmon require a freshwater lake or lake-like environment to complete their reproductive cycle. The only natural lake accessible from the Elwha River is Lake Sutherland. It is drained by Indian Creek, a tributary of the Elwha which enters at river mile 7.5, between the two dams. Since Lake Sutherland has been developed, spawning habitat in the lake or in tributaries upstream is in poor condition. For this reason, habitat for sockeye is rated as "unfavorable/marginal" under all scenarios.

Although a stable population of naturally spawning kokanee, or landlocked sockeye, remains in the lake, Interior is investigating whether the kokanee has the characteristics needed as brood stock for Elwha River sockeye. Some of these kokanee may be descendants of Elwha River sockeye, but this is unknown and complicated by the many lake plantings of non-native kokanee. Chances of locating an appropriate stock are rated as "unfavorable/marginal."

Impacts. Sockeye smolts tend to lose scales more easily than other native anadromous salmon (FERC, p. 4-31), and would have more trouble negotiating the fish screens proposed for Elwha Dam. With **Removal of the Elwha Dam**, passage problems would be entirely eliminated since this species would veer off toward Lake Sutherland and not continue upriver to Glines Canyon Dam.

Passage under the **Removal of the Elwha Dam** or the **Proposed Action** is considered "favorable;" it is considered "unfavorable/marginal" for the **Removal of the Glines Canyon Dam** and **Dam Retention** (with mitigation) alternatives, and "none" for the **No Action** alternative. Only **Removal of Elwha Dam** or the **Proposed Action** results in a "fair" chance for sockeye salmon restoration, with all other alternatives rating either "poor" or "none."

Resident Species

Affected Environment. Rainbow trout, native char, and small populations of cutthroat and brook trout occupy the upper Elwha. Rainbow trout also use the reservoirs and middle reach of the river. These are nonanadromous populations of trout, although the impulse for rainbow or native char to migrate to sea may remain.

Impacts. Since reintroduction of native anadromous trout and salmon would increase competition for available food and habitat, resident populations would be expected to decline to historically low population levels. In the **Proposed Action** alternative, this loss would be completely offset through improved habitat and the increased number of native anadromous trout and salmon available for fishers. However, in the **Dam Retention** (with mitigation) alternative, the restoration of native anadromous species would not make up for the loss of resident trout and native char (FERC, p. 4-68).

Cumulative Impacts

Overall harvest of salmon and trout, warmer than normal waters caused by El Niño, logging, development, water diversions, agricultural activities, removal of riparian vegetation, and bank hardening to protect roads and private and public property in the river all have a cumulative, or additive, effect on fisheries. These stresses, in addition to the loss of 93% of the Elwha River drainage after the Elwha Dam was built in 1910, have resulted in depressed catches of many species of salmon and seagoing trout in the Puget Sound area.

Dwindling or even decimated populations of salmon occur in spots along the entire west cost. Most small streams on the West Coast have been damaged from urbanization, water withdrawals, or other land management activities (Nehlsen et al. 1991). This is true with the large rivers, as well. As a result, very few pristine watersheds are left in the United States. Unlike most Peninsula streams, the area above Lake Mills provides salmon and steelhead pristine spawning and rearing habitat because it has been spared the adverse, long-term impacts from recent timber harvest, water use and human development that many other Peninsula streams are now experiencing. The habitat within the park will also be preserved, as this is mandated by federal law.

The impact of these actions is evident in reduced catches and the more frequent listing of anadromous fish species as threatened or endangered. As an example, the National Marine Fisheries Service (NMFS) recently (March, 1995) proposed

wild steelhead runs from the Klamath River, California north to Port Orford, Oregon be listed as threatened under the Endangered Species Act because of population declines resulting from these factors. Degradation of habitat caused by dams and water withdrawals has led to listings (as threatened or endangered) of salmon stocks in the Columbia River Basin and Sacramento River in California.

Salmon and anadromous trout, including those which are able to outmigrate from the Elwha River, experience impacts in the marine environment as well, in the form of commercial fishing pressure and environment changes such as El Niño. A small percentage of Elwha River chum (5 to 15%), and larger portions of pink (60-75%) , chinook (60%) and coho (approximately 77%) are taken by commercial and sport marine fishermen before they return to the Elwha River.

...most population declines of these fish have occurred because of diminished and degraded habitat.

The impact extends beyond the U.S. border, as Pacific Coast fish produced in one area not only traverse the waters of many states, but are captured by Canadian fishermen as well. U.S. fishermen also capture fish produced in Canada. Because of this, harvest management occurs on the international (Pacific Salmon Treaty) level as well as on a national (Pacific Fisheries Management Council), and local (State of Washington and treaty tribes) level. The number of fish of U.S. origin which can be caught by Canada is controlled by the Pacific Salmon Treaty. The purposes of the Treaty are to: "prevent overfishing and provide for optimum production" and to "provide for each Party to receive benefits equivalent to the production of salmon originating in its waters." High seas drift net fisheries, which have had a large impact on salmon fisheries worldwide, were banned internationally on December 31, 1992. Fishing vessels, closely monitored by the U.S. Coast Guard and Canadian Pacific Maritime Forces in 1993 and 1994, have committed very few violations of the ban.

Regional, national and international fisheries management has helped to prevent overharvest of most stocks, although this does sometimes occur. However, it remains true that most population declines of these fish have occurred because of diminished and degraded habitat.

Conclusion

Taking **No Action** would continue to limit salmon and trout to 4.9 miles of poor quality habitat. These populations would require management through hatchery supplements and would never be self-sustaining. In the case of pink and chum salmon, it is very likely that the populations will become extinct in the foreseeable future if present conditions continue.

Dam Retention, with Interior-specified fish passage measures over both dams, would allow access to the middle and upper Elwha for some species, but would not improve habitat for fish in the middle or lower river. Coho and winter and summer steelhead have a "fair" chance for restoration if this alternative were implemented. The chance for restoration for all other species

is either "none," "poor," or "unknown." As with the No Action alternative, Elwha pink and chum are likely to face extinction under this alternative.

Removal of the Glines Canyon Dam would improve habitat quality in both the lower and middle river, and would eliminate passage mortality from the larger dam and reservoir. Mortality from Elwha Dam and Lake Aldwell would remain. Chances for restoring steelhead are "good" under this alternative; both chinook and coho runs would have "fair" to "good" possibilities for restoration if fish passage measures were installed on Elwha Dam. Cutthroat and char (Dolly Varden and bull trout) have "unknown" chances for restoration. Chances for fully restoring sockeye, pink or chum salmon are "none" or "poor," with pink and chum likely to become extinct.

For the Proposed Action, passage mortality would drop to zero and habitat along the entire river would be restored...

Removal of the Elwha Dam would give sockeye salmon better chances of restoration than either the **Removal of the Glines Canyon Dam** or **Dam Retention** (with mitigation) alternative. However, most runs would experience difficulty passing over Glines Canyon Dam or utilizing the poor habitat in the middle stretch of river if the **Removal of the Elwha Dam** alternative were chosen. Chances of chinook, coho, pink, chum and steelhead restoration are rated "poor" to "fair" if the Glines Canyon Dam remains and Elwha Dam removed. The possibilities for reestablishing seagoing cutthroat trout or char are "unknown" for this alternative.

For the **Proposed Action**, passage mortality would drop to zero and habitat along the entire river would be restored, including the 5.3 miles now inundated by the reservoirs. All runs for which native stock is readily available have "excellent" chances for restoration, including winter steelhead and summer/fall chinook salmon. Chances for restoring coho are "good" to "excellent," and "good" for all remaining runs except sockeye salmon. Since suitable sockeye stock is questionable and lake habitat is poor, chances for sockeye restoration are rated "poor" to "fair."

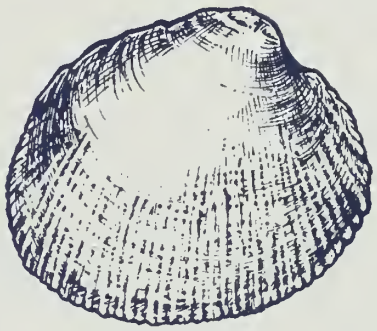
Living Marine Resources



Affected Environment

Living marine resources include shellfish, echinoderms, marine algae, fish, and mammals. Hardshell clams, such as littleneck, butter, and horse clams, are the most commonly pursued species in the area, although the season is often closed due to persistent red tide incidents (FERC, p. 3-47). Littleneck and butter clams prefer gravel- to boulder-sized substrate, while horse clams prefer sandy substrate. Although species composition and abundance prior to dam construction is not known, clams may have been more abundant than at present because of substrate changes due to bedload sediment starvation (Elwha Report, p. 15).

At the river mouth, the nearshore environment is composed primarily of cobbles and boulders, while the offshore bottom is mostly sand and gravel (Schwartz, 1994). A suspended sediment plume from the river's discharge



drifts to either the northwest or to the northeast depending on tide and currents. To the east of the river mouth for approximately one mile, the upper beach is steep with high wave energy, and plant and animal use is limited. This beach area is composed primarily of cobbles with some gravel. The lower beach supports a healthy community of marine flora, including more than 20 species of brown, red, and green algae and a number of attached animals, such as snails, limpets, barnacles, mussels, and chitons (letter from G. Ging, USFWS, August 1994). Starting near river mile 1, a natural band of actively eroding bluffs contributes large amounts of suspended sediments to the surf.

In general, the nearshore marine community includes fish such as salmon, greenling, flatfish, rockfish, sculpins, clingfish, sand lance, herring; more than 50 species of marine algae (including kelp); birds, including gulls, common murres, marbled murrelets, rhinoceros auklets, and harlequin ducks; and mammals including the Pacific harbor seal and, infrequently, Steller and California sea lions, orcas, and gray whales (Calambokidis et al., 1987; USFWS, 1994). Nearshore substrates composed of boulders and cobbles support species that prefer rocky environments, such as kelp, many species of red algae, red and yellow sponges, red rock crab, barnacles, mussels, limpets, chitons, and periwinkles. Local kelp beds are particularly important as habitat for various species of baitfish, which are prey species for salmon.

Impacts

Clam populations have been reduced by the steepening of beaches and the loss of sands and gravels due to the trapping of sediments behind the dams (Elwha Report, p. 60). For the **No Action, Dam Retention** (with mitigation) or **Removal of Glines Canyon Dam** alternatives, there would be no changes in the river's sediment output, and thus no changes in existing clam populations would be expected (FERC, p. 4-34). The nearshore marine environment would continue to be dominated by species that prefer a rocky environment--kelp, rock crab, barnacles, and mussels. **Removing only Elwha Dam** would create a temporary increase in sand and gravel. Long-term natural sediment transport would continue to be blocked by the presence of Glines Canyon Dam.

Currently, the Elwha River has very little estuary. The river flows almost directly into salt water with little salinity transition area or characteristic estuarine habitat types (e.g., eel grass beds, shallow fine sediment pools). Less than 300 feet of river mouth area has estuarine characteristics, and there is little use as a fish nursery. This condition would continue under the **No Action, Dam Retention, and Removal of Elwha Dam** alternatives, as re-establishing the Elwha River estuary requires the return of natural sediment transport conditions.

With **Removal of Glines Canyon Dam**, stored sediments could be flushed out naturally and fill Lake Aldwell within 40-50 years. If the Elwha Dam remains, sediment could eventually fill Lake Aldwell and require pumping or dredging around the dam to prevent wear on the turbines. Although this is

likely to be unreasonably expensive for the dam owners (see Response to Comments for more information), impacts from this alternative to marine resources could be similar to **Proposed Action** in the very long term.

If the **Proposed Action** were selected, the short term impacts to marine resources would depend on the sediment management option selected. A range of options would be examined in detail in the Implementation EIS. These options include allowing sediment to erode naturally, stabilizing it in place, mechanical removal (probably by dredge and slurry via pipeline). If sediment naturally eroded, 9-12 million cubic yards of stored sediment would eventually wash out into the river, delta, and Strait of Juan de Fuca. Mechanical removal may require a marine outfall for fine-grained sediment and sand.

Suspended sediment would wash out of the reservoirs during dam removal and for a period of six months following dam removal, depending on weather and sediment management methods. Bedload (sand, gravel, cobbles) would be transported to the river mouth over a period of years, and the coarser cobbles and boulders would take decades to disperse downriver.

Sand, gravel, and cobbles stored behind the dams would erode downstream, eventually reaching the mouth, rebuilding the pre-dam delta. Current estimates are that the delta would build 100-500 feet seaward from the river mouth. Waves, tidal currents, and river discharge would re-form the sediment deposited offshore into typical estuarine conditions with barrier bars and shallows. Areas within the bars would receive fresh water from the river and saltwater flows during flood tides. The inflowing salt water would carry nutrients supporting the rich ecology typical of estuaries. This transition area would be essential to complete restoration of Elwha River salmonids whose juveniles require a brackish environment before they begin their lives in salt water, as well as to other marine species that use or reproduce in an estuarine environment (including Dungeness crab). Plant and animal components would change accordingly (e.g., from kelp, rock crab, barnacles, and mussels to eelgrass, Dungeness crab, and flatfish).

Upriver from the mouth, deposits of sand and larger sediment would result in the mainstem channel splitting into several channels, similar to the way the river appeared on early maps of the area. Sand would be supplied at a rate greater than the pre-dam Elwha River for the first several years after the dams are removed. This would rapidly increase the amount of sand to beaches in the nearshore area at the river mouth and begin net longshore transport to the east. Species most likely to be affected in the short term include macrophytic algae, barnacles, mussels, and others with limited mobility. In the long term, the replacement of sand in the nearshore would likely increase the net area of productive intertidal habitat.

Finer silt and clay would mostly remain in suspension and become rapidly diluted with the large volume of marine water during this flushing out period. If this material is naturally eroded, the river would appear very turbid during

the removal. This could cause intense short-term impacts on the nearshore area east of Freshwater Bay by smothering vegetation and animals and causing high turbidity in bay waters (Elwha Report, p. 40). In the near term, the abundance of macrophytic algae could drop in response to the higher turbidity, but should return to its previous level within a few years of dam removal.

Over time, populations of all three hardshell clam species probably would increase in the nearshore due to the increased sand and gravel sediment loads (FERC, p. 4-121). In addition, surf smelt should benefit from the increase in spawning habitat that would result from additional sand gravel beaches. Marine mammals would not be expected to be impacted by short-term, increased sediment loads. Salmon and trout might be adversely affected by suspended silt and clay as they swim from the bay up the Elwha (see section on "fish" in this document).

As one means of mitigation for the short-term impacts to marine resources from dam removal, the Implementation EIS would examine using concrete rubble from the dams to create artificial marine reefs in the Strait of Juan de Fuca and/or other locations.

Cumulative Impacts to Marine Resources

Marine life well east of the Elwha River mouth has been affected by reduced sediment not only from the Elwha River, but also from the armoring in 1930 and again in 1958 of eroding sea bluffs to the east of the river mouth. The cliffs originally supplied approximately 270,000 cubic yards of sediment to the nearshore environment each year. This was reduced to an estimated 90,000 cubic yards annually when the bluffs were stabilized to protect a water supply line into Port Angeles. Since the waves in the vicinity have the ability to transport 270,000 cubic yards of material per year, beaches and the nearshore habitat have been steepened and now provide a greatly reduced intertidal zone. The intertidal zone is important for many species of fish because of its high production of prey items. Now, larger substrate and the marine life that traditionally occupy this kind of rocky habitat (kelp, rock crab, barnacles) have replaced the original species (eelgrass, flatfish, juvenile lingcod, cragon shrimp, and Dungeness crab).

Regionally, with the significant exception of salmon stocks, there are few sources of negative impacts on marine resources. Most of the coastal strip on the west side of the Olympic Peninsula is protected by Olympic National Park and two national wildlife refuges. The north side of the peninsula, although not in protective land status, is relatively natural, affected primarily by sediment input from coastal logging activities. The east side on Puget Sound is affected by logging, residential, and industrial activities. The return of natural Elwha River salmon runs and the restoration of the river's estuary would positively affect the overall health of the marine environment.

Conclusions

If **No Action** is taken, or the **Dam Retention** (with mitigation) or the **Removal of Glines Canyon Dam** alternatives are adopted, the nearshore marine community would continue to be dominated by species, such as kelp, rock crab, barnacles, and mussels, that prefer a rocky environment. **Removal of Elwha Dam** could flush 2-3 million cubic yards of material into the Strait of Juan de Fuca; the **Proposed Action** could send up to 9-12 million cubic yards into the Strait. Either of these alternatives might cause short-term impacts from sediment settling on to sessile (immobile) biota, such as shellfish or vegetation. In the long term, removing both dams could change the nearshore and estuarine community to favor species, such as eelgrass, Dungeness crab, flatfish, and hardshell clams, that require a sandy substrate.

Vegetation

Affected Environment

The project area is within the western hemlock zone, the most extensive vegetative type in western Washington and Oregon (FERC, p. 3-48). Forests are generally dominated by western hemlock and Douglas fir. The Elwha drainage supports a mix of plant species that is transitional between the wet western peninsula and the comparatively dry eastern peninsula. Other common woody species include Pacific madrone, grand fir, red alder, bigleaf maple, and manzanita. Eight vegetated land cover classes have been mapped in the vicinity: conifer forest, mixed forest, hardwood forest, deciduous shrub, grassland, palustrine (wetland) forest, palustrine shrub, and palustrine emergent. At least 64 non-native plant species have been documented in the Elwha drainage within the national park (Elwha Report, p. 18). Much of this vegetation lies along the riverbank and/or has adapted to the moist soil in the vicinity of the river. This riparian vegetation is an important habitat for many species of wildlife.

Wetlands, or areas which are periodically saturated, in the project area are limited to the three palustrine land cover classes--forest, shrub, and emergent. Approximately 50% of their total acreage is in Sweets Bottom (an area along the river near the park boundary), while the largest wetland area, 38 acres, is at the upstream end of Lake Aldwell (FERC, pp. 3-51 and 4-125). Wetland values include flood moderation, bank stabilization, sediment and nutrient retention, and wildlife habitat.



Impacts

Impacts from the **No Action** and **Dam Retention** (with mitigation) alternatives would be similar. Under both alternatives, 684 acres of potential natural vegetation would remain inundated and 31 acres unavailable due to the dams and associated project facilities. This acreage includes more than five linear miles of low elevation riparian communities and natural wetlands. With **Dam Retention** (with mitigation), vegetation would be removed for construction

of fish passage facilities at each dam site (Elwha Report, p. 58), and an additional 189 acres of vegetation around Lake Aldwell would be modified for wildlife mitigation. Both these alternatives would continue the loss of an estimated 48 acres of wetland vegetation and 533 acres of riparian habitat. Of these 533 acres, 52 acres of deciduous riparian forest, and 65 acres of cobble riparian habitat remain lost through inundation or direct development.



Under the **Removal of Glines Canyon Dam** alternative, a total of 425 acres--416 acres at Lake Mills and 9 acres at the Glines Canyon Dam site--would be reclaimed and eventually returned to pre-dam conditions. A 4.7-acre wetland in the vicinity of the boat launching area on Lake Mills appears to be maintained by seepage from upslope areas and probably would not be affected by removal of the dam and reservoir. An estimated 26 acres of new wetlands would be established along the reclaimed river channel. Riparian vegetation would also be restored, with an estimated 287 acres returned under this alternative. Of this 287 acres, 28 acres of riparian hardwood and 35 acres of cobble/gravel riparian habitat would be reestablished.

A minimal amount of vegetation would be lost at the Elwha Dam with the construction of a fish passage facility. The James River Corporation has proposed modifying land at Lake Aldwell for wildlife mitigation, including the creation of eight acres of wetlands, as part of their Federal Energy Regulatory Commission licensing process (these mitigation measures have been assumed as part of the action alternatives which leave one or both dams in place). A new campground at Lake Aldwell proposed by James River, if built, would disturb an additional five acres (Elwha Report, p. 47; FERC, pp. 4-165 and 4-46).

Under the **Removal of Elwha Dam** alternative, 268 acres at Lake Aldwell and 22 acres at the Elwha Dam site would be recovered to natural conditions. A portion of the 38 acres of wetlands at the delta of Lake Aldwell could be lost, although most of this wetland is located far enough away from the delta that it would not be destroyed should the dam be removed. Approximately 22 acres of new wetlands would be established along the reclaimed river channel. Approximately 246 acres of riparian vegetation, including at least 24 acres of riparian hardwoods and 30 acres of cobble/gravel riparian habitat, would be restored. A minimal amount of vegetation would be lost at Glines Canyon Dam with the construction of a trap-and-haul facility for fish mitigation.

The **Proposed Action** would lead to the restoration and revegetation of approximately 715 acres (FERC, p. 4-123), 684 acres of which are now inundated by the two reservoirs. Following dam removal and initial sediment management, remaining sediment could be either moved out of the floodplain (the stabilization alternative) or left in place (the natural erosion and mechanical removal alternatives). Much less material would remain in the reservoir and delta lands under the latter two alternatives than if stabilization were used. In all three scenarios, lands within Olympic National Park would likely be hydroseeded with grasses that would immediately help control erosion and start the successional process. Scientists estimate the sediment

remaining in the reservoir and delta areas would begin to appear natural within three years, and be stabilized enough to mimic pre-dam levels of erosion within 6-10 years.

These areas could return to native plant communities similar to those that existed prior to dam construction. Natural, early successional forests would return quickly, with mature forests taking several hundred years. Most upland stands would be dominated by western hemlock and Douglas fir, while riparian stands would contain red alder, bigleaf maple, black cottonwood, grand fir, and willow. Establishment of non-native plants might be an initial concern at some sites, and mitigating measures to control these species would be identified in the Implementation EIS.

The **Proposed Action** could eliminate or degrade some portion of the 43 acres of existing wetlands, but reestablish 48 acres of recovered wetlands in either palustrine forest or palustrine shrub communities (FERC, p. 4-125). Most of the 43 acres of wetland associated with the reservoir is on or just upstream from the Lake Aldwell delta, and would not be destroyed by either the natural erosion or mechanical removal alternatives for managing sediment. An additional 122 acres of wet channel/river and gravel bar wetlands, and as many as 533 acres of riparian vegetation would be restored. Of the 533 acres, an estimated 52 acres of riparian hardwood vegetation, and 65 acres of riparian cobble habitat would return.

The loss of wetlands at the reservoirs would be fully offset by the wetland habitat gained. In addition, riparian and upland habitat would be restored and used by wildlife. The 48 acres of wetlands would establish along side channels, sloughs and tributaries, and on a portion of the low terraces. The natural development of palustrine emergent wetlands could occur in a few years, with palustrine shrub and forested wetlands taking 10 and 20 years to develop, respectively.

Before any dam removal scenario would be implemented, the U.S. Army Corps of Engineers would require inventory and mapping of wetlands, and would consider options for mitigating any that may be lost. This could include replacement in kind, creating additional wetlands within former lake beds or other appropriate areas, or possibly determining that the net gain in wetlands is mitigation enough. Mitigation would be further explored in the Implementation EIS and in the permitting phase of the project.

Cumulative Impacts to Vegetation

Filling of the reservoirs destroyed more than five linear miles of low elevation (less than 600 feet) riparian and wetland communities. Many other low elevation riparian communities on the Olympic Peninsula have been impacted through the removal of natural forest vegetation. Most areas are in various stages of forest regrowth, but remain in active logging rotations. With the exception of some west side rivers, no low elevation riparian areas on the peninsula are managed for natural conditions and long-term protection.

Recovered river bottom lands in Lake Mills and Lake Aldwell would be managed for long-term protection under the **Proposed Action**.

Conclusions

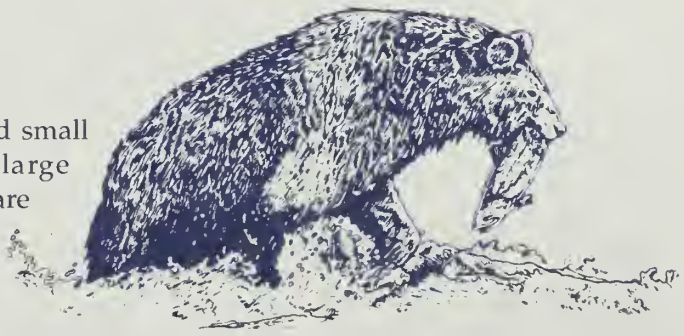
If **No Action** is taken, 715 acres of potential native forest and more than 5 linear miles of low riparian and wetlands communities would continue to be inundated by the reservoirs or affected by the dams and their facilities. If the **Dam Retention** (with mitigation) alternative is selected, these lands would continue to be affected, although 189 acres of vegetation around Lake Aldwell would be modified for wildlife mitigation.

The **No Action** alternative has resulted and would continue to result in the loss of an estimated 48 acres of wetland, and as many as 533 acres of riparian vegetation, including at least 52 acres of hardwoods, and 65 acres of riparian cobble habitat. The **Dam Retention** alternative would continue these same losses. Both of these alternatives may have helped to create some portion of the 43 acres of wetlands near the two reservoirs, although most recent evidence suggests the portion attributable to the reservoirs may be quite small. With **Removal of Elwha Dam**, 290 acres of land would be revegetated, a portion of the 38 acres of wetland associated with Lake Aldwell lost, and 22 acres of wetlands recovered. Most of the remaining area, 246 acres, would return to riparian vegetation, with at least 24 acres of riparian hardwood and 30 acres of riparian cobble habitat restored. **Removing Glines Canyon Dam** would add 425 acres of terrestrial habitat and 26 acres of wetlands. It may degrade or eliminate 4.7 acres of wetland habitat, although recent evidence suggests it would not. It would likely restore 287 acres of riparian vegetation, including 28 acres of riparian hardwoods and 35 acres of riparian cobble habitat. If the **Proposed Action** is selected, 715 acres of habitat, including 48 acres of wetlands, would be restored. Removing the dams could degrade or eliminate some of the existing 43 acres of wetlands near the reservoirs, but recent evidence suggests only a small portion are tied to the existence of the reservoirs. An additional 122 acres of wet channel and gravel bar wetlands and up to 533 acres of riparian vegetation, including 52 acres of riparian hardwoods, and 65 acres of riparian cobble would be restored if the dams were removed. Scientists estimate the sediment remaining in the reservoir and delta areas would begin to appear natural within three years of dam removal, and be stabilized enough to mimic pre-dam levels of erosion within 6-10 years.

Wildlife

Affected Environment

The Elwha area supports a variety of birds, large and small mammals, amphibians, and reptiles. One of the large mammals is Roosevelt elk; important elk calving areas are at the mouth of Cat Creek, at the upstream end of Lake Mills, and near Altaire Campground just below Glines



Canyon Dam (Elwha Report, p. 19). Small mammals include beaver, mink, river otter, and pine marten. Birds include numerous passerines, waterfowl, raptors, and marine species. In the upper Elwha, populations of fish-eating (or carcass-eating) wildlife species probably decreased when salmon and trout were blocked by the dams, although records were not kept at the time. At least 22 species feed in whole or in part on salmon or their carcasses, including black bear, bald eagle, mink, river otter, Pacific fisher, pine marten, long-tailed weasel, belted kingfisher, and common merganser.

On Lake Aldwell, while neither threatened nor endangered, a wintering population of trumpeter swans is of local concern. These swans, also known to use Lake Mills, have recently numbered up to 60 (letter from L. Gillette and M. Jordan, The Trumpeter Swan Society, Maple Plain, Minnesota, May 14, 1994). They are part of the Pacific Coast population, currently numbering an estimated 13,500 birds, with 2,000 wintering in western Washington. They use a variety of habitat types including agricultural fields, forested wetlands, ponds, lakes, and estuaries. Although this species was hunted to near extinction by the early 1930s, conservation efforts have slowly rebuilt population levels. As a result, trumpeter swans appear to be relatively stable or increasing in numbers. In 1990-1992, sightings of trumpeters in winter index areas of the Pacific Coast region were already above year 2001 North American Waterfowl Management Plan goals of 10,000 birds.

In addition to wintering in open water areas surrounded by forest, trumpeter swans occupy wet agricultural lands. Individual colonies of wintering swans move from field to field or from one forest pond or bay to another. Attributes of winter habitat that trigger movement from one area to another, or which make an area attractive to a colony, are not well understood. Lake Aldwell, only recently utilized by the swans, is not high quality or natural habitat for this species.

Impacts

Under the **No Action** alternative, a total of 684 acres of terrestrial wildlife habitat would remain inundated and another 31 acres unavailable due to dam and facility use. Important bottom land riparian habitat would continue to be unavailable for winter elk use. No wildlife mitigation would be done under this alternative. In the upper and middle drainage, up to 22 wildlife species that use salmon as food would continue to be adversely impacted. Swans and other waterfowl would continue to use the reservoirs as winter habitat, although the reservoirs provide low quality habitat because the shoreline is steep and most of the water is deep.



Dam Retention (with mitigation) would be the same as the **No Action** alternative except that 189 acres of lands around Lake Aldwell would be managed to benefit wildlife species, and the partial restoration of salmon runs would benefit wildlife that feed on salmon carcasses, live fish, or fish eggs. (Elwha Report, p. 59; FERC, p. 4-47).

Impacts to wildlife from either the **Removal of Glines Canyon Dam** or **Removal of Elwha Dam** would be similar. Removing Elwha Dam would result in the eventual restoration of 268 acres under Lake Aldwell, while removing Glines Canyon Dam would restore 415 acres under Lake Mills. These areas would return to bottom land riparian vegetation, important as winter elk range. Both alternatives would likely restore some salmon stocks, with expected restoration more beneficial to wildlife species that use carcasses, live fish or eggs if Glines Canyon Dam is removed. Under both alternatives, 189 acres near Lake Aldwell would be managed to benefit wildlife. Swans would continue to use Lake Aldwell as winter habitat if Glines Canyon Dam were removed, but would lose this habitat if Elwha Dam were removed. (FERC, pp. 4-167 and 4-196).

The removal of both dams and reservoirs would benefit many more species of wildlife than would be adversely affected.

The Federal Energy Regulatory Commission used a habitat evaluation procedure to model habitat changes for nine representative species: elk, deer, mink, beaver, Douglas squirrel, Cooper's hawk, lesser scaup, pileated woodpecker, and yellow warbler. In a study area including the reservoirs and some surrounding lands, net habitat would increase under the **Proposed Action** for all species except the lesser scaup (FERC, p. 4-131). Species that prefer lake habitat, such as scaups, mallard ducks, bufflehead, Barrow's goldeneye, merganser, and river otter, would suffer some negative impacts; species preferring river, riparian, and upland habitats would be positively affected. A swift-flowing stream filled with salmon is important habitat for beaver, muskrat, and river otter. To varying degrees, most species now using the reservoirs would also use riverine habitat. The removal of both dams and reservoirs would benefit many more species of wildlife than would be adversely affected.

Restoration of native anadromous fish runs and the subsequent availability of salmon as prey in the middle and upper Elwha would benefit at least 22 wildlife species known to use this food source (Elwha Report, p. 59). If **Proposed Action** were implemented, total biomass from returning salmon would increase to approximately 12 times more than the current level (FERC, p. 4-135). Salmonid eggs, fry, and juveniles will benefit a variety of native wildlife. As nutrients from salmon carcasses returned to the river, aquatic insects and species that feed on them would be expected to return; these species include amphibian larvae, spotted sandpipers, dippers, and harlequin ducks. Birds and mammals that feed on young fish include mergansers, great blue herons, belted kingfishers, otters, and mink.

Increases in visitor use which would accompany the restoration of the salmonid recreational fishery in the Elwha River could have some adverse impacts on wildlife and species of special concern in the park. However, these would be more than offset by the return of 715 acres of habitat to natural riverine conditions.

Draining the reservoirs and revegetating the restored lands would create more elk habitat, including important bottom land riparian areas. It would also

extend the elk migration corridor connecting high elevation subalpine park lands with low elevation forests farther down the Elwha valley.

The trumpeter swan winter habitat that Lake Aldwell and, to a lesser extent, Lake Mills provides would be lost if **Proposed Action** or **Single Dam Removal** alternatives were chosen. In the context of the Pacific Coast population of swans, which comprises roughly 75% of the entire North American population, this impact would be minor. However, if both reservoirs were drained, the local population would be forced to relocate. Mitigation options for the loss of this habitat, if required, will be explored in the Implementation EIS.

Cumulative Impacts

Based on habitat modeling, existing elk winter forage in the project vicinity is limiting, and habitat quality is low (FERC, p. 3-53). Subpopulations are considered vulnerable due to their low numbers and to increasing development on winter range adjoining the national park. In the reservoir areas, short-term recovery of grazing habitat and long-term recovery of mature forest stands for thermal cover (an essential component of winter habitat) would benefit the local elk subpopulation. Various wildlife species in the vicinity of the northern park boundary would be increasingly impacted through the conversion of land use from natural conditions to human activities. The revegetation and long term protective management of 425 acres at Lake Mills in Olympic National Park and river corridor lands through Lake Aldwell would benefit many wildlife species.

Conclusions

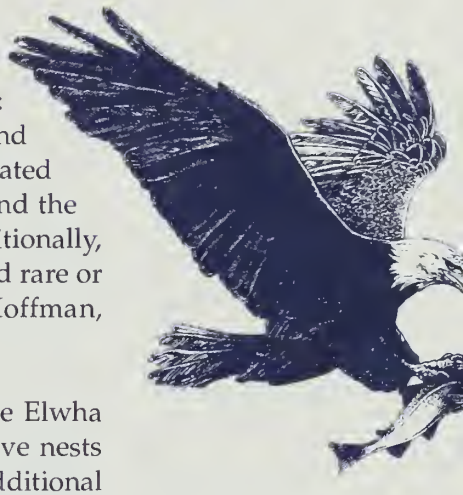
Wildlife would benefit from the revegetation of reservoir lands and reintroduction of salmon and seagoing trout into the Elwha River ecosystem. The **Proposed Action** would restore the greatest number of acres and highest levels of fish, with the greatest positive impact on wildlife of all the alternatives. Wildlife would benefit progressively less from the (1) **Removal of Glines Canyon Dam**, (2) **Removal of Elwha Dam**, and (3) **Dam Retention** (with mitigation) alternatives.

Species of Special Concern

Affected Environment

Four federally threatened species inhabit the area--the northern spotted owl, marbled murrelet, bald eagle, and Steller sea lion. One federally protected species, the peregrine falcon, migrates through the area. Three additional species have been petitioned for federal listing--the Elwha pink salmon, coastal coho salmon, and coastal steelhead. Species which are candidates for federal listing are the Pacific fisher, harlequin duck, northern goshawk, Cotton's milk-vetch, and bull trout. Candidates for state listing are the pileated woodpecker, common loon, and Vaux's swift. State-monitored species in the

area are osprey, great blue heron, barred owl, turkey vulture, Pacific harbor seal, orca, and grape fern (Elwha Report, p. 19; WDFW 1993; FERC, p. 3-60).



Five sensitive plant species may occur in the area (FERC, p. 3-63): porcupine sedge, tall bugbane, giant helleborine, water lobelia, and branching montia. Surveys conducted in July and August 1990 located nine giant helleborine plants between the road to Whiskey Bend and the bypass reach in the area of Glines Canyon Dam (FERC, p. 3-64). Additionally, 14 plant species reported to occur in the Elwha valley are considered rare or extremely rare within Olympic National Park boundaries (C. Hoffman, personal communication, August, 1994).

Northern spotted owl surveys have found seven pairs between the Elwha headwaters and the national park boundary (FERC 3-59), two active nests located within 2.2 miles of the river and Lake Mills, and at least one additional nest between U.S. Highway 101 and Lake Aldwell (USFS, personal communication, June 1994).

Bald eagles are observed year-round in the area, and two nest sites are just east of the mouth of the river (FERC, p. 3-58). Eagle densities generally decrease farther from the sea. Prey are primarily marine birds, chinook salmon carcasses in the lower river, resident fish in the reservoirs, and carrion, particularly elk and heron.

Marbled murrelets are primarily marine birds although they nest in semi-colonial aggregates in inland, old-growth forest stands (Federal Register 1992) and feed on fish and invertebrates in nearshore marine waters. Significant numbers of marbled murrelets feed in Freshwater Bay. Murrelets surveyed from March through September 1990 were estimated at 15 pairs in the upper Elwha River valley or tributaries during the breeding season (FERC, p. 3-59). From Krause Bottom above Lake Mills to the river mouth, the river appears to be used primarily as a travel corridor, with little nesting along the path. However, there were possible nest sites in stands along Boulder, Cat, and Stukey creeks, and above Altaire Campground. No murrelets were observed on either reservoir.

Surveys for spotted owls and marbled murrelets are ongoing. However, neither the developed areas where the hydroelectric project facilities are located nor the open water habitat offered by the reservoirs are considered suitable habitat for the spotted owls or murrelets. Survey data supports that there are no northern spotted owl nests within approximately one mile of either dam. Because of the distance between the dams and spotted owl nest sites, it is unlikely that owls would be affected by project removal activities, particularly with equipment modified to reduce noise levels. If required, such modifications or other mitigation measures would be developed in the Implementation EIS or permitting phase of the project, could include timing restrictions and/or routing access roads to avoid nest sites. The basis of determining which

mitigation is required will be a biological assessment submitted to the U.S. Fish and Wildlife Service.

Impacts

In the short term, marbled murrelets could be affected by increased turbidity following dam removal or installation of fish passage measures if the muddier water makes it more difficult for them to see and catch prey or reduces the number of prey (small fish and crustaceans). In the long term, additional forest acres (**Single Dam Removal** or **Proposed Action**) in the reservoir areas would have a beneficial effect on northern spotted owls and marbled murrelets. The renewed availability of salmon carcasses would be expected to increase the number of wintering bald eagles along the middle sections of the river.

The renewed availability of salmon carcasses would be expected to increase the number of wintering bald eagles along the middle sections of the river.

Fish species petitioned for listing under the Endangered Species Act could be negatively affected in the short term if sediment management resulted in pulses of sediment carried downriver. Mitigation for these impacts would be analyzed in the Implementation EIS.

Both the **No Action** and the **Dam Retention** (with mitigation) alternatives would continue to negatively impact several federally listed species by inundation of habitat and dramatically reduced salmon and trout as prey. Bald eagles, for example, eat salmon; spotted owls and marbled murrelets use mature forests for nesting. Coho and pink salmon and steelhead would continue to be directly affected by the loss of freshwater habitat.

Although **Removal of Glines Canyon Dam** or **Removal of Elwha Dam** would improve conditions for these species of special concern, these alternatives would not restore the fisheries or habitat to pre-dam conditions, thus sustaining some negative impacts on the species. (Elwha Report, pp. 47 and 51; FERC, pp. 4-172 and 4-200). Only **Proposed Action** would fully restore the species's natural freshwater habitat in the Elwha River.

Cumulative Impacts

Spotted owls and marbled murrelets have been impacted primarily through the logging of old-growth and mature forest communities. The consequence of continued logging activity in their habitat is currently an issue of local, regional, and national debate (USFS and BLM, 1994). However, it is mainly fragmentation of old-growth forests at issue. Since all alternatives except the Proposed Action would continue to prevent restoration of natural successional (and eventually old-growth) forests, they would have added negative impacts on owls and murrelets.

Bald eagle populations, recovered from their lowest levels in the 1970s, have been upgraded from endangered to threatened species status. Restoration of the salmonid fisheries in the Elwha River would support this trend.

The petitioned and candidate fish species would probably suffer some

short-term adverse effects from alternatives involving dam removal. If lake levels were drawn down, the middle and lower reaches of the Elwha River would carry more sand and silt, covering the gravel substrate that these species use for spawning. Over the longer term, however, dam removal and river restoration would offset cumulative impacts to these species elsewhere on the Olympic Peninsula. Causes of cumulative impacts that have lowered populations of petitioned and candidate species to critical levels are not certain but include sedimentation, overharvesting, and water pollution.

Conclusions

In the short term, construction noise and suspended sediment in the river have the potential to impact nesting owls and murrelets, Elwha pink and coastal coho salmon, coastal steelhead, and bald eagles. Mitigation measures would be developed through consultation with the U.S. Fish and Wildlife Service and other federal and state agencies, and addressed in the Implementation EIS or permitting phase of one project. In the long term, the **Proposed Action** would improve conditions for spotted owls, marbled murrelets, and bald eagles. Spotted owls and marbled murrelets would benefit from the restoration of forest habitat, and eagles from the restoration of native anadromous fish as prey. Coho and pink salmon and steelhead would benefit directly from the recovery of riverine habitat. All other alternatives would continue to exert negative impacts on these species, with **No Action** the most severe through continued habitat inundation and the absence of salmon runs as a source of prey. The **Dam Retention** (with mitigation) alternative would restore a limited number of salmon and trout to benefit federally listed species more than **No Action**. Single dam removal alternatives are slightly better, with the **Removal of Glines Canyon Dam** restoring more fish and more upland habitat than the **Removal of Elwha Dam**.

Cultural Resources



Affected Environment

Research has revealed the presence of many more resources within the project area than described (P. Gleeson, Olympic National Park, personal communication, August 1994) by either the Draft Staff Report or the Elwha Report. Cultural resources include structures, landscapes, traditional cultural properties, ethnographic sites, ethnohistoric sites, and archeological sites, representing a continuous occupation from centuries past. They also demonstrate the importance of the Elwha River, which provided sustenance to the valley's inhabitants and served as a transportation corridor into the heart of the Olympic Peninsula.

The Elwha River is central to the culture of the Lower Elwha S'Klallam Tribe. As shown by archeological evidence and oral tradition, the Elwha S'Klallam were living along the Elwha River and coastal portions of the river basin long before the arrival of Euro-Americans. S'Klallam villages were located adjacent to important fishing stations at Ediz Hook, the mouth of the Elwha River, and

The dams' place on the National Register of Historic Places is a source of pride to some residents.

at the confluence of Indian Creek and the Elwha in the upper Elwha valley. Seasonal camps for fishing and other subsistence activities were located along the Elwha River and its tributaries, and along the shores of Freshwater Bay and Ediz Hook. Trails used by the S'Klallam followed the Elwha and its tributaries into the high country of the Olympic Mountains, where the S'Klallam sometimes met with the Skokomish, Quinault, and other tribes during hunting and berry picking expeditions. The river, the fish, and certain locations along the river were central in the cultural life of the Elwha S'Klallam. S'Klallam were still living at the confluence of Indian Creek and the Elwha River when construction of the Elwha Dam began.

Euro-American settlers were drawn to the resources of the river valley and began to homestead in the mid 19th century, but found climate and the tenacity of natural vegetation limiting. The S'Klallam, who at that time were not U.S. citizens, initially found themselves unable to obtain legal papers for homesteads on their ancestral homelands. With the assistance of Euro-American homesteaders and passage of an effective Indian homestead law in 1884, tribal members overcame the legal obstacles; by 1894, ten family heads received trust patents to approximately 1,300 acres of land in the lowlands of the Elwha valley and on Freshwater Bay. Prior to the destruction of the anadromous fish runs by the dams, the Elwha River fisheries remained the mainstay of the S'Klallam economy.

In 1890, Thomas T. Aldwell moved from Canada, by way of Seattle and Port Townsend, to Port Angeles. In 1894, Aldwell recognized the potential for a power site on a claim he had purchased on the Elwha River and began acquiring lands necessary to build a hydroelectric dam and reservoir. In 1910, Aldwell and George A. Glines formed the Olympic Power and Development Company to build a dam and power plant. Backed by eastern financiers, construction got underway that same year. Despite failure of the Elwha Dam's original foundation in 1912, the dam and power plant were completed in 1914. From 1926 to 1927, a second dam and power plant were constructed at Glines Canyon, 8.5 miles upriver from the Elwha Dam. Despite existing state laws requiring fish passage, neither dam included such measures. For some members of the Port Angeles community, the dams became part of their family history because family members worked on the construction or lived in the valley during construction. The dams' place on the National Register of Historic Places is a source of pride to some residents.

While the hydroelectric developments provided power for consumers in Port Angeles, the character of the river and the valley was radically changed. The dams destroyed anadromous salmon and trout. Loss of the Elwha as a free flowing river cut to the core of S'Klallam spiritual existence and damaged a fishery vital to their economy. Tribal members lost access to sacred sites where the Creator made the Elwha S'Klallam and where they went to purify themselves and receive spiritual guidance. The reservoirs behind the dams inundated at least one S'Klallam settlement site, seasonal camps, and possibly burial grounds as well as habitat for many resources including fish, land game, and plants used for food, medicine, and raw materials.

S'Klallam and non-Indian residents suffered significant losses when the dam failed during construction in 1912. A primary bridge crossing over the Elwha was washed away and a mill was damaged. All of one Indian homesteader's property was swept away by the resulting flood. Other homesteaders had topsoil washed away and farm fields covered with debris. Some people later moved their houses to higher ground.

Operation of the power plants not only blocked fish access to most of the Elwha River, but affected fish in the river downstream of the dams through the periodic reduction in flows. Spawning grounds were left without water, and fish stranded away from the river. Today, cultural resources considered historically important include the hydropower projects themselves, home sites, Elwha Ranger Station, Elwha and Altaire campgrounds, the one-lane Elwha River Bridge, and the two dam complexes. Elwha and Glines Canyon dams are listed on the National Register of Historic Places, significant for their associations with the rapidly evolving technology of power generation and the organizations that were formed to develop and distribute power. In addition, the Elwha River plant is an example of a low head hydroelectric system and a rare, early multiple-buttress type dam. The Elwha River Hydroelectric Power Plant Historic District includes the dam and both spillways, the five penstocks, and powerhouse. Glines Canyon Hydroelectric Historic District includes the dam and spillway, intake, powerhouse, gate house, and surge tank.

Impacts

Under the **No Action** alternative, no changes would take place in the Elwha River Hydroelectric Power Plant Historic District, Glines Canyon Hydroelectric Historic District, or other historic sites. Members of the Lower Elwha S'Klallam Tribe would continue to suffer the loss of important tribal resources integral to their traditions and culture; sacred land would remain inundated or inaccessible through continued damming of the river. Fluctuations in lake



Elwha riffles. *(Asahel Curtis Photo, Washington State Historical Society)*

level could also result in the further erosion of archeological sites.

Under the **Dam Retention** (with mitigation) alternative, both dams would be modified: the Elwha Dam with a fish ladder and Glines Canyon with the addition of trap-and-haul facilities. These actions, compatible with hydroelectric use, would not be expected to affect the dams' listings on the National Register. Fish ladders would improve survival rates for some stocks, but not sufficiently to provide substantial fish harvests for tribal members, commercial fishers, and recreationists. Access to inundated traditional use and spiritual sites would continue to be denied.

Removal of Elwha Dam would result in the loss of a property listed in the National Register of Historic Places--"a historically significant example of a low head hydroelectric system in Washington State from the early 20th century. ... The blowout and reconstruction of the original dam foundation is noteworthy because it represents a failure of early engineering and a successful response to that failure" (Elwha Report, Appendix L). This alternative would require modification of Glines Canyon Dam to allow fish passage, an action which is not expected to affect its eligibility for listing.

Removal of Glines Canyon Dam would eliminate a dam historically important because of "its association with the evolution of power plant design and contribution to the development of the automation of hydroelectric installation....It marks the closing of an era which characterized early hydroelectric development within the state." This alternative would also require modification of Elwha Dam to allow fish passage, an action which is not expected to affect its eligibility for listing.

The Washington State Office of Archeology and Historic Preservation would be consulted in developing standards for mitigation to preserve the history of the dams and associated project facilities should any or all be removed. Any mitigation would include complete documentation of the projects according to the standards of the Historic American Engineering Record, including a history of each, measured drawings of designated features, and photographs and archival copies of important engineering records and drawings. Other mitigation measures could include onsite interpretation of remaining features of the projects and the removal process (Elwha Report, Appendix J).

Cultural or archeological sites in the immediate vicinity could be uncovered or damaged by construction during removal of either or both dams. To identify and avoid cultural sites, a survey would be conducted prior to construction activity. Wherever possible, construction would be routed to avoid sensitive areas and rerouted if unexpected sites were uncovered during construction. The Department of the Interior would consult with the State Historic Preservation Officer and the Advisory Council on Historic Preservation to determine the best mitigation tactics. A programmatic agreement among federal and state agencies and the Tribe for protecting cultural resources has been drafted to ensure cooperation in managing and protecting cultural

resources. The Elwha Ranger Station Historic District and the one-lane Elwha River bridge could be affected if flooding increased in this section of the river as a result of dam removal. The nature of the impact would be more precisely defined in the Implementation EIS.

Several known sites sacred to the Elwha S'Klallam are inaccessible because of the Elwha Dam and Lake Aldwell, and there may be others to which access is denied by the Glines Canyon Dam and Lake Mills. **Removing Elwha Dam** or implementing the **Proposed Action** would potentially make them available to the tribe.

Implementing the **Proposed Action** would affect present day cultural resources by reestablishing the native anadromous fisheries, thereby returning a traditional economic and cultural element to the tribe. The S'Klallam people would benefit from long-term restoration of ceremonial, subsistence, and commercial fishing. Traditional fishing sites would again be accessible, eliminating crowding with non-tribal fishers at the mouth of the river. Shellfish habitat at the river mouth would be replenished by sand and upstream nutrients carried to the sea. Restoring the free-flowing river and native



Fishing the Elwha in the 1920's. (Asahel Curtis photo, Washington State Historical Society)

anadromous fisheries would have positive impacts on the material and cultural well-being of tribal members (Elwha Report, p. 44).

The free-flowing Elwha might meander more widely or frequently across the floodplain, causing localized flooding and damage to historic sites from water and sediment deposits. The Elwha Ranger Station Historic District and Elwha River bridge are both recognized historic sites downstream of the dams. Others may exist, and an inventory to identify them is presently underway. Archeological resources such as villages or seasonal camps located outside the floodplain are not expected to be affected by increased meander. Such sites could be affected by construction activities associated with dam removal. Since the pre-dam river changed course frequently, it may have already eroded less protected sites on the floodplain (Elwha Report, Appendix L).

Cumulative Impacts

Cumulative impacts are those which have had an additive negative impact on cultural resources when combined with losses attributable to either the presence of the hydroelectric projects or their removal. A number of cultural resources on the Olympic Peninsula have been lost in the past as a result of development. Removal of the Elwha and Glines Canyon dams might result in additional loss of cultural resources. Documenting these resources before major changes are made would contribute to the future preservation of their historical significance.



The cultural fabric of the Lower Elwha S'Klallam Tribe has been adversely affected by the presence of the projects and ensuing loss of fisheries resources. In the late 19th and early 20th centuries, other events also adversely affected the culture of the tribe, including boarding schools which discouraged or banned the use of the native language, Indian agents who prohibited traditional religious practices, and the logging or development of streams which further reduced salmon runs.

Conclusions

The free-flowing Elwha and its native salmon fisheries are central to the culture of the Lower Elwha S'Klallam Tribe. Benefits to the tribe would increase in direct proportion to the degree of restoration of the river and native fisheries. Only the **Proposed Action** would restore the river and fully reestablish the native fisheries lost almost a century ago. Removing either dam or installing fish passage measures would only partially restore the fisheries. Sacred sites would remain buried beneath the Elwha Dam and Lake Aldwell, possibly under Glines Canyon Dam and Lake Mills as well.

The dams are historically significant examples of early hydroelectric systems. Though their features would be inventoried, photographed, and recorded, the dams and power plants would be lost if the **Proposed Action** were implemented. This would also be true of single dam removal alternatives.

Recreation, Esthetics and Land Use

Affected Environment

The Elwha River valley traditionally has been used for recreation, timber production, fish harvest, power production, and residential purposes. The portion of the middle reach inside Olympic National Park and the upper reach of the Elwha is dedicated to park uses, such as hiking, fishing, camping, picnicking, or wildlife observation. The lower and portion of the middle reach outside the park experience mixed use, including limited Native American cultural and subsistence uses, recreation, boating and hunting and trapping.

Certain parts of the valley have limited road access, but none is as easy to reach as more developed regional sites (FERC, pp. 3-78 to 3-79). Visitors can access the river or reach the reservoirs in a few places by road. Above Lake Mills, the river is accessible only by trail and the shoreline inaccessible in several areas due to steep banks and deep gorges (FERC 3-80). All of the river valley upstream of river mile 9.5 lies within Olympic National Park in the Elwha subdistrict. Although this region is relatively little-used compared to the neighboring Hurricane and the more famous Lake Crescent subdistrict, approximately 700-900 people boat the river annually (FERC, p. 3-83) in spring and summer, and an estimated 5,000-8,000 stay in the Altaire and Elwha campgrounds on the river each year. Some sports fishing is done, and several thousand people hike the Elwha subdistrict backcountry each year.

The Washington Department of Fish and Wildlife reported angler catches of 127-157 summer steelhead and 1,000-2,300 winter steelhead per year from 1987 to 1989 on the Elwha. A small state ramp on Lake Aldwell, accessible from U.S. Highway 101, provides a place to launch canoes and other small boats and to fly fish along the eastern shoreline and north end of the lake. The James River Corporation boat ramp on Lake Mills also is used to launch small water craft. From July to September in 1981 and 1982, anglers spent 8,500-9,500 hours fishing both lakes (FERC, p. 3-83). Recreationists spent an average of 22,000 hours per summer fishing primarily for rainbow trout in the lakes and middle reach of the river (FERC, p. 3-44).

Marine recreational fishing exists in the Strait of Juan de Fuca, where chinook, coho, and pink salmon are taken off Ediz Hook during the late summer months (FERC, p. 3-82). Several charters from Port Angeles operate to support recreational fishing. (For further information on marine fishing for salmon and trout in the area, see Elwha Report, pp. 16-17, and "Cumulative Impacts" in the fisheries section of this document).

Nine trailheads in the Elwha drainage basin provide access to approximately 20 backcountry trails. Five of the nine trailheads also allow access to day hike trails of up to three miles. Records have not been kept for day hikes, but 8,000-14,000 visitors camped overnight in the backcountry each year, 1985 to 1989 (FERC, p. 3-83). Segments of the old Elwha River Trail through Smoky Bottom are now under Lake Mills.

Although there are no formal viewing pulloffs of the Elwha River from the highway or road, some informal viewing spots exist (FERC, pp. 3-87 to 91).

Within the park and upstream of Lake Mills, the Elwha River is pristine and considered eligible for designation as a wild and scenic river. The Glines Canyon Gorge is a dramatic site, as are other locations in the project area. Water quality, fish habitat, riparian habitat, and scenic and esthetic values are as they were when the first European settlers arrived. The river valley here retains its character as a lush rainforest.

Outside the park boundary, some of the forest adjacent to the river has been logged and developed into homesites and farms. The middle and lower sections of river land are a patchwork of public (US Forest Service, Washington departments of Natural Resources and Fish and Wildlife) and private ownership (including 574 acres of tribal land at the mouth of the river). Some of these lands have been and will continue to be logged. Parcels of land between the reservoirs are used for transmission corridors, support for the power production of the dams, municipal and industrial water intake, and state and tribal fish hatcheries.

Plans or policy statements for the management of these lands and river resources have been prepared by Olympic National Park, National Marine Fisheries Service, Pacific Fishery Management Council and Clallam County, as well as other governing agencies including the Lower Elwha S'Klallam Tribe, Point No Point Treaty Council, and Washington Department of Fish and Wildlife. Many of these plans and policies address the restoration of the native anadromous fisheries. Others deal with managing coastal, recreational, and wildlife resources. (For have more detailed information on each of these plans, see FERC, pp. 3-64 and 3-68 to 3-77.) The Puget Sound Salmon Management Plan (administered by area Indian tribes and the Washington Department of Fish and Wildlife) sets objectives for habitat preservation, production levels, and escapement of each salmon species for the Pacific Coast. In Puget Sound rivers, the plan promotes the restoration and natural production of species, particularly coho and chinook, to optimum levels.

Impacts

Recreational Fishing. Under the **No Action** alternative, the impacts to recreation would be primarily on sports fishing, both in the river and the marine environment. The Elwha River was historically one of the largest producers of salmon and steelhead on the Olympic Peninsula, yet current runs are only a small portion of their former size. This is because the dams block upstream migration of fish and downstream flow of spawning gravels and nutrients. The reservoirs have inundated more than five miles of important riverine habitat, and releases from the reservoirs result in water temperatures 2 to 4° C higher than normal during summer months. These conditions have reduced the number of harvestable salmon for recreationists both in the Elwha



and in the marine environment. Presently, in-river recreational fishing opportunities for native anadromous species are limited to a 100-400 fish summer steelhead fishery. River anglers catch primarily rainbow trout or native char (Dolly Varden and bull trout) in the middle and upper Elwha River or in the two reservoirs (see previous "Affected Environment" section).

In the short term, removing either dam could affect river fishing because of the initial need to protect native populations as they reestablish and rebuild; this could curtail recreational fishing for several years. In the long term, however, the **Proposed Action** would restore the native fisheries in the Elwha, reducing the need for harvest restrictions (see "Native Anadromous and Resident Fisheries" section of this document, or Elwha Report p. 35).

Reintroduced salmon and native anadromous trout would likely compete with resident trout and native char for food and habitat, lowering numbers of the resident fish. All dam removal alternatives would result in more fishing opportunities, but a slight overall decrease in fish available to anglers is predicted if both dams are retained with fish passage measures installed and hatchery operations phased out (See "...Fisheries" section of this document and FERC, p. 4-68). This is primarily due to the requirement for greater escapement (fish allowed to spawn) to maintain wild stocks rather than hatchery stocks and to supplement losses at passage facilities.

Under **Dam Retention** (with mitigation), with fish passage measures installed, coho salmon and winter and summer steelhead runs would have a fair chance of restoration, but none would have "good" or "excellent" chances. The reservoirs would remain for use by flat-water boaters.

Removal of Elwha Dam would completely eliminate passage problems for sockeye salmon. Coho and steelhead would have a "fair" chance for restoration, but pink, chum, chinook and sockeye would have "poor" or "poor to fair" chances. The natural balance from a reintroduction of native anadromous salmonids would most likely reduce populations of resident trout and char. Lake Aldwell would be eliminated as a recreational resource for flat-water boaters, but would be replaced with 2.8 stream miles available to whitewater recreationists and river anglers.

Removal of Glines Canyon Dam would raise the probability of restoration for steelhead from "fair" to "good," and for chinook and coho to "fair" or "good." With the Elwha Dam still in place, however, sockeye, pink, and chum all would fare worse, their chances for restoration dropping to "none" or "poor." Resident trout and char populations would also grow smaller. Lake Mills would be eliminated as a recreational opportunity for lake anglers and others who now boat on the reservoir. Approximately 2.5 stream miles would be restored and become usable by whitewater boaters and stream anglers.

Removal of both dams would eliminate passage problems for all native Elwha anadromous fish and fully restore habitat for all except sockeye salmon. The Elwha sockeye require a freshwater lake for their life cycle and depend on the

highly developed Lake Sutherland. Restoring river habitat would not repair the condition of Lake Sutherland, but would improve chances of full restoration from "none" under present conditions to "poor" or "fair." Like all other alternatives that reintroduce native anadromous fish, the **Proposed Action** would also result in a population reduction of resident trout and char. Although all flat-water recreational opportunities would be lost, more than 5 miles of river recreation would be added.

The Department of the Interior has stated its commitment to ensuring recreational access through lands it may acquire...

Camping, Hiking, and Whitewater Boating. All dam removal alternatives involve the loss of at least one reservoir and associated recreation, including boating, camping, fishing, and viewing. Visitors seeking flat-water recreational experiences would use other nearby locations, such as Lake Crescent, or choose river or other recreation options. All action alternatives would have direct and indirect short-term construction impacts on recreation through road and campground closures due to noise, dust, in-stream sediment, and the temporary loss of a quiet, natural environment.

In the long term, each removal alternative would create new recreation opportunities for anglers, whitewater boaters, and visitors seeking a natural, high quality outdoor experience. If both dams were removed, 5.3 stream miles would be added to the Elwha. If only Glines Canyon Dam were removed, 2.5 miles would be added, and 2.8 miles of river if only Elwha Dam were removed. The Department of the Interior has stated its commitment to ensuring recreational access through lands it may acquire, and the Elwha Restoration Act asks any future landowner of the Aldwell lands to also plan for public access. A possible trail connecting Olympic National Park with the Port Angeles waterfront trail, as well as other recreational and interpretive opportunities, are mentioned in the Elwha Report, and would be further examined during or following the Implementation EIS.

The present owner of the dams, James River Corporation, has proposed three boat-in campsites, trails, and an overlook at Lake Aldwell, and improvements to the boat launch facility at Lake Mills. These would increase reservoir recreational opportunities if either or both of the dams were retained.

In the short term, all action alternatives entail construction and its accompanying noise, dust, sediment, road closures, and general disruption. Installing fish passage measures on each dam could take one to two years. Removing both dams would probably be done in two years, but may take as long as four.

Removing the dams and draining the reservoirs would uncover trees and stumps, as well as hundreds of acres of barren land (415 acres under Lake Mills; 267 under Aldwell, FERC, pp. 4-177 and 4-207). Revegetation would be well-established within three years, and the scene would naturally evolve into a varied landscape with multiple terraces. Roosevelt elk might graze these open areas providing wildlife viewing opportunities for visitors. Gorges such as those at the bases of both dams would be restored to their natural conditions.

Land Uses. Lands inside park boundaries acquired by Interior, specifically those behind Glines Canyon Dam, would be managed according to Olympic National Park policies (Elwha Report, pp. 117-120, Appendix I). These policies include restoring, "...natural aquatic habitats and the natural abundance and distribution of native aquatic species, including fish, together with the associated terrestrial habitats and species," (NPS Management Policies, 1988) and "...conserve maintain, and restore, where possible, the primary natural resources of the park and those ecological relationships and processes that would prevail were it not for the advent of modern civilization" (Olympic National Park Statement for Management, 1989).

The Lower Elwha S'Klallam Tribe is interested in trust ownership of Elwha project lands, including those currently beneath Lake Aldwell. Some of this reclaimed land could be used for housing and economic development by the tribe. If the secretary of the interior chooses to remove both dams, Interior would examine different land disposal options for any acquired lands outside the park boundaries. These options are specified in the Elwha Restoration Act: held in trust for the tribe's use, included as part of Olympic National Park, managed by the U.S. Fish and Wildlife Service as a wildlife refuge, or used and managed by the state. Cooperative management among two or more of these agencies is also possible. Acquired river banks within project boundaries would be managed in a free-flowing state.

Solid waste would be produced by any dam removal alternative. If disposed of on land, 3 acres are estimated as needed for rubble from the Glines Canyon Dam, 33 acres for rubble from the Elwha Dam. A possible disposal site for rubble was examined in the Draft Staff Report, but alternative sites and options for using the concrete (including ocean disposal and the creation of artificial reefs) would be examined in the Implementation EIS.

The **No Action** alternative would not generate solid waste, but would be inconsistent with all agency plans, including National Park Service and Olympic National Park management plans and policies, the Fishery Management Plan (National Marine Fisheries Service and Pacific Fishery Management Council, 1989), and the Clallam County Comprehensive Plan.

In the long term, each removal alternative creates new recreation opportunities...

The National Park Service policy to restore "natural aquatic habitats and the natural abundance and distribution of native aquatic species, including fish, together with the associated terrestrial habitats and species," and Olympic National Park policy, "conserve, maintain, and restore, where possible, the primary natural resources of the park and those ecological relationships and processes that would prevail if not for the advent of modern civilization," would both be in conflict with any decision that does not fully restore the Elwha River ecosystem. Since the **Proposed Action** is the only alternative which would accomplish this goal, it is the only alternative consistent with these policies. **Removal of Glines Canyon Dam** would restore only those natural ecosystem processes in the park; it could not restore native anadromous fisheries and wildlife to pre-dam conditions.

The Puget Sound Salmon Management Plan (administered by area Indian tribes and the Washington Department of Fish and Wildlife) sets objectives for habitat preservation, production levels, and escapement of each salmon species for the Pacific Coast. In Puget Sound rivers, the plan promotes the restoration and natural production of species, particularly coho and chinook, to optimum levels. None of the alternatives except the **Proposed Action** could fully accomplish this objective; in fact, the **No Action** alternative is inconsistent with it. To the extent that partial restoration of the fisheries would occur, each of the other action alternatives, **Removal of Elwha Dam**, **Removal of Glines Canyon Dam**, **Dam Retention** (with mitigation), would be partially consistent with the Puget Sound Salmon Management Plan policies.

The Clallam County Comprehensive Plan emphasizes protecting and enhancing recreational resources that attract visitors to the area to support the local economy (FERC 3-76). Although the **No Action** and **Dam Retention** (with mitigation) options would continue to provide some recreation through the reservoirs, alternatives that enhance ocean or river salmon and trout populations would also attract sports anglers and visitors to the area. The Dam Retention alternative would supply fewer harvestable salmon and steelhead than under current conditions, primarily due to the requirement for greater escapement to maintain wild stocks rather than hatchery stocks and to supplement unmitigated losses at passage facilities. Fewer trout would also result, due to new competition with salmon and steelhead in the upper basin. The reduced available salmon, steelhead, and trout would make this action largely inconsistent with the county plan.

No Action would continue to negatively impact native anadromous salmon and trout and recreational fishing by restricting habitat to the lower 4.9 miles of the Elwha River. This alternative is also inconsistent with the stated priorities of the county plan. Single dam removal alternatives would partially restore the fisheries and hence attract fishing-related visitors, but only the **Proposed Action** would completely restore the fisheries.

Only the **Proposed Action** is consistent with rights in riparian lands reserved by the Point No Point Treaty and upheld by the U.S. Supreme Court. This 1855 treaty retains the tribe's right to capture up to 50% of the harvestable anadromous fish returning to their usual and accustomed fishing places. The court defined these fishing places for the S'Klallam, including all tributaries in the drainage extending from Hoko River on the west to the mouth of the Hood Canal on the east (R. Busch, Evergreen Legal Services, personal communication, Feb. 1995).



Cumulative Impacts

The Olympic Peninsula has many recreation areas managed by government agencies and private landowners (FERC, p. 3-79). Olympic National Park has approximately 1,000 developed campsites and the Olympic National Forest,

379. Anglers fish for salmon, steelhead, and other trout in the Elwha and other peninsula rivers (FERC, p. 3-78) and whitewater boaters use five rivers. Lake Sutherland and Lake Crescent are within a few miles of the Elwha.

Construction associated with all alternatives except **No Action** might temporarily restrict access for hikers, campers, and anglers in the Elwha subdistrict of the national park, perhaps creating more crowded conditions at neighboring campgrounds, lakes, rivers, and on hiking trails. Although camping, hiking, and fishing are available in the nearby Hurricane and Soleduck subdistricts, whitewater boaters would have to use the Soleduck or Bogachiel rivers or travel more than 75 miles to the Queets, Quinault, or Humptulips rivers.

If native anadromous fish were restored to the Elwha through any dam removal scenario, there would be a one- to three-decade period during which fishing restrictions for one or more runs would be in effect. This would be followed by a much better fishing future. A wider range of fishing opportunities could gradually increase the number of visitors to the Elwha subdistrict.

Conclusions

The Elwha River basin provides hiking, camping, fishing, and boating opportunities. Fishing, primarily for resident trout and steelhead, takes place both in the river and from small boats on Lake Mills and Lake Aldwell. Most of this basin in the Olympic National Park is in pristine condition, less used by recreationists than other neighboring subdistricts. Noise, dust, and road closures during construction of fish passage measures and/or removing either or both dams would have short-term negative impacts on recreationists. Short-term harvest restrictions necessary for restoration would also negatively impact anglers. However, to the extent each alternative would restore native anadromous fisheries in the long run, it would have positive impacts for anglers and to those seeking wilderness recreation experiences. Reservoir recreation would no longer be available on the Elwha River if **Proposed Action** were implemented, and would be confined to a single reservoir if either the **Remove Elwha Dam or Remove Glines Canyon Dam** alternative were selected.

Removing the dams and draining reservoirs would uncover barren lands at the reservoir bottoms, but would offer a unique visual experience as these lands begin the natural successional process toward a mature forest. Scenic vistas such as Glines Canyon Gorge would be restored to natural conditions if the dams were removed.

Only the **Proposed Action** is consistent with all relevant plans and policies for the area, including the Puget Sound Salmon Management Plan, Clallam County Comprehensive Plan, Olympic National Park, and the Point No Point Treaty.

Socioeconomics



Department of the Interior Methodology

In this environmental impact statement, the Department of the Interior uses a combination of data from the Draft Staff Report and more recent information available since 1993 when the report was printed. On the cost side, these data affect direct project cost and cost for purchase of alternative energy. On the benefits side, they most alter Federal Energy Regulatory Commission numbers on the economic impact of increased tourism in Clallam County. The socioeconomic method used here also differs from the Draft Staff Report by considering a more extended project period (100 years), estimating impacts over a range of discount rates (from 0 to 7%), and following recommendations by the Office of Management and Budget (1992) in using real rather than nominal values in analysis. Use of real prices and rates removes inflation from all calculations, but accounts for price changes caused by changes in factors of demand and supply. After consultation with the Bonneville Power Administration, Interior has revised assumption of real increase in regional cost of purchased energy from the coal-based estimates used by the Federal Energy Regulatory Commission to conform to expected increases in the price of natural gas.

Data and assumptions underlying principal socioeconomic findings are contained in "Elwha River Restoration Project - Economic Analysis" (Meyer et al., 1995).

Affected Environment

Clallam County encompasses an area from just east of the city of Sequim westward along the Strait of Juan de Fuca to the most westerly point of land in the continental United States, Cape Flattery, and south to include the town of Forks. Port Angeles is the largest city in the county. The county also contains a major portion of Olympic National Park. For much of its length, the Elwha River flows northward within the boundaries of the national park before emptying into the Strait of Juan de Fuca west of Port Angeles. Four treaty tribes: the Lower Elwha S'Klallam, the Jamestown S'Klallam, the Makah, and the Quileute, have reservation lands in Clallam County. The Elwha drainage area is an important part of the traditional territory of the Lower Elwha S'Klallam Tribe, whose reservation lies adjacent to the river mouth.

Clallam County population was 56,464 at the 1990 census, an increase of 9% from 1980. Caucasians make up 93% of the population, with 2,695 Native Americans representing the largest county racial minority. An estimated 556 Native Americans resided on or near the Lower Elwha S'Klallam reservation in 1990. Total county population is projected to reach approximately 63,000 by 2000, and 71,000 by 2010 (White, Stalheim, and James, 1992).

Most of the county population is concentrated around Port Angeles and Sequim. Port Angeles continues to be the population center of the county,

accounting for over 32% of the total. Factors that contribute to this concentration include industrial- and recreation/tourism-based activity associated with Port Angeles' deep water harbor, the "rain shadow" which makes climate in the east end of the county more attractive, and land ownership patterns which put most of the south and west areas of the county in large commercial timber holdings and in Olympic National Park.

For most of this century, the economy of Clallam County has been dominated by its natural resources and the drawing power of its environmental amenities. The large timber resource base has made the timber industry a traditional economic mainstay--with approximately 56% of the county's 1.13 million acre land base managed for this purpose in 1992 (White, et al., 1992). Over the past two decades, forest-based productivity in northwestern Washington State has flattened and then declined: first, in the processing sector due to anticipated timber supply shortfalls and, more recently, in the harvest sector. The decline is primarily due to supply shortfalls, restrictions on export of raw logs, and environmental concerns (Haynes, Richard W., 1990).

Commercial fishing and shellfish harvesting have also been important traditional activities for the county. Like the timber industry, activity in this sector has declined in recent years, principally due to declines in available fish harvests. Other resource-based industries of importance include agriculture and mining.

A growing tourism industry serves the many visitors drawn to the county by Olympic National Park, ferry access to Victoria, British Columbia, salmon fishing, and opportunities to enjoy the varied scenic and recreational amenities in this area. More recently, the county's growing retirement community has created employment gains in the service sector of the economy (White, et al., 1992).

Income, Employment, and Poverty

At the 1990 census, Clallam County per capita income was estimated at $12,755, while county unemployment stood at 8%. Median household income increased from $16,890 (1980) to $25,434 (1990). Consistent with national trends, earned income from employment in the county has declined from 59% to 50% of all income, 1980 to 1988. (Clallam County Economic Development Council, 1994).

County employment was estimated at 23,310 persons out of a workforce of 25,500 in May 1992. (White et al., 1992) The highest growth in employment between 1985 and 1990 was in government, retail/wholesale, and construction sectors. Clallam County has lagged behind the state in employment growth, but has exceeded the state in retail/wholesale and government sectors. Tourism, a growing older population, and establishment of a new state corrections center at Clallam Bay have been significant contributors to this trend. Major employers in the county, as of 1992, are listed in Table 5.

Poverty levels in Clallam County were almost 2% higher than for Washington State as a whole at the 1990 Census. Members of the Lower Elwha S'Klallam Tribe are in a far more adverse position than county residents in general with respect to all economic indicators discussed in this section. Comparative 1990 census data for Washington, Clallam County, and the Lower Elwha S'Klallam Tribe for income, unemployment, and poverty are presented in Table 6.

Public Infrastructure, Services, and Utilities

The government of Clallam County operated on a 1993 budget of $14.8 million (Gerden, Ruth, 1994). Of this amount, $4.3 million came from property taxes while $2.1 million was generated from sales tax payments to the county general fund. The county's combined state and local tax rate is 7.9%. The state retail

Table 5. *Major Employers in Clallam County.*

Employer	Persons
Olympic Memorial Hospital	546
Port Angeles School District	502
ITT Rayonier	434
U. S. Coast Guard	400
Clallam County	345
Daishowa America	320
Clallam Bay Correction Center	317
Sequim School District	247
Quillayute School District	202
City of Port Angeles	197
Peninsula College	180
K-Ply	130
Olympic National Park	130

Source: White et al., 1992.

Table 6. *Comparative Statistics on Economic Status.*

	Lower Elwha S'Klallam Tribe	Clallam County	Washington State
Per capita income	$5,000	$12,755	$14,923
Percent in poverty	35%	9.5%	7.8%
Percent unemployed	35%	8.0%	5.7%

These data underestimate tribal unemployment for some months when the unemployment rate may rise as high as 80% (FERC p.3-99)

Source: 1990 Census

sales and use tax portion is 6.5%; the county's sales and use tax portion equals 1.4%, and provides revenue to the county general fund (1.0%), the transit system (0.3%), and the criminal justice system (0.1%). An optional tax of 2% on sales of hotel/motel rooms is also received. This tax is not additive with state/local sales tax, but is credited against the state's 6.5% portion of those taxes. The anticipated 1994 property tax from structures associated with Glines Canyon dam is $116,000. The anticipated 1994 property tax on structures at Elwha dam is $114,000 (Gerden, 1994).

Water is supplied by Clallam County Public Utility District #1, the cities of Port Angeles, Sequim, and Forks, and by private irrigation districts, water associations, and community well systems. Port Angeles's water supply is drawn from the Lower Elwha Ranney well. Five reservoirs, situated around the city, receive water through 24-inch lines along the old railroad grade. The storage capacity of the existing reservoir is 11 million gallons. More than 7,000 customers consume 4 million gallons per day (White, et al., 1992). Dry Creek Water Association wells, which supply a small group of rural users, are located adjacent to the lower Elwha River.

Electric power in the county is generally provided by Bonneville Power Administration via two local utilities, Clallam County Public Utility District #1 and Port Angeles City Light. Port Angeles City Light assesses an 11% overhead charge on Bonneville power provided through their system (FERC, p. 2-42). Elwha and Glines Canyon dams provide an average of 172 gigawatt hours/year of electricity to the Daishowa mill. This is approximately 43% of the mill's requirement.



The start of construction at the base of the Elwha Dam, 1911.
(Daishowa/James River Company Photo)

Port Angeles's deep water harbor is protected from storms by Ediz Hook, a natural sand barrier that encircles the harbor from west to east. Ediz Hook was formed with material eroded from adjacent sea bluffs and from Elwha River sediment deposition. Over the years, construction of dams on the Elwha and erosion control measures on the sea bluffs have substantially reduced natural recruitment of material to Ediz Hook; consequently, today, the Hook loses more material to wind and wave action than it receives. As a result, in 1978, the U.S. Army Corps of Engineers installed a rock-based blanket to reduce erosion of Ediz Hook at a cost of $5.6 million. Repair and maintenance costs approaching $100,000 per year are expected to control further erosion (personal communication, M. Scuderi, U.S. Army Corps of Engineers, November 1994).

Clallam County's major medical center, a 126-bed facility, is the Olympic Memorial Hospital in Port Angeles. A smaller hospital is located at Forks and a rural primary medical clinic at Clallam Bay. The Indian Health Service operates a health center at Neah Bay. Tribal health clinics are situated at Quileute and (recently) on the Lower Elwha S'Klallam reservation.

Table 7. *Estimated Annual Economic Value of Elwha Salmon and Steelhead - 1990/1991*

Type of Catch	Catch in Fish† (thousands)	Fish Size† (pounds)	Catch in Pounds (thousands)	Net Economic Value Market (thousands of dollars)	Net Economic Value Non-Market (thousands of dollars)
Commercial & Tribal Chinook	5.5	11.5	63.2	175*	
Sport Chinook	2.8			73~	180**
Commercial & Tribal Coho	19.3	6.5	125.4	292‡	
Sport Coho	2.6			68~	167**
Tribal Steelhead	1.8	7.0	12.6	46§	
Sport Steelhead	1.8			47~	116**
	33.8			701	463

Notes:

† From FERC (1993), p. 3-103.

* Based on 1988-1990 average ex-vessel price of $1.85/lb., +52% increment for processor marginal net economic value.

~ Based on marginal net economic value of $26.22 per fish, -50% gross sport angler expenditure per fish.

** Based on 1988-1990 non-market surplus of $64.31 per fish.

‡ Based on 1988-1990 average ex-vessel price of $1.53/lb., +52% increment for processor marginal net economic value.

§ 1988-1990 sockeye ex-vessel proxy value of $2.43/lb, +52% increment for processor marginal net economic value.

Prices used in this table are based on data from Washington Department of Fish and Wildlife and from Pacific Marine Fisheries Commission. Fishery net economic value conventions and non-market values are from Bonneville Power Administration (1986).

Fishing expenditure data are derived from The Research Group (1991).

Housing

The 1990 census showed 25,225 housing units in Clallam County--an increase of 15% from 1980. Of these units, 17,479 were single family homes. Average household size in the county has declined from 2.54 persons in 1980 to 2.4 persons in 1990. A 1991 study by the Clallam County Assessor estimated that 20% of county housing stock is in poor to fair condition. Sixty-four percent of housing units in the county are owner occupied, 27% rented, and 9% are vacant. Between 1980 and 1990, there was an 18% increase in homeless households and a 28% increase in homeless individuals in Clallam County (White et al., 1992).

The Lower Elwha S'Klallam Tribe has a total of 80 housing units available to tribal families; there are 87 additional families on the tribal housing waiting list. Average tribal household size is reported to be 3.7 persons. Only two of the families presently occupying tribal housing earn sufficient income that housing subsidies are not required (Lower Elwha S'Klallam Tribe, staff data, 1994).

Fisheries and Fish Processing

Commercial and recreational fishing have been a cornerstone of the Clallam County economy. Construction of Elwha Dam in 1910 preempted Treaty fish resources secured to the Lower Elwha S'Klallam, Port Gamble S'Klallam, Jamestown S'Klallam, and Makah tribes in 1855, initiating a substantial decline in Elwha River fish stocks (FERC, p. 3-101). More recently, reduced commercial and sport fisheries have continued in the Strait of Juan de Fuca, but with only low-level contributions from Elwha River hatchery-supported stocks (FERC, p. 3-103). The Federal Energy Regulatory Commission estimated fishery catches from Elwha stocks for the period 1990/1991 (FERC, p. 3-103); estimates of net economic value associated with these catches are presented in Table 7.

The economic figures in Table 7 do not include tribal subsistence fishing, nor do they incorporate tribal ceremonial or cultural values of Elwha fisheries. These are discussed in the following section.

Finally, it should be noted that fish harvests have declined substantially from the 1990/1991 conditions underlying Table 7--with attendant major losses for Clallam County residents (Brown and Hodges, 1994). Commercial fishermen in this area (and others) received federal disaster relief in 1994 when a large area of the Pacific coast was entirely closed to salmon fishing. It is unclear at this time whether this signals a further longer term decline from 1990/1991 conditions, or a more temporary condition such as the El Nino current.



Tribal Circumstances

In 1854-55, the United States entered into land cession treaties with native tribes and bands in the Washington Territory. The Elwha S'Klallam were a party to the Treaty of Point No Point signed in January 1855. Under the terms of the treaty, the Elwha S'Klallam retained the right to fish at their "usual and

accustomed" fishing places, but they were not provided with reserved lands accessible to those fisheries. Instead, they were expected to live on the Skokomish River at the south end of Hood Canal, an arrangement unworkable and unacceptable to the S'Klallam. They remained in their own territory while successive Indian Department officers urged the necessity of providing an Indian reservation for these people within their own homeland. The United States eventually purchased lands in the lower Elwha valley for this purpose in the 1930s, although the lands were not given formal status as an Indian Reservation until the 1960s. Removal of the dams would allow tribal members to restore their traditional economic and spiritual relationship with the river.

In 1910, construction on Elwha dam began. Although this structure, and the one that followed at Glines Canyon in 1926, provided electricity for milling of forest products at Port Angeles, it also preempted the greatest part of the salmon resource secured to the Lower Elwha S'Klallam by the Treaty of Point No Point and severely affected the tribe's social and economic well-being. Preemption by Elwha and Glines Canyon dams of the treaty fisheries secured to the tribe has combined with an almost total lack of effective access to alternative economic opportunity to leave Lower Elwha S'Klallam people today as the most economically disadvantaged group in Clallam County (Table 6).

Tribal social circumstances have paralleled economic difficulties. Tribal society exhibits significant social support for its members, particularly on reservations and through extended families. However, Bachtold (1982), specifically referencing the Lower Elwha S'Klallam and other northwest Tribes, reports strong linkages among economic well-being, health, and self-worth and concludes that continuing economic deprivation creates overwhelming stress among tribal members.

Despite these difficulties, and the currently depressed level of fish harvests, Elwha fisheries continue to play a central role in tribal economic activity, culture and ceremony, and to offer hope for their improved future. This is perhaps best expressed by tribal chairperson, Frances Charles:

> I hate to think of the future, especially for our children, if our resources aren't there--the fish, the nature, the wildlife, the plants-- which have always been provided for us. Our ancestors were raised to protect the river. They raised us to protect the river. We must be even stronger in the future--protecting what was given to us for our children, and for our children's children-- and valuing what we have. --
>
> Frances Charles

The tribe continues to operate a fish hatchery for chinook, coho, and steelhead on the lower Elwha that produced 63,000 pounds of salmon in 1987. The tribe considers the fishery potential of the Elwha River its most significant economic asset. Most tribal fishers presently rely on the river's fisheries to some degree to obtain a relatively small amount of income and/or food each year.

Power Production for Daishowa Mill

Elwha and Glines Canyon dams annually produce an average of 172 gigawatt hours of power, or about 43% of the total for the Daishowa mill through the Bonneville Power Administration/Port Angeles City Light system. Daishowa mill currently employs approximately 320 persons (Table 5). Operating and maintaining Elwha and Glines Canyon dams employs approximately 10 persons.

The estimated 1996 cost of power production from Elwha and Glines Canyon dams, without any improvement expenses, is 12.29 mills (FERC, 2-38 to 39). The estimated real priority firm power rate, or the rate Daishowa mill would actually pay for additional purchased power, for Bonneville customers in 1996 is 26.7 mills (BPA, 1993). The estimated real avoided cost for power production, or the cost of supplying additional power from Northwest regional power sources in the Bonneville region in 1996 is 33.3 mills (Meyer, et al., 1995). Bonneville's real priority firm power rate is expected to remain essentially unchanged through the year 2014. BPA's regional avoided cost of energy production is estimated to reach 47.5 mills by the year 2014 (BPA, 1993).

Impacts

Under the **No Action** alternative, there would be little change in the economic circumstances of Clallam County. County population is expected to approach 60,000 by the year 2000, with higher than state average unemployment and poverty and lower than state average income likely to continue. Tribal unemployment and poverty would continue to greatly exceed that of the rest of the county, and tribal income and health status would remain substantially lower. There would be no positive impact on tribal culture.

Presently, the county collects $230,000 in property taxes annually on the two hydropower projects.

All alternatives except No Action require Daishowa Mill to absorb additional costs for the portion of the 172 gigawatt hours of power it would lose. The real cost per year of providing this power at local preferred customer rates and at regional avoided costs, expressed in 1996 dollars, are provided in Table 8. These rates are calculated based on Bonneville Power Administration energy supply costs and on what the dam owner would incur in installing fish passage mitigation measures. Because the cost of fish passage is incorporated into the replacement power cost, it is not also included in the construction cost figures for each alternative when comparing costs and benefits (Tables 10 and 11).

Although the power would be provided to Daishowa mill (the user of the electricity now) at the local preferred rate, Bonneville Power Administration would eventually need to bring other sources on line to make up for hydropower lost at a higher cost than this. The cost to Bonneville of supplying this additional power is the regional avoided cost in Table 8. The real cost of the 172 gigawatt hours of power provided by the two dams to Daishowa mill under the **No Action** alternative would be $2.1 million per year in 1996 dollars.

Net business benefits are derived by enterprises involved in commercial and sport fishing-related activities. For the **No Action** alternative, net business benefits are estimated at $840,000 per year from hatchery operations (Table 10). Future associated sport and commercial fishing and business benefits would likely remain consistent with present trend lines.

Retention of the Two Dams with fish mitigation installed could increase county property tax-based revenue by $639,000, if all fish passage improvements were included in the assessment base (see Table 1). Surcharges on additional purchased power would increase revenue to the local power utility by an estimated $37,000 per year. This alternative would provide an estimated 37 person-years of employment during the construction (of fish passage mitigation measures) period.

Installing required fish mitigation measures would cost $38 million (See Table 9). This plus annual purchase of 12 gigawatt hours to replace energy production lost by the dams is estimated to increase annual costs of power to the mills four-fold to $8.1 million. Over a 100-year period, this translates to an additional $196.7 million (at a 3% rate of discount).

Annual net business benefits from fisheries restoration would slowly increase and eventually reach $1.1 million (see Table 10). Allowing for the slow rate of stock recovery associated with this alternative (see fisheries section), the **Dam Retention** option would provide fewer benefits than the **No Action** alternative, when returns for all future years are discounted and totaled to a single present

Table 8. *Estimated Annual Real Energy Cost for Replacement Power (172Gwh) for Daishowa Mill ($ million per year in 1996 dollars)*

Alternative

A. Using Local Cost of Purchased Power

	1997	2000	2010
1. No Action	2.1	2.1	2.1
2. Dam Retention	8.1	8.1	8.1
3. Remove Glines	9.3	9.4	9.3
4. Remove Elwha	6.7	6.8	6.7
5. Proposed Action	4.8	4.9	4.8

B. Using Regional Avoided Cost of Purchased Power

	1997	2000	2010
1. No Action	2.1	2.1	2.1
2. Dam Retention	8.1	8.2	8.2
3. Remove Glines	10.0	10.1	11.0
4. Remove Elwha	7.2	7.4	8.0
5. Proposed Action	5.8	6.2	7.6

value estimate of benefits. Annual net economic benefits to business from fishery restoration are summarized, for each alternative, in Table 10. These estimates reflect full recovery to the extent permitted by each alternative. Rate of recovery will be faster for the Proposed Alternative than for other action alternatives.

Other recreation, not associated with fishing, would remain within future trend lines under this alternative. All action alternatives would likely impose fishing restrictions on salmon and trout in the short term to facilitate restoration.

Removal of Glines Canyon Dam, while retaining Elwha Dam with fish passage mitigation, could increase county tax revenue by $243,000 and would provide 172 person-years of employment during the deconstruction period (see Table 1; from FERC, p. 4-178). Revenue to the local power utility would increase due to surcharges charged on replacement power. Removal of Glines Canyon dam would increase the annual real cost of 172 gigawatt hours of power to Daishowa mill to $9.3 million. Regional replacement cost of that energy would increase five-fold over the No Action scenario to $10.0 million per year in 1997, and would increase to $11.0 million per year by 2010 (see Table 8). This increased level of cost reflects the combined costs of increased mitigative requirements at Elwha Dam and the purchase of energy to replace power production from Glines Canyon Dam. Over 100 years (at a 3% rate of discount), this amounts to $282 million (see Table 12).

Fish harvests would recover slowly, eventually generating net business revenue to the commercial (tribal and nontribal) and sport fishing sectors of $2 million per year (see Table 10). Over the 100-year period beginning in 1996, these increases amount to $11.6 million, expressed in present value terms.

Table 9. *Estimates of Capital Expenditures*

	No Action	Dam Retention	Glines Canyon Dam Removal	Elwha Dam Removal	Proposed Action
Acquisition	---	---	$ 15M‡	$ 14.5M‡	$ 29.5M
Construction	---	---	$ 40.3M*	$ 25.6M*	$ 45.5 - 71M**
Fish Passage/ Mitigation	---	$ 38M†	$ 31M†	$ 25M†	---
TOTAL	---	**$ 38M**	**$ 86M**	**$ 65.1M**	**$ 75 - 101M**

Notes:

* Construction costs taken from Draft Staff Report.

** Preliminary estimate; taken from Meyer et al., 1995 and the Elwha Report, updated by Bureau of Reclamation, March 1995; includes water quality and flood protection costs.

† Assumes state-of-the-art screens (i.e. no Eicher Screens) and relocated intake at Glines (if Glines remains); state-of-the-art(i.e. no Eicher Screens) screens at Elwha Dam (if Elwha Dam remains). Water quality protection costs taken from Draft Staff Report and may underestimate true cost of protection.

‡ Assumes acquisition costs would be split roughly evenly and total $29.5 million.

This figure is constrained by slow recovery of stocks and the fact that future benefits estimates are reduced by discounting. Losses from fish passage at Elwha Dam and reservoir, condition of fish habitat downstream from Elwha Dam, and inundation of fish habitat by Lake Aldwell would prevent full fish restoration under this alternative. Some nature-based recreation benefits would be restored in Olympic National Park, while recreation on Lake Mills would be eliminated. There would be marginal positive benefits for tribal culture.

Capital costs to implement this alternative are estimated to be $86 million. Of this total, construction costs associated with the removal of Glines Canyon Dam account for $40.3 million (see FERC, p. 2-27). Acquisition would add to this. Although acquisition costs would need to be negotiated, the Department of the Interior presumed they would be split roughly evenly between the two projects to total $29.5 million (the price specified for purchase of both projects in the Elwha Restoration Act) for the purposes of this document, for a total construction cost of approximately $55 million. Mitigation measures for fish

Table 10. *Estimated Annual Net Business Benefits from Elwha Fish Restoration - After Completion of Fisheries Rebuilding*

	No Action	Dam Retention (w/mitigation)	Glines Canyon Dam Removal	Elwha Dam Removal	Proposed Action
Chinook					
Commercial Non-Tribe	0.09	0.10	0.20	0.13	0.25
Commercial Tribal	0.38	0.39	0.81	0.57	1.06
Sport Business	0.09	0.10	0.19	0.13	0.24
Coho					
Commercial Non-Tribe	0.05	0.09	0.14	0.12	0.16
Commercial Tribal	0.11	0.22	0.33	0.26	0.38
Sport Business	0.05	0.09	0.12	0.14	0.16
Pink					
Commercial Non-Tribe	---	---	---	0.08	0.29
Commercial Tribal	---	---	---	0.09	0.32
Sport Business	---	---	---	0.02	0.07
Chum					
Commercial Non-Tribe	---	---	---	0.02	0.13
Commercial Tribal	---	---	---	0.03	0.15
Sockeye					
Commercial Non-Tribe	---	---	---	0.03	0.03
Commercial Tribal	---	---	---	0.04	0.04
Steelhead					
Commercial Tribal	0.05	0.05	0.10	0.07	0.13
Sport Business	0.02	0.02	0.04	0.03	0.05
TOTAL ANNUAL BENEFITS	**0.84**	**1.07**	**1.97**	**1.57**	**3.46**

passage required by Interior account for $31 million (mitigation costs are integrated into the regional energy cost line item in Table 8).

Removal of Elwha Dam and retaining and mitigating Glines Canyon Dam would provide 84 person-years of employment during the deconstruction period. County tax revenue would increase by $166,000 with Elwha Dam removed due to installation of increased mitigation at Glines Canyon Dam (see Table 1). Revenues to the local power utility from surcharges on replacement power would increase by $241,000.

...the impact on the electric energy bill of the average regional consumer would be negligible under this or any other alternative.

Removal of Elwha Dam would increase annual real costs for 172 gigawatt hours of electricity to $6.7 million. Annual regional avoided cost would be $7.2 million in 1997 and would increase to $8.0 million in 2010 (see Table 8). This increased cost reflects increased mitigative requirements at Glines Canyon Dam and purchase of energy to replace power production from Elwha Dam. Over the 100-year period, the regional avoided cost of replacement power (at a 3% discount rate) totals $188 million (see Table 12).

As with the previous two alternatives, fish stocks would recover slowly, and would be limited by the continued presence of Glines Canyon Dam and Lake Mills. Eventually, this option is estimated to generate an additional $1.6 million in direct annual net revenues to the commercial and sport fish business sectors. The slow recovery period and poor chances of full recovery for most stocks mean this alternative only generates an additional $5.6 million in total fisheries-related revenue, expressed in present value terms, over the 100 years following dam removal (see Table 11). Some added benefit would also accrue to nature-based recreation in the river corridor downstream of Glines Canyon Dam. This option would provide only marginal improvement to tribal economic conditions.

Capital costs for this alternative are estimated in the $65 million range (see Table 9). Construction costs account for $25.5 million (see FERC, p. 2-28), and acquisition presumed $14.5 million, for a total of $40 million. Mitigation and fish restoration would account for $25 million of this total. Again, these mitigation costs have been integrated into regional energy cost estimates in Table 8.

The **Proposed Action** would reduce county property tax revenue by $230,000 per year and increase revenue to the local power utility by an estimated $561,000. Annual real costs to Daishowa mill for 172 gigawatt hours of power would be increased to $4.8 million. Regional avoided cost would be $5.8 million in 1997, increasing to $7.6 million by 2010 (see Table 8). Over the 100-year period, additional regional avoided cost for replacement power would total $171.9 million (presuming a 3 % discount rate). Despite this increase, the impact on the electric energy bill of the average regional consumer would be negligible under this or any other alternative.

Fishery net economic benefits to commercial and sport fish business sectors would reach $3.5 million per year under this option (Table 10). With both

dams removed, fisheries restoration would be completed more quickly than with other action alternatives. Over the 100 years following dam removal, additional fisheries benefits (discounted at 3%) would total $34.6 million, expressed in present value terms.

The cost (including water supplies and flood protection) of the **Proposed Action** is estimated to be between $45.5 million and $71.5 million, plus a cost of $29.5 million for acquisition of the two structures. Although the acquisition costs are set by Congress, construction costs are still preliminary estimates which would be refined in the Implementation EIS.

Removal of the two dams would return the fishery resources secured by the Elwha S'Klallam people in their treaty with the United States at Point No Point, and would have a major beneficial effect upon presently adverse levels of tribal poverty, employment, income, health, and upon the ability of the tribe to secure and renew its cultural future.

Local Benefits of the Proposed Action

Partly in response to comments and questions about long-term benefits associated with the Proposed Action which were received during the public review of the draft environmental impact statement (see Response to Comments, "Socioeconomics" section), additional information was developed for the Proposed Action only. It is summarized below:

Elwha River restoration activities would have specific economic effects on the economy of Clallam County. After restoration was complete, 446 annual jobs and a payroll of $4.6 million would be generated in the Clallam County recreation and tourism sector, increasing local sales taxes by $296,000 per year. It is presently estimated that between $45.5 million and $71.5 million plus a $29.5 million acquisition cost would be spent to remove both dams. These expenditures are expected to generate between $40 and $55 million in business activity in Clallam County over the 10-year period of river restoration activity and an additional $21-$29 million in personal income (payroll plus returns from savings and investments made). Updated estimates since the Draft Staff Report indicate that from 760 to more than 1000 total jobs would be generated as a result of construction (Meyer et al., 1995).

This alternative, unlike any other, would restore natural sediment processes in the entire river and into the marine area. It would increase natural sediment available to Ediz Hook, reducing maintenance costs by an estimated $28,000 per year.

Present Net Values

The present net economic value (e.g. total present value for a 100-year period) measures net change from the No Action option of costs and market benefits associated with each action alternative, calculated over 100 years of project life and discounted at 3 percent. Estimated comparative business benefits

and project costs are summed and displayed on this basis as single present dollar totals in Tables 11 and 12. For Proposed Action, benefits from increased recreation and tourism would amount to $133 million over the life (100 years) of the project. The $3.5 million per year of net economics benefits after fish stocks were restored would amount to $30 million over the 100-year project life (and discounted at 3%).

Table 11. *Summary of the Net Present Value of Elwha River Restoration Market Benefits over Project Life - at 3% Rate of Discount*

	Dam Retention (w/mitigation)	Glines Canyon Dam Removal	Elwha Dam Removal	Proposed Action
Business (or Market) Benefits: (in millions of dollars)				
Commercial Fisheries (Tribal & Non-Tribal)	-3.7	9.5	5.2	30.1
Sport Fish Business	-1.0	2.1	0.4	4.5
Ediz Hook	---	---	---	0.9
Recreation and Tourism*	---	---	---	132.6
TOTAL MARKET BENEFITS	**-4.7**	**11.6**	**5.6**	**163.6****

Notes:

* Negligible benefits from recreation and tourism for alternatives which do not restore the river, fisheries or ecosystem are assumed.

** Excludes Sport Fish Business net revenue to avoid double counting.

These totals do not include an important feature of restoration projects such as the Proposed Action called **non-market values**. Non-market values are estimates of what people would be willing to pay over and above the market price of a product or service to use it. For instance, sport fishers attach a benefit to the recreational pleasure associated with catching a fish which exceeds the price per pound the fish would bring on the open market.

The non-market value of fully restoring the Elwha River ecosystem and native anadromous fisheries was assessed in a recent (1995) study by Dr. John Loomis of Colorado State University. This value measures what citizens of the United States would be willing to pay in increased federal taxes over a ten year period to fully restore the river-- even if they did not plan to visit the area personally. This estimate was based on a consultant survey of over 300 residents of Clallam County and more than 1300 U.S. citizens in total. Averaging responses, and assuming that persons who did not return the survey would pay nothing, the total non-market value of restoring the Elwha River native anadromous fisheries and ecosystem was estimated to be $3.5 billion annually for 10 years.

Although the study of non-market values was developed and conducted carefully and conservatively, non-market estimates of value may by nature be less reliable than market estimates. To put them in perspective, the study team calculated how far "off" the estimated $3.5 billion non-market value would have to be to invalidate the conclusion that the benefits of dam removal outweigh costs (i.e., that the benefit/cost ratio was smaller than one). They found even crediting minuscule proportions (one-half of one percent or more) of the non-market benefits reported by Loomis would yield a positive benefit-cost ratio under all discounting scenarios.

Table 12. *Summary of Net Present Value of Elwha River Restoration Project Costs over Project Life-Discounted at 3 percent*

	Dam Retention (w/mitigation)	Glines Canyon Dam Removal	Elwha Dam Removal	Proposed Action
Impact Costs: (in millions of dollars)				
Project Acquisition	---	15.0[1]	14.5[1]	29.5
Construction -Estimate 1	---	40.3[2]	25.6[3]	45.5
-Estimate 2	---			71.5
Regional Energy Cost	196.7	281.6	187.6	171.9
TOTAL COSTS - estimate 1	**196.7**	**336.9**	**227.7**	**246.9**
- estimate 2				**272.9**

Notes:

1 These estimates will depend on negotiation. They are arbitrarily assigned between "Glines Canyon Dam Removal" and "Elwha Dam Removal" in this table to sum to the "Proposed Action" figure of $29.5 million.

2 From FERC-93, p. 2-27.

3 From FERC-93, p. 2-28.

Cumulative Impacts

Clallam County is in transition. Rural in nature, lumber and fish dependent for most of its history, it is now experiencing fairly rapid change with recent declines in its traditional resource-based activities, particularly in the Port Angeles to Forks Highway 101 corridor--increases in tourism, retirement settlement, and service-based jobs, notably from its eastern boundary at Sequim westward to the city of Port Angeles. A recent analysis points out that, with such changes, rural populations may be placed at risk due to limited structural diversity, a feeling of vulnerability to economic and political forces over which they exert little control, periods of inmigration and outmigration that may contribute to a population with limited attachment to local community and a draining of persons capable of enriching the community (U.S. Forest Service, 1993). The potential effects of such changes have been

summarized with specific reference to recent reductions in timber harvest in Clallam County and other areas of the Pacific Northwest:

A sudden drop in the harvest levels creates more than an economic shock or the sudden loss of jobs. It creates a social shock that can reduce the ability of a community to respond to economic change. "Persistent poverty, increased commuting, emigration of community members, the breaking up of family and community support networks, changes in leadership, low morale, uncertainty, heightened conflict among groups within communities, deep cuts in school budgets are all factors that result ... if community needs are not addressed" (U.S. Forest Service, 1993).

The same authors point out that such social stresses may be relatively short-term, and can be at least partially mitigated. However, Clallam County has been experiencing such stress the past five or six years, and it is against this backdrop that social effects of Elwha River restoration should be evaluated.

Social circumstances of members of the Lower Elwha S'Klallam Tribe are significantly more adverse. Where negative economic circumstance underlying social difficulties for the county as a whole have been fairly recent, substantial numbers of tribal members have been living in poverty for more than half of this century.

Removal of both dams would provide short-term economic impetus for recovery due to the construction project, and longer-term additions to business revenue, personal income, and local tax revenue from recreation and tourism. This alternative would also provide needed longer-term stimulus to tribal and non-tribal commercial fishing sectors and to businesses based on sport fishing.

Conclusions

Total benefits of the **Proposed Action** greatly exceed total costs. Business benefits associated with recreation and tourism, including sport fishing, would total $133 million over 100 years of project life (at 3% rate of discount (See Table 11). Commercial fishermen would obtain $3.5 million per year of net economic benefits after fish stocks were restored, amounting to $30 million over project life. Approximately $1 million over the life of the project would be saved in erosion control costs at Ediz Hook, and shellfish harvest would be more abundant. Removal of both dams would also substantially improve material and cultural circumstances of the Lower Elwha S'Klallam Tribe.

Activity associated with removal of both dams would generate between 760 and 1,067 jobs in Clallam County, $21-29 million of personal income, and between $40 and $55 million in business activity in Clallam County over the 10-year period of river restoration activity. A recent survey suggests non-market benefits of the **Proposed Action** may approach $3.5 billion for this same 10-year period. After restoration was complete, 446 annual jobs and a

Activity associated with removal of both dams would generate between 760 and 1,067 jobs in Clallam County, $21-29 million of personal income, and between $40 and $55 million in business activity...

payroll of $4.6 million would be generated in the Clallam County recreation and tourism sector, increasing local sales taxes by $296,000 per year.

The **Dam Retention** alternative would generate 37 jobs during construction, increase property tax revenue by $639,000, and generate $1.07 million in fisheries business benefits. The increased cost of power would add $196.7 million over the 100-year life of the project.

Removing Glines Canyon Dam only would provide 172 person-years employment, increase property tax revenue by $243,000, and increase fisheries benefits to $1.97 million after restoration was complete.

Removing only Elwha Dam would provide 84 person-years of employment, increase tax revenues by $166,000, and increase fisheries benefits to $1.57 million after restoration was complete.

The **Proposed Action** would increase fisheries benefits to $3.5 million much more quickly than other action alternatives, as restoration would be completed more quickly without passage losses imposed by the dams and reservoirs. Although property tax would decline by $230,000, payments to the local energy utility would increase $561,000. Only the Proposed Action is consistent with federal trust responsibilities to the four affected Indian tribes or would substantially reduce material and cultural damages suffered by the Lower Elwha S'Klallam Tribe as a result of construction of the dams.

Safety

Dam Safety

Affected Environment

Glines Canyon and Elwha dams have undergone testing to measure their structural integrity under normal operating conditions. A procedural history of these tests and measures taken to improve safety of the dams are found in the Draft Staff Report, pp. 2-5 to 2-10. Both have high hazard potential because of possible loss of life and significant property in the event of dam failure. Because of this, the Federal Energy Regulatory Commission has required additional measures to meet the probable maximum flood loading conditions. In November 1989, the Glines Canyon Dam spillway was so modified through the addition of post-tension anchors.

The U.S. Army Corps of Engineers considered Elwha Dam potentially unsafe for floods greater than 40,000 cubic feet per second in 1978, and recommended a variety of measures to repair and strengthen it. The commission agreed; in 1982, additional anchors were required in the north spillway and intake sections. Both were satisfactorily completed. The James River Corporation has submitted emergency action plans to the commission since the 1970s under the dam safety program. During the first years, the commission accepted all such plans on an interim basis. For the past 10 years, the Elwha plans have

been "fully accepted" by the commission (letter from James River Corporation, Dec. 21, 1994). Part of the plan for the Elwha River dams requires James River to notify the Lower Elwha S'Klallam Tribe, Clallam County Sheriff, Point No Point Treaty Council, and others when releases from the dams exceed 3,000, 8,000, and 13,0000 cubic feet per second. Although the feasibility of installing sirens to notify citizens using the river at the time of a release was examined, James River concluded this would be ineffective without secondary confirmation and instead chose to use the phone contact approach (personal communication, O. Campbell, Jan. 1995).

Recently, geologists have discovered deep subduction faults on the Juan de Fuca Plate in the vicinity of Port Angeles and a shallow crustal fault (the Whidbey Fault) along the Admiralty Inlet just north of Port Townsend. Both faults were found after the last inspections for the Elwha and Glines Canyon dams. The U.S. Geological Survey and the Washington Department of Natural Resources are currently evaluating the potential hazard each of these faults poses. When these evaluations are concluded, the dams may need to be reinspected and hazard potential re-evaluated.

Impacts

Changes made to Glines Canyon Dam in 1969, 1977 and 1978, and 1989 have increased its stability and the Federal Energy Regulatory Commission now considers it able to withstand the probable maximum flood. The Washington State Department of Ecology Office of Dam Safety has indicated that both dams currently meet state safety standards for both probable maximum floods and earthquakes. New information on the seismic hazard posed by the two newly discovered faults and re-examination of criteria to determine earthquake



The first Elwha Dam near completion, circa 1911.
(Daishowa/James River Company Photo)

danger may ultimately require the dams' owner to prepare an updated risk assessment. This, in turn, could lead to the need for further retrofitting of both dams to increase stability under earthquake loading (personal communication, G. Lavassar, M. Schaefer, Washington Department of Ecology, Dec. 1994).

Removing the Elwha Dam might cause safety problems if not properly conducted since the dam's alluvial foundation failed in 1912 while the dam was being built. Although the spillways and power penstocks are supported by bedrock, the concrete gravity portion of the dam rests on sand and gravel. To ensure the dam would hold while being removed, a large mass of gunnite capped fill, which acts to keep the foundation relatively dry, must be protected until much of the reservoir is drawn down (Elwha Report, Appendix F).

Flooding

Affected Environment

Average annual discharge from the Elwha River is approximately 1500 cubic feet per second. Flooding can occur during winter and spring, particularly October through March. Flood discharges have ranged from 4,680 cubic feet per second in 1936 to 41,600 in 1897. The greatest recorded discharge in recent years was 28,700 cubic feet per second in 1990 (J. L. Lencioni, U.S. Army Corps of Engineers, personal communication, August 1994).

A frequency analysis of yearly peak discharges shows a flood of 5,000 cubic feet per second has a 97% chance of returning each year; a 13,000 cubic feet per second flood has a 50% chance of returning each year. The highest measured flood of 41,600 cubic feet per second has a 71-year return period, or a 1.4% chance of returning each year.

Both Elwha and Glines Canyon dams are operated in a "run-of-the-river" mode. This means that very little of the water entering the drainage is stored or released differently from the way it was before the dams were built. As a result, and because the reservoirs have little flood storage volume, the dams provide very minimal flood protection and only during short duration events (storms or snowmelt).

The 700-acre floodplain and Lower Elwha S'Klallam Tribal Reservation structures near the mouth of the river are protected by a federal levee at the far eastern edge of the historic meander belt. This eastern levee is built to withstand the current 200-year flood (i.e., with the dams). A 600-foot-long privately owned and operated levee on the west side of the floodplain extends downstream from the high natural bluff line which naturally constrains westward migration of the river channel.

Impacts

Because the dams are operated as "run-of-the-river," there would be little or no change in the frequency, duration or intensity of most floods along the

Elwha River if the dams were removed. The greatest impact of **Dam Removal** on flooding would result from the release of deposited sediment and reintroduction of natural sediments into the river channel downstream of the dam sites. This increase in bedload, or aggradation, would cause the river to rise, with localized flooding and more frequent meandering across the entire floodplain. The degree of aggradation and change in the meander activity would vary depending on the steepness of the river and whether large, stable vegetation had become established in the floodplain.

Flooding from the rising riverbed could be mitigated through the modification of existing levees, construction of new levees, monitoring and dredging as needed, purchase of flood insurance, or other measures. Based on preliminary information, the U.S. Army Corps of Engineers estimates the federal levee which now protects the reservation would need to be raised 2-4 feet and armored with riprap to maintain its current level of protection if the dams are removed. Mitigation measures for impacts from flooding will be examined in the Implementation EIS.

These same phenomena, aggradation and a more active meander, would occur in places along the stretch of river between the dams if **only Glines Canyon Dam was removed**, as natural sediment transport from upstream would be restored as far downstream as Elwha Dam. It could occur briefly in the lower river if **only Elwha Dam was removed**, but the continued presence of Glines Canyon Dam would prevent the long-term natural transport of sediment.

Hazardous Materials

Affected Environment

A team of Department of the Interior experts from the Bureau of Reclamation and U.S. Fish and Wildlife Service inspected both dams and accompanying facilities in May 1994 for the presence of hazardous materials. Since the dams were built in the early 1900s, the team was particularly looking for asbestos in the building materials and polychlorinated biphenyls (PCBs) in the transformers and other electrical components.

Team members found asbestos in the exterior siding of the Elwha Dam office, in the floor tile and interior wall plaster of the Glines Canyon Dam residence, and throughout the insulation for electric cables in both powerhouses (DOI, "Elwha Dam and Glines Canyon Dam Hazardous Waste Status", May 19, 1994).

Numerous soil samples taken from the Glines Canyon switchyard and one at the base of the power pole just outside the fence of the Elwha power pole storage yard have been tested; the presence of PCBs in one soil sample was detected. The PCBs were present in an amount (0.63 ppm) below what would require cleanup under state regulations (1.0 ppm). Other petroleum hydrocarbons not considered hazardous were present in the switch yard soil and will require cleanup. Samples of transformer oil were not taken, as the

inspection team relied on Daishowa's test reports. Capacitors and oil-filled electrical bushings have not been tested for the presence of PCBs, but are presumed to contain them and would be disposed of as hazardous material.

Impacts

Removal of the dams, powerhouses, and facilities could result in some asbestos, PCB-laden soil or capacitors, and other hazardous materials associated with power plant operations being transported offsite to a hazardous waste facility. Neither asbestos nor PCBs would enter the river during dam removal if required methods of containment were used.

Construction would be required for all alternatives except **No Action**. Heavy construction equipment may leak oil or require refueling at the site, possibly resulting in minor amounts of oil or diesel fuel entering the reservoirs or water.

Cumulative Impacts

There is a natural danger of flooding to all who live in the Elwha River floodplain, even with both dams in place. The dams are currently operated in a natural flow or run-of-the-river mode. Danger from periodic flooding now exists and will continue if the dams are removed. No other known sources of hazardous materials exist in the Elwha river corridor.

Conclusions

The Washington State Department of Ecology Office of Dam Safety has indicated that Glines Canyon Dam and Elwha Dam currently meet state safety standards for both probable maximum floods and earthquakes. Determining whether current standards should be changed and whether two newly discovered faults pose additional threats to the dams from earthquakes may require additional analysis and mitigation on the part of the dam owner.

Proper safety precautions would be taken if the dams were removed to prevent a blowout of the sand and gravel on which a portion of Elwha Dam now sits.

Removing Glines Canyon Dam or both dams would create a more free-flowing, dynamic river which would meander over a wider range and hence cause more frequent flooding at certain places along the river.

Asbestos has been found at both dam sites. One sample of soil at Glines switchyard indicated low levels of PCBs. Although transformer oil, capacitors, and bushings will not be tested for PCBs, they may be treated as if they were contaminated and disposed of as hazardous material. Switchyard soil would require cleanup due to high concentrations of petroleum hydrocarbons.

Elwha River Ecology

An area's ecosystem is composed of physical and biological components which interact and are mutually dependent upon one another. Fully restoring an area's natural ecology or ecosystem begins with restoring the natural physical processes which, in the case of the Elwha River, are flow and transportation of sediments and organic material. It also includes restoring biological ecosystem processes, such as the abundant salmon and trout which once provided food for terrestrial inhabitants and essential nutrients to the river's aquatic life.



Affected Environment

Before the dams were built, the Elwha River looked different from what it does today. In places where the river gradient was not as steep (much of the middle and lower river), the main channel actively meandered, forming side channels and pools. The riverbed was a mix of sand, gravel, cobbles, and fine-grained sediments. When the coarser grained material moved at high flows, it had a scouring effect on vegetation attempting to sprout on in-river islands or bars of sediment. Water contained both particulate and large woody organic debris, and was cloudy during the rainy seasons. Much of the river and its tributaries upstream of the dams are still this way, but the 15 miles below the head of Lake Mills are very different. The middle and lower stretches of the Elwha are now largely devoid of smaller gravels and sand. The sediment that has washed down from the upper river and tributaries is trapped behind Glines Canyon Dam. A smaller portion lies behind Elwha Dam. Some debris and organic material is also blocked, with less flowing into the middle and lower river than under pre-dam conditions.

As sand and gravel washed out, the elevations of the riverbed and the river dropped in many places. The riverbed is now armored with large cobbles that move downstream only under high flow conditions, and flow is more often contained within the channel boundaries (i.e., does not overtop the channel or flood at lower flows). Because the scouring effect of the smaller-sized bedload material is missing, vegetation has taken hold and matured on gravel and sand beds. The river is still turbid during the rainy season, as clay and much of the silt stay suspended in the water as it flows through the reservoir of each dam. Reservoir releases have raised water temperatures by 2 to 4° C. in some seasons.

The dams have also eliminated more than five miles of riverine habitat through inundation by the reservoirs. Since the river is less active, fewer side pools or channels now form, and the estuary at the river's mouth has decreased from its much greater size prior to the construction of the Elwha Dam in 1910. Now, only a very small zone near the river mouth, probably less than 300 feet wide, has any estuarine characteristics. Before the dams, the Elwha estuary extended north and eastward another 1000-2000 feet, and consisted of a gradually sloping intertidal beach which facilitated the mixing of the fresh water of the river with the salt water of the Strait. Since the river now flows almost directly

into salt water with no transition area from low to high salinity, there are no habitat types typical of brackish water areas. These depleted habitats are important for many fish and wildlife species and are essential for successful anadromous fish rearing.



To survive and breed, the native anadromous salmon and trout, which used the Elwha River before the dams were built, require spawning gravels, nutrients, and organic debris. In addition to limiting nutrients and keeping spawning gravels away from the fish, the dams have blocked the possibility of access to the natural, high quality habitats that remain upriver. Neither dam was built with fish ladders or other means of passage, and the populations of all species of native anadromous fish have declined dramatically over the intervening 80-plus years.

In the pre-dam Elwha, salmon and trout brought nutrients from the sea in the form of body weight or biomass all along the river and its tributaries. Most adult salmon die within days or weeks of spawning in the river; before the dams were built, their carcasses fed at least 22 species of birds and mammals. This food source was especially important during the late fall and winter when other food is scarce. The river was well used by the 10 runs of native anadromous salmon and trout; there was no month of the year when one or another was not migrating upstream, spawning, rearing, or passing juveniles out to sea (see Table 4, In-River Life Cycle Stages of Elwha Salmonids).

In addition to feeding an abundance of wildlife species, native anadromous fish also returned important minerals and nutrients to the river. Two nutrients, phosphorus and nitrogen, often limit biological productivity in Northwest streams. Yet, each year, decomposition of the salmon carcasses probably provided more than 13,000 pounds of these essential nutrients to the Elwha River under natural conditions. (Elwha Report, p. 36). The nutrients, absorbed by aquatic plants and animals, formed the base for an in-stream food chain which fed, among others, the juvenile salmon and trout.

Impacts

If **No Action** is taken, the dams would continue to block the downstream flow of organic material and sediment, as well as the upstream migration of salmon and trout. The entire river would remain unnaturally low in native fish biomass. Populations of at least 22 species of wildlife would be smaller than the area could otherwise support.

The stream ecology would remain unnatural as well, with armored and relatively immobile channels, and with limited nutrients to support aquatic productivity. Water temperatures would remain elevated. Hatchery fish, which make up the bulk of the spawning native anadromous fish in the Elwha, would remain crowded, physiologically stressed, and subject to disease. The abundance and diversity of aquatic insects upon which fish feed would be less below the dams than above, as recent surveys have shown (P. Crain, Lower Elwha S'Klallam Tribe, personal communication, August 1994).

Under the **Dam Retention** (with mitigation) alternative, some native anadromous fish would be able to climb both ladders at Elwha Dam, survive the trap-and-haul process at Glines Canyon Dam, and repopulate the middle and upper river. These fish could supply as much as 109,700 pounds of salmon biomass and 1,800 pounds of nitrogen and phosphorus to the Elwha River (See Table 13).

Salmon and trout species would not be distributed in the river throughout the year as under pre-dam conditions, since only coho and steelhead have even a fair chance for restoration. Also, although wild coho and winter steelhead would be able to pass over the dams and populate a longer reach of the river, hatchery operations would be phased out. Ultimately, the overall numbers of salmon in the Elwha would drop below what the hatchery now produces.

Sediment and nutrients would still be trapped behind the reservoirs, continuing to degrade the value of habitat in the middle and lower river. Water temperatures would remain elevated. River habitat would remain inundated by the reservoirs. The mainstream channel of the Elwha would meander less and form fewer side pools and channels, and the estuary would remain reduced in size. Aquatic insect populations would probably continue to be less diverse and abundant. Both reservoir deltas would continue to grow in size and cover more habitat formerly available to wildlife.

With **Removal of Glines Canyon Dam** and with fish passage facilities installed at Elwha Dam, sediment and nutrients would be restored to the middle river, but would build up behind Elwha Dam until the reservoir filled. The estuary would remain smaller than under pre-dam conditions, but much of the other

Table 13. *Potential Carcass Biomass (in pounds) contributed to Elwha River ecosystem from runs with at least fair restoration potential. (Elwha Report, p. 36)*

	No Action	Dam Retention	Removal of Glines Dam	Removal of Elwha Dam	Proposed Action
Spring Chinook	0	0	35,000	35,000	35,000
Fall Chinook	0	0	135,700	135,700	140,400
Coho	0	109,700	113,700	113,700	117,600
Chum	0	0	0	0	236,000
Pink	0	0	0	0	261,200
Sockeye	0	0	0	27,600	27,600
TOTAL	0	109,700	284,400	312,000	817,800

habitat for juveniles, such as side channels, pools, and debris-covered areas, would be restored in the middle section of the river. Removing the dam would introduce approximately 284,000 pounds of salmon carcass biomass and 4,770 pounds of nitrogen and phosphorus into the ecosystem (Elwha Report, p. 36). Pink and chum salmon would not be restored under this alternative, which would represent a substantial 289,000 pound loss of late fall and winter biomass compared to natural conditions.

Stream flows in the middle river would approximate those under pre-dam conditions. Since most of the temperature elevation is from Lake Mills, removing it would reduce downstream temperatures to near normal. The reintroduction of sand and gravel would cause the river to meander over a wider range and to flood locally. A natural stream flow regime and distribution of sediment would not, however, return to the lower river; more than two miles of riverine habitat would continue to be inundated by Lake Aldwell. The Lake Aldwell delta would grow larger and bury more potential wildlife habitat.

Removal of Elwha Dam with fish passage facilities installed at Glines Canyon Dam would result in clear passage for sockeye salmon to migrate to the sea from their freshwater habitat at Lake Sutherland. Annually, this would add 27,600 pounds of sockeye carcass biomass to the Elwha River for a total of approximately 312,000 pounds, and would introduce approximately 5,200 pounds of nitrogen and phosphorus into the ecosystem.

Since Glines Canyon Dam would still be in place, sediment, nutrients, and debris would be blocked from the middle and lower river; habitat, therefore, would remain in a degraded condition. Fish would be lost in passage from both the Glines trap-and-haul process and downstream migration through Lake Mills, and the pre-dam species distribution would not be reestablished.

River morphology would continue to be altered by the presence of Glines Canyon Dam; the channel would remain armored and stabilized, without side pools or channels. Water temperatures would remain elevated, and fish populations affected as a result.

The estuary would remain smaller than under pre-dam conditions, since sediment would be blocked by Glines Canyon Dam. The Lake Mills delta would grow larger and bury additional potential wildlife habitat.

In the **Proposed Action**, the Elwha River would return to its natural dynamic flow. Sand and gravel would build up the riverbed, causing more frequent river course changes and localized flooding. Parts of the middle and lower river would return to their pre-dam actively meandering condition. More than five miles of riverine habitat would be returned for use by fish and aquatic organisms.

Salmon and trout would travel unimpeded through cool water and high quality habitat along the entire 45-mile Elwha River and its accessible

tributaries. Nutrients, spawning gravels, and woody debris would be distributed along the river's entire length. Side channels, pools, and backwater areas would be available for juvenile rearing, as would a much larger estuary at the river mouth.

Over time, pre-dam levels of trout and salmon would return to the Elwha, distributing nutrients, collected from the ocean in the form of fish biomass, throughout the valley over the entire year. Wildlife species that find food scarce in the fall or winter would return as an abundant source of food became available. Other species, limited by sources of food, would be expected to move into the forest lands of the Olympic National Park bordering the middle and upper river. Removing both dams is expected to introduce more than 800,000 pounds of salmon biomass and 13,000 pounds of nitrogen and phosphorus into the ecosystem, more than twice the contribution in any other alternative.

Some short-term impacts to the ecosystem would result from construction noise impacts on wildlife and from sediment releases into the river (See sections on "Impacts to Wildlife," "Species of Special Concern," and "Fisheries" in this document).

Cumulative Impacts

Other changes to the Elwha River ecosystem include the diversion of some of its water for private, public, and industrial use (see Affected Environment, Water Quality section); logging and agricultural development along tributaries to the river; and the placement of flood-control levees to protect tribal and non-tribal residences near the river's mouth. Development has had a direct cumulative effect on area wildlife, as well as indirectly through water diversions and pollution of Elwha water quality. The levees constrain the natural floodplain. The levee on the west side of the river is a 600-foot extension of the natural bluff line that naturally constrains the river and has had no impact on the river's meander. None of these impacts has significantly affected the Elwha River Valley ecosystem or would preclude full restoration if the dams were removed.

Many efforts, including habitat restoration and controls on fishing, are underway in similar ecosystems in the Pacific Northwest to salvage salmon runs. Since 83% of the Elwha River basin lies within Olympic National Park boundaries and is in relatively pristine condition, full restoration of the Elwha River ecology is attainable and provides an excellent opportunity for fish restoration.

Conclusions

Restoring the natural ecology depends on restoring natural stream flows and the native anadromous fisheries in the Elwha River. The **Proposed Action** would accomplish both and add approximately 800,000 pounds of salmon and trout biomass to the river. Removing only Glines Canyon Dam would

partially restore both, but approximately 500,000 fewer pounds of fish biomass would be added to the upper and middle Elwha than by removing both dams. Removing only Elwha Dam would not restore natural flows or transport of nutrients, woody debris, and gravel the fish require. Approximately 500,000 fewer pounds of fish biomass would be added than with removal of both dams. Mitigation measures installed at Glines Canyon Dam would result in some salmon in the upper river. Mitigation measures on both dams would not return the river to its original flow and transport regime, but would provide approximately 100,000 pounds of salmon and trout biomass to wildlife species along the mid and upper Elwha. Taking **No Action** would continue to keep all salmon and seagoing trout from the middle and upper Elwha, and would prevent the Elwha River from returning to natural flow, sediment transport, and water quality conditions.

Required Impact Sections

Impacts on Energy Consumption

The implementing regulations of the National Environmental Policy Act require that environmental impact statements discuss energy requirements and conservation potential of alternatives. Much of this information is embodied in the economic analysis of replacement power, located in the Impacts to Socioeconomics section of this document, as well as in the adopted and incorporated sections of the Draft Staff Report and Elwha Report.

In this section, the Department of the Interior details how much power the Daishowa mill, the sole current user of power generated by the dams, would need to replace if either or both dams were removed and/or if fish passage measures were installed. Daishowa uses 172 average annual gigawatt hours of power from the dams, and approximately 400 overall. The mill would require 400 gigawatt hours regardless of alternative, but the amount available through Elwha River hydropower would vary. If **Dam Retention** were selected, 160 gigawatt hours would be available from the dams. If **Elwha Dam were removed**, 93 gigawatt hours would be available; if **Glines Canyon Dam were removed**, 67 gigawatt hours; if **both were removed**, no power would be produced from the plants. The mill would receive replacement power, which could be generated from a variety of existing or new sources from the Bonneville Power Administration grid (FERC Appendix A, Part 9). For purposes of costing only, Interior presumed the hydropower supplied by the dams would be replaced by sources of energy available to the Bonneville grid--and at costs estimated for regional replacement of power by Bonneville. These costs are estimated to increase over the next 20 years at rates equivalent to increases in the real cost of natural gas.

Since Daishowa instituted conservation measures in 1989, accounting for an annual savings of 26.6 gigawatt hours, conservation potential at the mill is minimal. An energy audit conducted for the City of Port Angeles Light Department in 1991 identified potential additional savings of 9.6 gigawatt

hours annually, approximately 5.5% of the current power production of the dams. These savings could be realized by installing adjustable speed drives, high efficiency motors, and a system of motor shedding of refiner lines that would reduce eddy current coupling. Other energy saving items were identified, but their cost effectiveness was not determined in the audit.

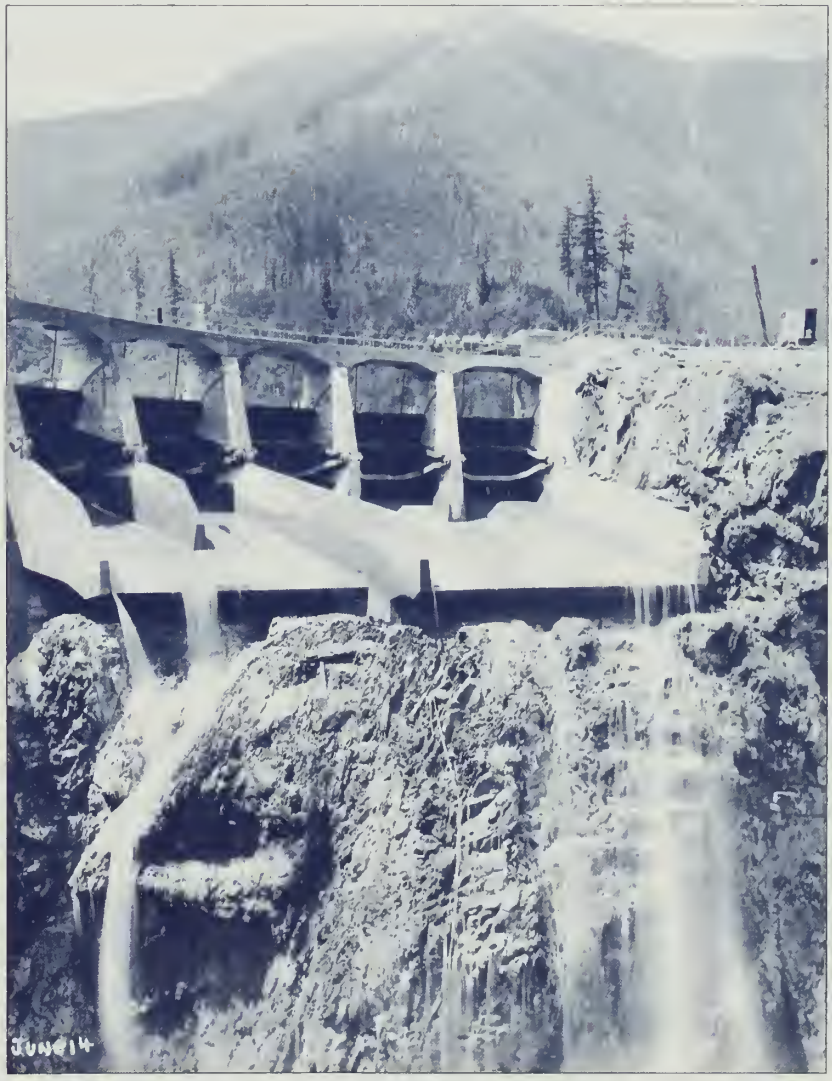
Regionally, the Northwest Power Planning Council has estimated conservation potential of 1,500-4,000 megawatts (Elwha Report, p. 124; FERC, Table 2-12). Through efficiency improvements, another estimated 370 megawatts would be available. Cogeneration, or the use of one fuel source to generate power for use and also heat or steam for re-use, is available both regionally and at the mill. At the mill, wood waste could be burned in a boiler to produce approximately 15 megawatts (based on the size of the boiler and availability of wood waste). Regionally, up to 2,200 megawatts may be available (FERC, Table 2-12).

Unavoidable Adverse Impacts

If the Proposed Action is implemented, there would be an unavoidable average annual loss of 172 gigawatt hours of hydropower. Both reservoirs and the recreation they support (flat-water fishing and boating) would be lost. The loss of the reservoirs would also displace wintering trumpeter swans and some other wildlife at Lake Aldwell.

The dams and associated buildings are considered historically important as examples of early hydropower production facilities. Although inventorying and recording features of both projects through the Historic American Engineering Record and other measures would provide mitigation, the structures would be lost.

The restoration of natural transport of upstream sediment could also have impacts. A



Glines Canyon Dam spillway, no date. (Clallam County Historical Society)

marine biotic community that has adapted to the lack of sediment in the nearshore area at the mouth of the Elwha River would be changed over time to one that prefers sandy substrate. The river elevation would rise in some places as bedload material was restored, resulting in a wider meander and more frequent localized flooding that could affect both private and cultural properties. Water downstream of the dams would have more organic material and nutrients than it does today. This would increase productivity of the aquatic and terrestrial ecosystem, but might require mitigation to protect human users.

In the short term, construction would create traffic and noise that could affect wildlife, species of special concern, and recreationists. Roads within Olympic National Park might need to be periodically closed during dam removal and strengthened to withstand high loads.

If material were removed from the dams, disposal on land would require an estimated 36 acres. A slurry pipeline to carry sediment from behind the dams might need to be temporarily located on land or in the riverbed if this sediment management option were selected. (The Implementation EIS would evaluate impacts of sediment management alternatives in detail.)

The release of sediment from behind the dams could severely affect aquatic life or water quality in the short term if unmitigated. Some sediment management methods would greatly reduce the amount released into the river. Others releasing large amounts would require greater protection for fish or water quality.

Short-term uses vs. long-term productivity

This section compares the short- and long-term environmental effects of decisions. Although traditionally, projects result in short-term gains and long-term losses, the restoration of the Elwha River ecosystem and native anadromous fisheries would do the reverse.

Short-term impacts from construction and sediment release on fisheries, water quality, flooding, wildlife, living marine resources, recreation, land use, and esthetic resources would last between six months and three years. Dam removal, and hence impacts from construction noise and traffic, would be completed in 18 to 36 months. Sediment loads of suspended solids would largely wash out in the first six months, leaving the river available for anadromous fish. Although the Mount St. Helens eruption added 50 million cubic yards of debris to the South Fork Toutle River in 1980, the stream was nearly clear three years later. The first steelhead returned in three months and the river population exceeded agency goals within five years. Since silt and clay stored behind the two Elwha dams are only a small portion of that deposited in the South Fork of the Toutle, fish are expected to recover well within these time frames. Revegetation of the reservoir shoreline would start immediately, and be clearly visible within three years.

In return for these impacts (and other, long-term losses described in the section "Unavoidable Adverse Impacts"), the Elwha River native anadromous fisheries would be restored to pre-dam conditions. The terrestrial and aquatic Elwha River valley ecosystem, subtidal and nearshore marine area at the river mouth, natural sediment transport regime, 715 acres of terrestrial wildlife habitat, and many cultural resources including several sites sacred to the Lower Elwha S'Klallam Tribe would be restored. In addition, a restored and uninterrupted river recreation corridor and increased long-term economic health for both the local community and tribe would result.

Although it is commonly believed that critically depressed salmon and steelhead populations in Olympic Peninsula rivers cannot be restored, this is not true. Elwha River native stock or closely related sources of all 10 runs of salmon and seagoing trout are available. Anadromous fish do experience some stress from fishing and other factors, such as warming caused by El Nino, in their marine environment; but, data from North Coastal rivers in relatively good condition show spawning fish exceed agency goals in most years (See Response to Comments; "Fisheries" section).

The destruction of the species' freshwater habitat--not overfishing--is primarily responsible for declines of specific runs. Agricultural, residential, and industrial development, as well as logging, roads, and recreational use, send sediment and pollutants into spawning rivers. Surface water withdrawals, channeling rivers for flood protection, development of estuary habitat, and drought have also added to habitat degradation for anadromous fish. Dams that totally or partially block upstream and downstream fish migration from spawning grounds, such as those on the Elwha, have had major impacts on salmon and seagoing trout populations.

When completed in 1914, the Elwha Dam immediately eliminated 93% of the historic freshwater habitat for the river's native anadromous fish species. Since the vast majority of the Elwha drainage is within Olympic National Park and protected by preservation policies, removing the dams would immediately return this habitat largely unaltered to these species. Interior estimates that more than 380,000 salmon and steelhead would occupy the river after the dams were removed and restoration complete.

These fish, which were an integral part of the Elwha River valley ecosystem, would furnish a missing link for the restoration of that ecosystem. The dead and dying salmon, as well as juveniles, would fill the river throughout the year, providing a dependable and constant source of prey and river nutrients. Insect and aquatic invertebrate production would return to pre-dam levels, providing a base for the river's aquatic food chain. More than 22 native wildlife species would benefit when their prey source was reestablished.

Irreversible and Irretrievable Commitments of Resources

This section is meant to articulate any resources which would be lost either temporarily (such as the logging of a forest which will grow back) or

permanently as a result of taking action. The resources permanently lost if action were taken as proposed would be an average annual generation of 172 gigawatt hours of hydroelectric power, the project facilities, and the two reservoirs. The projects are considered historically important because they represent early hydropower developments. Inventorying and recording the dam and power plant features in the Historical American Engineering Records would mitigate this loss. Recreation and wildlife habitat associated with the reservoirs also would be permanently lost. Short-term impacts, from six months to three years, on wildlife habitat, fisheries habitat, and water quality would also ensue from the release of sediment and construction noise.



Glines Canyon Dam and Powerhouse, 1924. (Daishowa/James River Company Photo)



Consultation and Coordination



Site of Lake Mills logged for dam (no date).
(Daishowa/James River Company Photo)

Previous page: Glines Canyon Dam from Lake Mills, without water. (Daishowa/James River Company Photo)

Consultation and Coordination

History of Public Involvement

The Federal Energy Regulatory Commission indicated its intent to write an environmental impact statement on whether to issue licenses for the Elwha and Glines Canyon dams by a Notice of Intent in the Federal Register on August 17, 1989. Formal scoping, or the early effort to involve agencies and the general public, was initiated in December 1989. Commission staff contacted interveners, state and federal agencies, Native American organizations, and members of the public who were potential sources of information. Two public scoping meetings held in Washington State identified issues and solicited comments. After review of public comments, the commission wrote a scoping document that identified objectives, issues, and alternatives including **Dam Retention** (described in FERC) and the **No Action** alternative, which was later eliminated as unreasonable.

The commission prepared and distributed a draft environmental impact statement to affected agencies and interested members of the public in February 1991; a Notice of Availability was published in the Federal Register March 1, 1991. Comments on the draft environmental impact statement were reviewed and responded to in a two-volume document that normally would have been the final environmental impact statement. This "Draft Staff Report," dated March 1993, was never made available to the general public by the commission, but was used by the Department of the Interior to aid in preparation of the "Elwha Report" as mandated by Congress.

A draft of the Elwha Report was available for public review and comment from October 4 to November 8, 1993. An October 1993 open house to discuss the Elwha Report in Port Angeles was attended by approximately 200 people. Staff from the agencies responsible for preparing the report (departments of the Interior and Commerce and the Lower Elwha S'Klallam Tribe) answered questions and recorded comments of attendees. The report was completed in January 1994 and submitted to Congress in June 1994. Portions of the report were modified as a result of some comments; Appendix M of the final document contains direct responses to other comments.

The National Park Service has prepared this final environmental impact statement to assist the secretary of the interior in deciding whether to remove

the two dams. A Notice of Intent published in the Federal Register described the two environmental impact statements approach (see Introduction). The National Park Service is responsible for the coordination and writing of both statements. Four public workshops to receive comments on the draft environmental impact statement and the material Interior is adopting were held in Seattle and Port Angeles in November 1994. In addition, interested parties were invited to submit written comments during the 60-day public review and comment period.

Concurrently, scoping for the second, or Implementation, environmental impact statement began. Public scoping sessions were held in conjunction with the public meetings for the draft environmental impact statement. Public meetings and a 60-day review and comment period on the draft document would be part of the public input process for the Implementation EIS.

Both environmental impact statements prepared by the Department of the Interior depend heavily on analysis provided by the federal agencies and the Lower Elwha S'Klallam Tribe, considered cooperating agencies under the National Environmental Policy Act. Cooperating federal agencies are the U.S. Fish and Wildlife Service, U.S. Bureau of Indian Affairs, U.S. Bureau of Reclamation, and the U.S. Army Corps of Engineers. The agencies have provided extensive review and comments on this environmental impact statement, and will conduct the bulk of analyses required for the Implementation EIS.

Public review of the draft environmental impact statement / comments and responses

Comments were received orally and in written form following the release of the draft environmental impact statement in October 1994. All comments were examined and considered by the National Park Service according to the requirements of 40 CFR 1503 (the implementing regulations for the National Environmental Policy Act). Those which were "substantive," and not simple statements pro or con the proposal, were responded to in the section "Response to Comments."

Record of Public Comment

A Notice of Availability was published in the Federal Register on October 21, 1994, for the Elwha River Ecosystem Restoration Draft Environmental Impact Statement. Approximately 1000 copies of the draft were distributed (See List of Recipients) to government agencies, businesses, special interest groups, and individuals.

Four public workshops were held in Port Angeles and Seattle, Washington, in November 1994. Notices of the public meetings were sent to each recipient of the draft document, published in local newspapers, and broadcast over local radio stations. The 60-day period to accept written comments ended December 23, 1994.

Public Meetings

The purposes of the meetings were to provide opportunities for the public to (1) ask questions about the draft and submit oral and written comments on it and (2) serve as formal public scoping for the Implementation EIS. The team captain, Heidi West, a consultant to the National Park Service, was facilitator for the meetings. A brief introduction of the project history, the environmental impact statement process, content of the draft environmental impact statement, and dam removal and sediment management alternatives for the Implementation EIS were presented. Six groups (general/land use, fisheries, sediment management/dam removal, water quality/flooding, wildlife/threatened and endangered species, socioeconomics/recreation) were arranged in the meeting room with experts available to answer the public's questions. Facilitators in each group summarized and recorded issues, questions, and comments. Responses to substantive public comments received during the public meetings, organized by subject matter, are included in the question and answer section of this document. Locations of the public workshops and numbers of people in attendance are as follows:

Port Angeles, Washington, November 14, 1994, 1:30 pm - 180 people
Port Angeles, Washington, November 14, 1994, 5:30 pm - 109 people
Seattle, Washington, agency public meeting, November 15, 1994, 1:30 pm - 4 people
Seattle, Washington, November 15, 1994, 5:30 pm - 91 people

Written Comments

During the comment period, 615 letters were received from governing bodies, government agencies, businesses, special interest groups, and individuals. Of these, 121 contained substantive issues that required clarification of information in the draft environmental impact statement, modification of the text, or direct responses. Since many substantive comments were similar in content, they are addressed by subject matter in a question and answer section. All of the comment letters received by the end of the response period are reprinted in this document.

"Implementation Environmental Impact Statement" Scoping Issues

Oral comments on scoping issues for the Implementation EIS were recorded at the public meetings in Port Angeles and Seattle in November 1994 and were received in writing during the public comment period. A summary of major scoping issues, organized by subject matter, follows. These substantive issues would be fully analyzed in the Implementation EIS as appropriate.

Socioeconomics. Commentors requested further study and refinement of project costs, including assessing the costs to remove the dams, manage the sediment, and restore the ecosystem. The majority of respondents requested that these studies pursue all possible cost-saving opportunities in restoring the Elwha River and its ecosystem.

Thorough economic analyses of the impacts of dam removal on tourism, recreation, and jobs were requested. The public also recommended that the socioeconomic analyses include the value of enhanced fish runs and shellfish harvest, cost savings in maintenance of Ediz Hook, economic and recreational values to the Lower Elwha S'Klallam Tribe, and regional recreational values if the dams are removed. Much of this information is now part of the final version of the first environmental impact statement (i.e. this document).

Commentors proposed that a funding consortium be formed if the dams are not removed. This group would include all parties that could be negatively impacted--city, county, state, and federal governments, Daishowa America, James River Corporation, Bonneville Power Administration, environmental and sport fishing groups, and the Tribes. The group could help pay litigation costs and other expenses required to mitigate for the presence of the dams.

Dam removal. Dam removal issues centered around finding the least expensive way to remove the dams. Suggestions ranged from leaving the dams in place, removing only parts of the dams, phasing removal of the dams, to dynamiting both dams at one time. Several meeting participants proposed that the environmental impact statement team study the costs and engineering solutions from other dam removal projects. An investigation of separating dam removal costs from other expenses, such as sediment management and stabilization of sediments, was also recommended.

Many participants requested further evaluation of waste disposal sites for dam refuse. Marine disposal of waste materials (except for possible offshore reefs) was discouraged by one commentor.

Sediment management. Concerns were raised about the impacts of river erosion on fisheries, wildlife, and downstream flooding. Thorough studies and mitigation strategies were requested for these issues.

Respondents requested further detailed analyses of the short- and long-term impacts on marine organisms of the delta building process and outfall site scenarios. Particular concerns were the short-term impacts of suspended silt and clay sized fractions on the productivity of the marine communities. Participants advised investigating land disposal of the fines instead of slurrying the sediments and suggested selling or using dredged fines as a soil amendment.

Water quality and quantity. Members of the public want water quality mitigation measures to ensure continued protection for all users including Daishowa America, Dry Creek Water Association, and the City of Port Angeles. The environmental impact statement team was asked to consider the total and continuing costs to protect and maintain water quality for surface and groundwater users. The team was also asked to conduct studies of groundwater supplies and provide mitigation for users who would be adversely affected if the dams were removed. Investigating alternative

groundwater sources was also requested. They asked that the risk of failure to protect water quality associated with each mitigation measure be determined and be based on actual field data, assessing conditions during and after dam removal.

Studies of alternative water sources and possible water conservation measures were requested. One respondent suggested that the mill could recycle their water. Others suggested investigating use of Morse Creek water, if necessary.

The Environmental Protection Agency stated that implementation of the project must comply with state water quality standards and requested baseline water quality data and quantitative analysis to demonstrate that each alternative will comply with existing state standards. The agency noted that Best Management Practices should be employed to protect water quality, monitored for their effectiveness and modified if necessary.

Fisheries. Further study of alternatives to dam removal, such as installation of state-of-the-art fish passage measures, was recommended. Many respondents also suggested studying other dams that have successful fish passage facilities and rivers in the area that have undergone restoration efforts.

Several technical suggestions were made to enhance fisheries restoration. These included providing aquatic life egg boxes in nearby rivers, opening the slough at the mouth of the Elwha, and moving large rocks to provide spawning areas for the returning salmon. Further studies were suggested to assess escapement, rehabilitation of the estuary at the mouth of the river, and future plans for the hatcheries.

To allow natural restoration of the ecosystem, it was suggested that outplanting not be done, that only the native stocks of salmon be reintroduced in the river. Studies were suggested to determine how long fish would need to be protected and fishing restricted to ensure complete restoration of the ecosystem.

Ecosystem. In order to ensure complete restoration of the ecosystem, a three-phase process was advised: removal of dams, disposition and/or management of project lands, and a comprehensive ecosystem management planning process that would initially involve all interested parties. Collecting baseline data, analyses of external influences on the restoration, and a monitoring program for 20 or more years following dam removal were also recommended.

Wetlands and vegetation. The public requested quantification of impacts to wetlands and riparian vegetation in the Implementation EIS, with delineation of the wetlands, determination of their aquatic resource functions, and a compensatory mitigation plan developed. The plan should consider direct, indirect, and cumulative impacts and incorporate Best Management Practices to minimize impacts to existing wetlands and riparian vegetation. Also, different ways to revegetate the area to return it most quickly to its natural

appearance should be examined.

Living marine resources. Many participants suggested using dam rubble to build an artificial reef in the Strait of Juan de Fuca. Others requested further analyses of the impacts on marine organisms from discharging slurried sediments into the Strait or other marine waters.

Wildlife. Participants requested further investigation of the effects of dam removal on wildlife, including species of special concern.

Flooding. Many questions were received about the need for the levees along the lower river and their impacts on the ecosystem. Some respondents think the levees are inconsistent with the primary goal of ecosystem restoration and suggested mitigating rather than improving them. Others stated that the levees should be removed altogether.

Ensuring the safety of those living in the floodplain of the Elwha was a concern. Some stated that, without the dams, there would be no flood protection. Further studies of the flooding problem and possible solutions were suggested. Some landowners requested that mitigation include stabilization of the riverbanks adjacent to private land. Constructing setback dikes to accommodate channel migration was also suggested.

The Washington Department of Natural Resources stated their rights to the original bed and shores of the Elwha River up to river mile 14. A legal agreement to dredge sediments in the deltas may be required. Additionally, the state may assert ownership of the sediments and request their assay for valuable minerals.

Land use. Participants and respondents stated that they prefer the lands to remain in a natural or semi-natural state to preserve the biological integrity of the entire river corridor and compensate for wildlife losses during the last 80 years. They also suggested restricting economic, mixed, and residential uses to already disturbed areas. Others stated that the lands should be managed to comply with the Wild and Scenic Rivers Act, and recommended recording this on future easements. Many want information made available on the disposition of the project lands and an opportunity to comment on this information.

Access issues were raised at the public meetings and in the comment letters. Citizens want public fishing and recreational access, with boat ramps from the head of Lake Mills to the mouth of the river, and foot trails and interpretive facilities along the river corridor and beach. The Washington Department of Natural Resources also wants access for fishing, recreation, navigation, and commerce. The department may be interested in acquiring/managing Lake Aldwell lands for these purposes, with possible cooperative management with the tribe.

Power. Many participants were concerned that, with dam removal, there would be increased power costs and no emergency power for Port Angeles. Rather than installing a third Bonneville transmission line, replacing lost power through conservation or utilizing local sources was preferred by many participants.

Transportation. It was suggested that further studies are needed to assess impacts to roads from heavy equipment and the transport of sediment and dam debris from the sites. Costs to strengthen the access roads before dam removal and rebuilding them after dam removal need to be determined.

No substantive written or oral suggestions were received for additions to analyses proposed for the Implementation EIS on any other resource (including cultural, recreation, etc.).



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National Park Service

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Carol Kahler - Freelance Artist, drawings on pages 75, 86, 88

List of Recipients

List of Agencies and Organizations Who Received Copies of the Final Environmental Impact Statement

Federal Department, Agencies, Committees and Laboratories

Department of the Interior
Environmental Protection Agency
Federal Emergency Management Agency
Federal Energy Regulatory Commission
General Accounting Office
House Fisheries and Wildlife Committee
House Natural Resource Staff
Idaho National Engineering Laboratory
National Biological Service
National Marine Fisheries Service
National Oceanic and Atmospheric Administration
National Park Service - Olympic National Park
Natural Resources Conservation Service
President's Council on Sustainable Development
Senate Energy & Natural Resources Committee
U.S. Army Corps of Engineers
U.S. Bureau of Indian Affairs
U.S. Bureau of Land Management
U.S. Bureau of Mines
U.S. Bureau of Reclamation
U.S. Coast Guard
U.S. Fish and Wildlife Service
U.S. Forest Service - Olympic National Forest
U.S. Geological Survey

Tribal Governments and Organizations

Columbia River Intertribal Fisheries Commission
Confederate Tribe of the Umatilla Reservation
Covelo Indian Community - Round Valley Reservation
Jamestown S'Klallam Tribe
Lower Elwha S'Klallam Tribe
Lower Elwha Fisheries
Makah Indian Tribe

Tribal Governments and Organizations — continued

Northwest Indian Fisheries Commission
Port Gamble S'Klallam Tribe
Puyallup Indian Tribe
Puyallup Fisheries Department
Quileute Indian Tribe
Skokomish Indian Tribe
Shoshoni Bannock Tribe
Shoshoni Bannock Fisheries Department
Point No Point Treaty Council
Yakama Nation

States Agencies and Organizations

State of California
Department of Fish and Game

State of Maine
Department of Natural Resources

State of Michigan
Department of Natural Resources Fisheries Division

State of Montana
Environmental Quality Control

State of New York
Power Authority

State of Oregon
Department of Fish and Wildlife

States Agencies and Organizations — continued

State of Washington
Department of Community Development
Department of Ecology
Department of Fish and Wildlife
Department of Health
Department of Natural Resources

Department of Trade and Economics
Department of Transportation
Governor's Office
Historic Preservation Office
Parks and Recreation Commission
State Energy Office

State of Wisconsin
Department of Natural Resources

Congress People

Honorable Norman Dicks
Honorable Jennifer Dunn
Honorable Diane Feinstein
Honorable Slade Gorton
Honorable Richard Hastings
Honorable Jim McDermott
Honorable Jack Metcalf
Honorable Patty Murray
Honorable George Nethercult
Honorable Linda Smith
Honorable Randy Tate
Honorable Rick White

County and Local Governments

City of Forks
City Council's Office
City Planner / Attorney

City of Port Angeles
City Council's Office
City Manager
City Attorney's Office
Planning Department
Utilities Department
City Light

City of Sequim
City Council's Office
Planning Department

Clallam County
Commissioner's Office
County Administrator
County Attorney's Office
Department of Community Development
Department of Roads and Public Works
Clallam County Public Utility District #1
  Commissioner's Office
  General Manager
Port of Port Angeles
  Commissioner's Office
  Executive Director

Organizations and Business

Adele McCall
Agriculture
American Rivers
American Whitewater Affiliation
Appalachian Mountain Club
Aquaculture Research Institute
Battelle Northwest
Beak Consultants
Bonneville Power Administration
Buchanan Ingersoll
Carolina Denver and Light Company
Century 21 Harbor Lights
Chinook Northwest Inc.
Clallam County - Sekiu Chamber of Commerce
Clallam County Grange
Clallam County Historical Society
Clallam County Public Utility District #1
Columbia Basin Fish & Wildlife Authority
Common Sense Resource League
Crescent West Inc.
Cutter and Stanfield
Daishowa America Inc.
Decision Data
Dorsey & Whitney
Dry Creek Grange #646
Dry Creek Water Association
Enserch Environmental Corp.
Evergreen Legal Services
First Federal Savings and Loan
Fish Pro
Fisheries Dept.-Shoshoni-Bannock Tribe
Fletcher Far Ayotte
Forks Chamber of Commerce
Forks High School
Foster Wheeler Environmental
Friends of the Cowlitz
Friends of the Earth
Friends of the Eel
Friends of the Elwha
Gehrke's Gink
Glen Canyon Environmental Studies
Greater Ecosystem Alliance
Green Crow Partnership

Organizations and Business — continued

Harza Engineering
HDR Engineering, Inc.
Hood Canal Environmental
Hung West & Associates, Inc.
Hydro-Triad Limited
Indian Creek Campground
Infotec Research Inc.
International Rivers Network
James River Corporation
Jones & Jones
Klahane Club
Lane & Lane Associates
Lighthawk
Log Cabin Resort
McGavrick Graves Attorney at Law
Mendocino Environmental Center
Meyer Resources, Inc.
NW Conservation Act Coalition
National Outdoor Leadership School
National Park Foundation
National Parks & Conservation Association
National Wildlife Federation
North Olympic Land Trust
North Olympic Salmon Coalition
North Peninsula Home Builders Association
Northrop, Devine and Tarbell
Northwest Chapter - Wilderness Watch
Northwest Economic Association
Northwest Hydraulic Consultants
Northwest Power Planning Council
Northwest Rivers Council
Okanogan Resource Council
Olympic National Resources Center
Olympic Rivers Council
Olympic Outdoor Sportsmen's Association
Olympic Park Associates
Olympic Park Institute
Olympic Peninsula Audubon
Olympic Raft & Guide Service
Outside Connection
PacifiCorp
Pacific Power and Light Company
Pacific Rivers Council
Parametrix
Perkins Coie
Port Angeles Chamber of Commerce
Port Angeles-Victoria Visitor Bureau
Port Townsend Chamber of Commerce
Preston, Gates, Ellis & Raivela Meeds
Preston, Gates and Ellis
Puget Sound Power and Light Company
Radin and Associates Inc.
Rainier Evergreen Inc.
Rayonier Inc.
Recreational Equipment Inc.
Redwoods Science Lab

Organizations and Business — continued

Rescue Elwha Area Lakes
Riddell, Williams, Bullitt & Walkinshaw
Ridolfi Engineering & Associates
Rio Grande Restoration Project
Rivers Council of Washington
Rivers Network
Robbin B. Sotir & Associates
SCS Engineers
Seattle Audubon Society
Sequim Chamber of Commerce
Seattle Water Department
Sierra Club
Sierra Club Legal Defense Fund
Simpson, Thacher & Bartlett
Smith, Brucker, Winn & Elhert
Sol Duc Hot Springs Resort
St. John's River Water Management District
Stone and Webster
Summit Technology
TQ NEPA
Tacoma Public Utilities
Tetra Tech
The Mountaineers
The Rockey Company
The Wilderness Society
Trout Unlimited
Trumpeter Swan Society
Twanoh Group Sierra Club
U.S. Savings Bank of Washington
Van Ness Feldman
Washington Appellate Defenders
Washington Environmental Council
Washington State Grange
Washington State Sportsman's Council
Washington Wilderness Coalition
Roy F. Weston, Inc.
Wilkinson Barker
Winthrop, Stimson, Putman and Roberts
Wise Use Movement
Woodward Clyde
Wrong Mountain Wildlife Preserve

Libraries

Aberdeen Timberland Branch Library
Bellevue Branch Library
Bremerton Branch Library
Clallam Bay Branch Library
Colorado State University
Daniel J. Evans Library
Everett Public Library
Forks Branch Library
Holland Library
Kirkland Branch Library
Kingston Branch Library
Mansfield Library

Libraries — continued

Port Angeles Branch Library
Redmond Branch Library
Sequim Branch Library
Shiled Library
Port Townsend Public Library
Renton Public Library
Seattle Public Library
Tacoma Public Library
University of Washington
Washington State Department of Fish & Wildlife
William G. Reed Branch Library

Academic Institutions

Colorado State University
Ferris State University
Humboldt State University
Michigan State University
Northwestern University
Peninsula College
Pitzer College
The Evergreen State College
University of California
University of Colorado
University of Montana
University of Washington
University of Wyoming
Western Washington University
Williams College

Newspapers

Associated Press
Bellingham Herald
East County News
Everett Herald
Forks Forum
High Country News
Hydrowire Newsletter
Jimmy Come Lately Gazette
Land Use Chronicle
McClatchy Newspaper
Montesano Vidette
Out West Newspaper
Peninsula Daily News
Peninsula Gateway News
Port Townsend Leader
San Francisco Chronicle
Seattle Post Intelligencer
Seattle Times
Sequim Gazette
Shelton-Mason County Journal
Spokesman Review

Newspapers — continued

Tacoma News Tribune
The Citizen News
The Daily News
The Daily World
The Olympian
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USA Today
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Magazines

Backpacker
Currents
National Fisherman
National Geographic Society
Outside Magazine
Pacific Northwest Magazine
Popular Mechanics
Seattle Weekly
Signpost Magazine
Sunset Magazine
The Christian Science Monitor
U.S. Weekend Magazine

Radio/TV Stations

CNN
KSOH-FM
KAPY
KAYO
KBAM Radio
KBWK Radio
KGHO
KGY Radio
KING TV and Radio
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KJR Radio
KKMO Radio
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Northland Cable News

Responses to Comments





Starting of construction at the base of the Elwha Dam, circa 1910.
(Daishowa/James River Company Photo)

Previous page: Excavation for Glines Canyon Dam Spillway, June 29, 1926. *(Daiwhowa/James River Company Photo)*

Responses to Substantive Comments on the Draft Environmental Impact Statement

Purpose and Methodology

The final environmental impact statement is to be an accurate analysis of impacts of the proposed action and its alternatives. Public and agency review of the draft statement helps to ensure quality.

The Department of the Interior received more than 600 comment letters on its Elwha River Ecosystem Restoration programmatic draft environmental impact statement, in addition to many questions and comments delivered orally at four public workshops held in November 1994. The National Park Service and cooperating agencies reviewed and responded to all comments that were not simple statements for or against the proposal, i.e., those requiring additional explanation or analysis of data and those that debated facts or conclusions reached in the draft environmental impact statement. These are called "substantive" comments.

Many comments were received about the scope of a proposed second environmental impact statement on the Elwha Restoration project, referred to as the Implementation EIS. The Department of the Interior was asked to include information on site-specific impacts from dam removal and was questioned how these impacts would be analyzed or mitigated. A summary of these comments is in the "Consultation and Coordination" section of this document. Since there is some overlap of these concerns with those relevant to the decision to remove the dams, responses are provided in this, the programmatic environmental impact statement, wherever possible.

Substantive comments were either answered in this question and answer section, through changes in the text of the environmental impact statement, or in both places. Since many comments were duplicative, the substantive comments were summarized by resource concern ("Flooding," for example), then further defined by the issues and topics as they were presented in letters and at the workshops. This allows the reader interested in a particular topic to review the substance of the issue and the environmental impact statement team's responses.

A commentor will be able to find the response to a particular question by consulting the topic in the question and answer section. In some cases, summaries of agency responses have been integrated in the text, so that anyone reading this document will have a complete picture of the overall proposal, its alternatives, and their impacts.

Organization of Comments and Responses

The "Index of Commentors, by Topic" presents the major topic or resource of concern followed by a listing of each author and the corresponding number of the comment letter on that particular topic or resource. Comment letters containing substantive issues in more than one category are included in each category. Responses to comments are organized alphabetically by resource topic, i.e. "Alternatives, Cultural Resources," etc.

This is followed by the "Table of Contents for Responses to Comments Section." Interior's responses to substantive comments are organized by impact topics.

In the "Comment Letters" chapter, the "Index by Author" precedes the reprinted letters and lists commentors by category or type of group: Public Agencies; Interest Groups; Business and Industry; and Private Individuals. The authors in each category are then presented alphabetically, with an assigned number. (These numbers correspond to the number on the upper-right-hand corner of the correspondence. The numbers are in order of time received by the National Park Service; some numbers may be out of numeric order since they were subsequently re-ordered by commentor category.) The author's name is then followed by a **code word or topic** pertaining to the major topic of the question or resource concern, i.e., "Fisheries," presented to the environmental impact statement team. The reader can find the response to her or his comment by referring to the "Fisheries" section of the question and answer section.

In addition to written comments, Interior also received many verbal substantive remarks at each of the four public workshops held in November, 1994 (See Consultation and Coordination section). Some of the speakers also sent in written responses, and are part of the written record and indexing system described above. Some only responded at the workshop; hence, their comments are not indexed, but are responded to if considered substantive.

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Responses to Comments

Alternatives in the Draft EIS

Issue: Additional alternatives to be considered in the draft EIS and/or the Implementation EIS to address public concerns

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12. Restoration of other rivers by the Department of the Interior instead of the Elwha River

See Comment Letters: Fouts, Stanley - C326; Johnson, Lee - C327; Olympic Park Associates - C612; Powne, Bob - C540; Pulkownik, Susan - C334

Issue: Additional alternatives to be considered in the draft EIS and/or the Implementation EIS to address public concerns

1. Use state-of-the-art fish passage measures; strive to balance fish and power.

Q: Many commentors would like a state-of-the-art fish passage scenario developed as is being tried on the Baker Dam. They argue that the Federal Energy Regulatory Commission plan is 20 years old and suggest exploring "fish-friendly turbines," collection and bypass systems for juveniles, and outplanting fish before removing the dams to see if the habitat would support them.

A: The fish passage facilities (including fish collection and bypass systems) and measures the commission included in the Draft Staff Report are not "20-year-old designs;" they are state-of the-art.

In the mid-1980s, when the licensing process became more active, the dam owners' fish passage consultants (Hosey & Associates, now Harza Northwest) worked with the fish and wildlife

agencies' fish passage experts and the Lower Elwha S'Klallam Tribe (who hired their own fish passage engineers) to design state-of-the-art passage facilities for both dams, including the testing of an Eicher screen, an experimental juvenile fish passage technology. Since that time, there have been no major advances in fish passage technology that would significantly benefit the Elwha projects. The Baker Lake fish collection system cited by the commentor was designed in 1959 (Warner, 1961).

We are unaware of specific "fish friendly" turbines, although some turbines (such as propeller types with adjustable blades) result in fewer fish mortalities than others. The Walla Walla District of the Army Corps of Engineers has initiated a multi-year study exploring ways to reduce turbine fish mortalities (on the mid-Columbia projects in particular). The mid-Columbia public utility districts of Grant and Chelan are also investigating ways to reduce turbine mortalities. Regardless, improvements in turbine design would not overcome problems associated with high head dams, such as Glines Canyon, where fish are under extreme pressure as they pass through the penstock. Nor would new turbines eliminate the fish passage problems of increased predation, migration periods, and residualism in the reservoirs.

Outplanting has already been tested on the Elwha River. A relatively early study, 1971, by the Washington Department of Fish and Wildlife revised by James River Corporation in 1988, documented the amount of habitat available in the Elwha and the amount of habitat affected by the dams. As part of the licensing process, the U.S. Fish and Wildlife Service conducted a number of studies of fish passage and survival that involved outplants of coho and chinook salmon and steelhead. These studies found that the fry-to-smolt survival rates of coho salmon (Wunderlich, et al. 1989) and steelhead (Wunderlich and Dilley 1986) were high compared with rates in other streams in the region. Juvenile chinook salmon survival was similar to other streams (Dilley and Wunderlich 1990). The Fish and Wildlife Service is currently assessing Lake Sutherland to update estimates of sockeye salmon production. Collectively, these studies demonstrate the high productive potential of the Elwha River for anadromous fish.

Q: Commentors asked that ways be found to "balance power and fish," i.e., increasing efficiency of the power plants, installing slower moving turbines with slower moving water that might not result in such high fish losses.

A: When trying to balance competing uses, there must be tradeoffs. The Elwha Report illustrated why retention of the dams is incompatible with restoration goals for the Elwha River ecosystem and native anadromous fisheries. Any provision for retention of hydropower production at either or both dams would mean that the ecosystem would not be restored and only a portion of the native anadromous fisheries could be produced (Elwha Report, Table 1, page 35).

The efficiency of the power plants could be very slightly increased, but this would have no benefit for the fisheries, and so would not help "balance" fish and power needs. In order to generate power from water, the water must fall from a higher level to a lower level. The amount of the fall is referred to as "head." The higher the head (the greater the distance of the fall), the more power can be generated. The purpose of the Elwha dams is to create this head. However, a viable fishery requires that the spawning fish be able to move upstream past the dam and the juvenile fish be able to move downstream past the dam.

2. Alternatives to control sediment and flooding

Q: Use controlled erosion to transport sediments downstream, i.e., open them for a period, then close and let the water run clear. Create a small hole in the dam to let sediment and water out. V-slash/planks in front could provide flood management benefits as well.

A: Releasing the sediments in short bursts would have impacts on fisheries and water quality which are different from releases over a long period of time. Suspended sediment levels are increased during short bursts, but water quality is allowed to partially recover. Prolonged releases reduce the maximum suspended sediment levels, but do not allow periods of water quality recovery. These issues would be more fully analyzed in the Implementation EIS.

Excavating one or more holes through Glines Canyon Dam for releasing the reservoir water and sediment has been considered. The costs and safety concerns are greater than one might initially think. A number of factors would have to be overcome to accomplish this. For example, in order to control the excavation of holes through the dam without damaging the remaining structure, sophisticated construction practices would be needed. In addition, much underwater work and the placement of bulkheads or cofferdams would be required to excavate the last section of concrete for each hole on the upstream face. Installation of a gate to control the discharges would be required. An underwater survey and an underwater video were used to determine the conditions along the upstream face of the Glines Canyon Dam. This information indicates that there may be up to 50 feet of sediment that includes a large quantity of woody debris at the dam. The excavation of one or several holes through the dam would require reinforcing the arch dam section either during or following the drawdown process to ensure the safety of the structure during construction and for the long term. Therefore, while the concept of excavating one or more holes through the dam is technically feasible, the costs and difficulties of this method are not competitive with other methods being investigated. Elwha Dam has much more material, called "fill" in this statement, behind it.

With regard to flood management benefits, the reservoirs are currently operated by passing the inflows. This means there are little, if any, flood control benefits now. Without the dams in place, there would probably not be noticeable effects in the volume of discharges downstream. By modifying the dam to accommodate an opening at the base of the structure, flood peaks may be reduced, but not without increased costs to the entire project.

3. Alternatives for revegetation

Q: Use vegetation for stabilizing sediment instead of mechanically removing and/or moving material around to create open meadows

A: If all sediment were left in place and reseeded, the natural meander of the river would eventually erode much of it. This might mean the release of large, unnatural, "doses" of sediment into the river over many years--a potential problem for fish, aquatic life, and perhaps for water users as well. The Implementation EIS will address this problem by examining plans that move sediment out of the immediate floodplain. Revegetation of remaining sediment with native early successional species is likely, and will be further investigated.

4. Alternatives to restore gravel while keeping dams in place

Q: Transport stored gravel around the Glines Canyon Dam, but leave both dams in place in combination with fish passage measures.

A: The Federal Energy Regulatory Commission and the Elwha Report examined this suggestion as a mitigation measure should both dams be kept in place. The commission estimated that replacing the amount of bedload carried annually by the Elwha River would be between $500,000 and $700,000 per year with gravel supplied from a local gravel pit (FERC, page F-718). Using gravel from the river and deltas above the dams would be more expensive and add impacts in the building of access roads and intakes. Transporting gravel would also not result in the full restoration of the ecosystem or fisheries. For these reasons, Interior considers this alternative unreasonable.

5. Remove one dam first, study results, then remove the other.

Q: Commentors suggested removing the Elwha Dam first and sluicing or dredging the sediment out. Use the knowledge gained by doing this to then remove the Glines Canyon Dam.

A: The option of timing removal of one dam to control sediment releases and then remove the other is under consideration for the Implementation EIS.

6. Alternatives for funding the project

Q: Commentors suggested several different funding scenarios for the project, including: James River Corporation would set aside money each year for restoration and experiment with fish passage measures at the dams until the money was accumulated to remove the dams; James River be offered fair market value for the dam, reservoir, and the corridor below the dam "the Park wants so badly;" or that dam owners contribute by donating the dams and associated lands they own--the Glines to the park service and the Elwha to the state of Washington.

A: With the exception of offering the dam owners a set price for the hydropower project lands, which is the scenario spelled out in the Elwha Act, the Department of the Interior does not consider these reasonable alternatives. The Elwha Restoration Act requires public acquisition of the dams and associated lands for a set price of $29.5 million.

Fish passage technology has been refined for decades; additional experiments are not needed to further demonstrate that fish passage will not restore the ecosystem.

The park has not indicated that it wants Aldwell project lands. These lands qualify for national park status should Congress decide to add them. If the dams were removed, the Glines lands would be managed in accordance with national park authorities and policies as stipulated by the Elwha Restoration Act. This management would ensure the return of the river to its natural conditions. Removing the dams would increase biodiversity and use of the area as a recreational resource and create wetlands in addition to those created by the reservoir.

7. Alternatives to dam removal

Q: Several alternatives to dam removal involving the Elwha S'Klallam Tribe were suggested:
- Tribal ownership and operation of the dams--sell electricity to Port Angeles
- Ownership by a public utility district, with tribe operating the dams
- Tribe should consider developing land near Highway 101 for commercial uses (casino was suggested) rather than depend on fish restoration

A: These alternatives are outside the scope of the Elwha Restoration Act. The Tribe's choices about its economic development strategies rest with the Tribe, not with the Department of the Interior or this environmental impact statement.

8. Cogeneration of electricity at the mills to reduce the cost of replacement power

Q: Commentors suggested using co-generation at the mills to reduce the cost of replacement power.

A: Cogeneration is the production of useful electrical energy as a byproduct of another type of energy production, such as steam or hot air. Cogeneration using wood waste is a potential resource option for the Daishowa mill. However, because of the size of the wood-waste fuel boiler and the availability of wood-waste fuel, cogeneration potential would be limited to approximately 15 megawatts. Potential cogeneration energy approximates the power that is supplied to the mill by the dams at any given time. But, based on an electrical efficiency review conducted at the mill in 1991 by CRS Sirrine Engineers, Inc., several factors, such as retrofitting or reconstructing the boiler, weigh against cogeneration as an economical option at this time (FERC, A-141).

9. Use the reservoirs to propagate the fish instead of the river

Q: Commentors suggested the use of stocking to increase numbers of anadromous fish in the Elwha River instead of removing the dams.

A: Stocking of Lake Mills (and Lake Sutherland) has been done. The U.S. Fish and Wildlife Service planted approximately 50,000 rainbow trout per year into Lake Mills until the mid-1970s. These plants resulted in put-and-take fisheries of short duration but few of the fish appeared to grow and survive past the first year. Peninsula College students conducted an assessment of the reservoir's trout population in 1975 and found that the fish "were in extremely poor condition." They also found that the gills of the trout were heavily infected with a parasite. The poor condition of these fish is probably attributable to or aggravated by the low productivity of the reservoir and high summer water temperatures. Additionally, current policies of the National Park Service do not support fish stocking, but favor natural production.

The same problems encountered by resident trout--high summer temperatures and cold winter temperatures, turbid water, low aquatic productivity and limited shallow water habitat--would prevent anadromous fish from doing well.

10. Examine raising user fees to help offset the cost of the project

Q: Could Olympic National Park offset the cost of restoration through dam removal by raising user fees?

A: Federal regulations govern the collection and expenditure of user fees. User fees collected by the National Park Service contribute to the federal government's general fund and could not be applied to specific National Park Service projects, including Elwha River restoration without specific federal legislation.

11. Reconsider replacing the dams if removal has not accomplished the degree of restoration expected

Q: Would Interior replace or rebuild the dams if the degree of restoration expected is not achieved?

A: Removing the dams and returning the river to a natural condition along most of its length would restore access to more than 70 miles of high quality mainstem habitat and tributaries to anadromous salmonids. Stocks of Elwha native or closely related anadromous fish are available for all runs. If the excellent spawning and rearing habitat of the Elwha River is restored, the fish will return.

Rebuilding the dams after taking them down would be expensive, and would again keep the salmon and trout from entering the river, thereby violating trust responsibilities to the S'Klallam and Makah tribes and preventing the return of a naturally functioning ecosystem, i.e., all of the cost and none of the benefit. The Department of the Interior, therefore, considers this alternative unreasonable.

12. Restoration of other rivers by the Department of the Interior instead of the Elwha River

Q: Commentors asked why the Department of the Interior was focusing on the Elwha River for restoring native anadromous fisheries instead of other river systems in the area (See responses under the "Fisheries" section for additional information related to this comment).

A: Although the sometimes high profile of the Elwha restoration proposal suggests Interior is focusing on this project, this is not the case. Interior agencies are involved in community and regional efforts to restore anadromous fish in other rivers on the Olympic Peninsula, including the Dungeness, Quileute, Hoh, Queets, and Skokomish. These efforts include studies to assess fish populations, outplanting to reseed underutilized areas, habitat improvements, and fishery management. A major commitment also has been made by Interior agencies to work with the U.S. Forest Service, state of Washington resource agencies, tribes, and local citizens in watershed analyses required under the President's Northwest Forest Plan. These comprehensive assessments are in the Quilcene, Dungeness, Soleduck, and Queets watersheds.

Interior and other federal agencies also participate in local watershed planning activities conducted by local governments for the purpose of improving both water quantity and water quality as well as stream, riparian and wetland habitat. This involvement is for the purpose of restoring fisheries and natural processes to the extent possible in each watershed.

Cultural Resources

Issues:

- Cultural importance of dams to local history
- Effects of dam removal on historic structures and cultural resources
- Impacts on the Lower Elwha S'Klallam Tribe's sacred sites from dam removal
- Cumulative impacts on the Lower Elwha S'Klallam Tribe

See Comment Letters: Booth, Beatrice and Bill - C219; Clark, Robert J. - C599; Julian, Tony -C478; Olympic Park Associates - C612; Sargent, Joan K. - C450

Issue: Cultural importance of dams to local history

Q: Commentors requested additional information on the cultural linkages among the river, dams, and local community.

A: For some members of the Port Angeles community, the dams are part of their family history because family members worked on the construction or lived in the valley during construction. The dams on the National Register of Historic Places are a source of local pride to some residents.

The Elwha River Hydroelectric Plant, completed in 1914, and the Glines Canyon Plant, completed in 1927, furnished power to the Port Angeles area for domestic, commercial, and industrial use. Much of this power supported the paper and pulp industries in Port Angeles. In addition, area residents may have enjoyed recreational activities such as boat excursions operated by the Waumila Lodge on Lake Mills. None of the buildings remains from the lodge, which operated from the 1930s to the 1960s. Studies needed to complete the Implementation EIS may uncover additional links between Port Angeles and the Elwha River's dam and power plant complexes.

Although Euro-Americans were drawn to the Elwha valley, in large part, because of the resources the river provided, the Lower Elwha S'Klallam Tribe has occupied the valley since prehistoric times. The tribe's relationship with the river has had longer to develop; for example, place names in the S'Klallam language exist for sites along the river from its mouth upstream into the Olympic Mountains. Among these are several sacred sites including the Creation site where the first ancestors of the present day S'Klallam people are said to have originated. S'Klallam villages were located adjacent to important fishing stations at Ediz Hook, the mouth of the Elwha River, and at the confluence of Indian Creek and the Elwha River in the upper Elwha valley. Seasonal camps for fishing and other subsistence activities were located along the river and its tributaries, and along the shores of Freshwater Bay and Ediz Hook.

In 1854-55, the United States entered into land cession treaties with native tribes and bands in Washington territory. The Lower Elwha S'Klallam were party to the Treaty of Point No Point signed on January 26, 1855. Under the terms of the treaty, the S'Klallam retained fishing rights at their usual and accustomed fishing places. These rights were upheld in federal court in 1974. (U.S. v. Washington, 384 F. Supp. 312 (1974) at p. 355-357 and 401).

Where the hydroelectric projects may have helped Euro-American residents by providing power for industries, jobs, and recreation, they had a substantial negative impact on the tribal fisheries.

The Elwha Dam eliminated access to over 90% of the freshwater habitat Elwha River salmon and trout need to complete their life cycle (see fisheries section of this EIS), and fisheries numbers fell dramatically as a result. The Lower Elwha S'Klallam tribal culture and its economy both suffered when the projects were completed and continue to suffer today, at least in part because of the lost fisheries resources of the Elwha River.

While the tribe maintains a salmon hatchery on the Elwha River, the catch is a fraction of the total produced by the river before the dams. Approximately half of the registered tribal fishermen now have gross fishing incomes of less than $1,000 per year. Approximately 90% gross less than $15,000 per year.

Alternative employment is not readily available to tribal members, and tribal unemployment and poverty rates far outstrip those of Clallam County and Washington state residents generally. This lack of economic well-being has been linked to overwhelming stress and poor health (Bachtold, L.M., and Washington, State Department of Health, 1992), including high rates or mortality, infectious disease. and chronic health problems.

Despite the damage done by the projects, an undiminished "spiritual" linkage maintained for generations by members of the Lower Elwha S'Klallam tribe, continues. It was perhaps best expressed by a former tribal chairperson, Carla Elofson, when she spoke before the Senate Committee on Energy and Natural Resource, June, 1992: "Our Creator gave us the fish to live on...and we cherished it, and we respected it. We didn't waste it, we used every bit of it. I may not see the abundance of fish come back in my lifetime, but I would like to see it come back for my grandchildren, my great-grandchildren, and the rest of my people, the following generations to come. It was a gift from our Creator; it was our culture and heritage."

Issue: Effects of dam removal on historic structures and cultural resources

Q: Some commentors noted that the dams and associated structures are historically significant and would be destroyed or damaged if the dams are removed, which would be an permanent loss of these resources.

A: The Historic American Building Survey/Historic American Engineering Record is a national program that documents the nation's historic architectural and engineering resources. The Elwha River Power Plant and the Glines Canyon Hydroelectric Plant are listed in the National Register of Historic Places; therefore, the National Park Service would prepare the highest level of documentation for both dam complexes. This would include written histories; large-format photographs; ink-on-mylar measured architectural, engineering, and industrial process drawings; and copies of historic drawings and photographs.

Q: Commentors asked whether historic resources other than the dams would be affected by dam removal and how those effects would be mitigated.

A: Section 106 of the National Historic Preservation Act requires that the head of any federal agency "take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register." The National Park Service and Lower Elwha S'Klallam Tribe have begun an ambitious multi-year program to identify and evaluate under national register standards the ethnographic, archeological, and historical

resources in the area that could be affected by dam removal and subsequent sediment flows. Information on whether and the degree to which these resources might be affected will be part of the Implementation EIS.

In response to Section 106 requirements, the National Park Service and Lower Elwha S'Klallam Tribe have consulted with the Washington State Historic Preservation Officer and Advisory Council on Historic Preservation and have developed a programmatic agreement that will stipulate appropriate measures to mitigate the loss of historic properties. Examples of mitigation include documentation and interpretation.

Issue: Impact on the Lower Elwha S'Klallam Tribe's sacred sites from dam removal

Q: Commentors asked what the impact from dam removal would be on the tribe's creation site, burial site, and other resources important to the tribe.

A: As stated in the final EIS, the spot where the Creator formed the Elwha people is presently inundated by Lake Aldwell (see EIS, impacts to cultural resources, and Elwha Report, p. 205). Alternatives that drain Lake Aldwell and remove accumulated sediments (Proposed Action and Remove Elwha Dam) would restore access to this site. All other alternatives would continue to deny the tribe access to its creation site.

The reservoirs behind the dams inundated at least one S'Klallam settlement site, seasonal camps, and possibly burial grounds as well as habitat for many resources including fish, game, and plants used for food, medicine, and raw materials.

Issue: Cumulative impacts on the Lower Elwha S'Klallam Tribe

Q: What other actions have negatively affected the tribe as the dams have done.

A: The tribe has suffered many additional impacts to its culture and economy. These forces, described in the socioeconomics and cultural resources sections of the final EIS, include unemployment for many tribal members, the additional impacts on salmon and migrating trout such as logging, etc.

Dam Removal and Technology

Issues:

- Increasing power production from the dams and similar dam removal projects and their impacts
- Long-term future of the dams under the re-licensing scenario; rate of sediment filling the reservoirs and sediment effect on power production
- Past efforts to pass fish at Glines Canyon Dam
- Dam removal impacts on local roads and land use from removal of rubble

See Comment Letters: Dinius, Burton - C496; Hoyle Jr., Robert - C154; Markley, Jack, C141; McCune, Calmar A - C91; Pulkownik, Susan - C334; Warber, Brenda - C151; Warth, John F. - C203

Issue: Increasing power production from the dams and similar dam removal projects and their impacts

Q: A number of comments were received suggesting that the dams be upgraded to produce more power as opposed to removing them.

A: The Federal Energy Regulatory Commission (1993) considered the expansion of power production at Glines Canyon Dam as technically feasible, but not cost-effective. The amount of power that can be generated at a hydroelectric site is based on the vertical distance the water drops at that site (head) and the amount of water flowing in the river at that site (flow). At the present time, the head is all being used; flow, dictated by nature, cannot be increased. At certain times of the year, when flows are high, some water may be passed over the spillway and not through the turbine. To use all the flow, the dam and reservoir would probably have to be enlarged to capture the water when the flow is high, and release it when the flow is low. Updating (uprating) the turbine units could increase the efficiency by only a small amount (approximately 5%; US Bureau of Reclamation estimate). More than a 5% increase in power requires additional turbines and generators. Although it is possible to make these changes, the increase in power would not offset the increase in cost, hence the conclusions reached in the Draft Staff Report.

Q: Some commentors asked whether dams have been removed in other areas of the country and what the results were, particularly in flooding impacts.

A: Numerous dams have been removed throughout the United States; however, the majority of these dams were smaller (10 to 40 feet in height) and had less sediment stored behind them than is behind the Elwha and Glines Canyon dams. In general, dam removal projects are required to remove a sufficient portion of the dam to permit the safe passage of floods down the watercourse across which the dam and reservoir were located. Reservoir sediments are often stabilized in place, and basin areas are revegetated. Where dams have been completely removed to return the stream and reservoir basin to pre-dam condition, as is proposed for the Elwha River, the flood potential returns to what occurred naturally before the dam was built. In the case of the two dams on the Elwha, the reservoirs are not operated to dampen floods, so the present "run-of-the-river" operation will continue whether the dams are in place or not. (See responses under the "Flooding" topic.)

Impacts from this and other dam removal projects could come from large sediment sources. Generally, if the supply of sediment is increased short term and then stopped, the river system recovers in 6 to 12 years. If large sediment sources continue, however, the stream takes on a channel form that responds to the increased sediment supply. It can take 7 to 20 years for the bedload (sand, gravel, and cobbles) portion of large sediment influxes to move down a river system, depending on its length. Suspended sediments, which are potential problems for fish and other aquatic life, flush out of the system more quickly. Although fish in Pacific Northwest rivers are used to high suspended sediment loads for short periods (from landslides and other natural causes), high mortalities may result from long-term suspended sediment influxes if they cannot move to an area with better water quality (such as tributaries of the Elwha River or the mainstem river above Lake Mills). In general, however, fisheries resources have responded positively to dam removal (See also, "Fisheries" section of Response to Comments).

Issue--Long term future of the dams under the re-licensing scenario; rate of sediment filling the reservoirs and sediment effect on power production

Q: Commentors wanted to know what would happen to the hydroelectric projects if they were not removed, but were instead retained and relicensed. Could licenses be granted immediately to either the present owners or a public utility district to operate the dams.

A: If the dams are not removed, the Federal Energy Regulatory Commission licensing process could begin again, although congressional authorization would likely be needed. The commission has granted annual operating licenses for the Glines Canyon Dam from 1976 when the original license expired. The Elwha dam has never been licensed. Other than the issuance of annual licenses, the commission (or any other agency) has no authority to grant "temporary" licenses to the dam owner or a public utility district.

Congress established the Elwha River Ecosystem Restoration Act (Public Law 102-495) in October, 1992 to help develop solutions for many long-standing unresolved fisheries and wildlife issues. Operation of the dams by another entity as an alternative to the present situation would not resolve these issues.

Q: Commentors questioned how long it would take for the dams to fill with sediment and whether maintenance would ever be a problem if the projects stayed in place.

A: If the current level of maintenance was continued to the projects, they would exist as is until the reservoirs filled with sediment and began to wear on the turbine runners and other mechanical components (see below). Annual costs for operating and maintaining the dams now, included in the costs for providing power to the mills, are estimated at $1.1 million in the Draft Staff Report. It would take a total of (from 1926) approximately 300-400 years to fill Lake Mills, and 200-300 years (from 1911) to fill Lake Aldwell.

Whether the power plant would be able to function as the reservoirs filled would depend on measures the dam owners would be willing to employ. The penstock or water intake for Glines Canyon Dam power plant is now approximately 60 feet from the surface. As sediment reached that level, the intake would need to be relocated or the sediment would need to be washed, dredged, or sluiced. Since the intake for Elwha Dam power plant is nearer the surface, filling will not affect power production as quickly. The ability of the power plants to continue to produce the same amount of power would not be affected until the penstocks were covered or coarse sediment began to enter them in quantity, since the head would remain the same. When sand or gravel began entering the power plant intakes, the owners would need to change the location of the intakes and/or dredge sediment or periodically replace turbine runners and other mechanical components to continue power production. This would probably make operation of the power plants economically infeasible.

Q: Commentors asked whether dam removal would affect emergency power supplies.

A: The power plants do not have adequate capacity to provide power to large portions of the city during emergencies, although eletricity from the dams has been used in the past to power critical services. Replacement sources could either be generated locally (such as through cogeneration) or taken from the Bonneville grid.

Issue--Past efforts to pass fish as Glines Canyon Dam.

Q: Some commentors noted that fish passage measures may have been used in the past on the Glines Canyon dam and asked why these measures were removed.

A: Since Glines Canyon Dam was constructed upstream of Elwha Dam, which had no provisions for fish passage, little consideration was given to providing fish passage facilities at Glines Canyon. The EIS team is unaware of any attempts to install fish passage facilities at Glines Canyon Dam, although the original sluiceway used during dam construction has at times been mistakenly referred to as a fish passage measure.

Issue--Dam removal impacts on local roads and land use from removal of rubble

Q: With regard to specific issues of dam removal, some commentors questioned what the impact would be on the Olympic Hot Springs Road, Altaire Bridge, and other local roads in carrying out the concrete from dam removal. Some suggested erecting a cement recycling plant at the site of the dam and using the crushed cement to improve the road and extend it into the park.

A: These issues will be analyzed in the Implementation EIS, including estimated costs to upgrade and rebuild local roads. A concrete recycling plant at the site is being considered by the EIS team. Disposal of dam rubble is covered in the "Impacts to Land Use" section of this document. The Federal Energy Regulatory Commission staff estimated that 36 acres of land would be needed to dispose of the rubble, and had identified a possible location not far from the dams (Kelly Mountain). Other alternatives will be examined in the Implementation EIS, including other disposal locations, using some of the rubble to create marine reefs, and usefulness or commercial value of the concrete and/or stored sand or gravel. Extending roads into the park where not related to dam removal are not examined in this statement, nor would they be in the Implementation EIS.

Dam Safety

Issues:

- The ability of the existing dams to withstand damage from earthquakes and the potential for downstream impacts should the dams fail
- The safety and stability of the Elwha Dam during removal
- Potential for downstream damage from sudden releases of water from the dams

See Comment Letters: Homenko, Deborah, and White, Jerry - C54; McCune, Calmar -C108, C91

Issue: The ability of the existing dams to withstand damage from earthquakes; the potential for downstream impacts should the dams fail

Q: Some commentors suggest that, when the dams were built, little was known about dam safety and earthquake danger. Now that new fault zones have been identified, commentors asked what would happen to either dam in the event of an earthquake and the cost to make the Elwha Dam able to withstand earthquakes in the area. It was suggested that this cost and all costs to maintain the dams and keep them safe be factored into the costs of No Action or Dam Retention alternatives.

A: According to the Washington State Dam Safety Coordinator, there are no seismic concerns at the present time with either of the Elwha River dams (personal communication, M. Schaefer).

However, deep subsurface (subduction) faults on the Juan de Fuca Plate have been recently identified in the vicinity of Port Angeles. Typically, these types of faults cause more damage to earthen dams than to concrete dams. An earthquake of large enough magnitude with an epicenter close to the dam site could, nonetheless, cause considerable structural damage to the Glines Canyon Dam or to the concrete portion of the Elwha Dam.

A shallow crustal type fault, the Whidbey fault, also has recently been discovered by the U.S. Geological Survey; it lies southeast to northwest along Admiralty Inlet just north of Port Townsend. Although this type of fault poses a greater hazard to concrete dams than the deeper subduction type faults, the regional hazards of the Whidbey fault have yet to be quantified.

In addition to data gathering on existing faults and the hazards they present, geologists from the U.S. Geological Survey, the University of Washington, and other entities are currently evaluating whether seismic criteria for the Olympic Peninsula area should be more stringent, and are updating their Probabilistic Ground Motion Maps. If these criteria are changed, the dam owner would be required to re-evaluate the seismic analyses for both structures in light of the more stringent criteria and correct any deficiencies identified as a result of the analyses.

If and when the criteria and safety rating for the dams are changed, the costs of any structural changes to them can be calculated; until this information is known, costs cannot be predicted.

Failure of either dam would pose a severe threat to downstream residents, hence both have a high hazard rating. For this reason, and because the Elwha Dam is built on sediment which saturated and "blew out" during construction in 1912, the Lower Elwha S'Klallam Tribe continues to be concerned that an earthquake could result in liquefaction and failure of the Elwha Dam foundation (J. Bohman, personal communication, 1995).

Issue: The safety and stability of the Elwha Dam during removal

Q: Given problems encountered during its original construction, how safe is the Elwha Dam now.

A: The Elwha Dam is currently considered safe by the agency that performs inspections. The problems encountered during construction were overcome by the placement of a significant amount of material upstream of the concrete gravity section, which has controlled seepage and provided stability. If the Elwha Dam is taken down, removal of this protective material must be carefully controlled to prevent saturation and safety problems. The Bureau of Reclamation is currently developing a site-specific engineering plan for dam removal. This plan would be part of the Implementation EIS.

Sudden releases of water during the removal of Elwha Dam is a danger the Bureau of Reclamation would design to avoid. Specifications for removing both dams would require that these releases be controlled to prevent damaging flows during deconstruction. Flow increases would occur often during dam removal. These fluctuations in flow would be controlled, and sufficient warning time provided.

Issue: Potential for downstream damage from sudden releases of water from the dams

Q: Commentors were concerned there may not be adequate warning for anglers downstream when water is now released from the dams.

A: As required by the Federal Energy Regulatory Commission, James River Corporation (owner of both dams) has a comprehensive, formal emergency action plan. When there are sudden releases of water from the dams, James River notifies the Lower Elwha S'Klallam Tribe, Clallam County Sheriff, Point No Point Treaty Council, and others. Phone contact is made whenever releases exceed 3000, 8000, and 13000 cubic feet per second. James River studied the feasibility of installing sirens to notify citizens in the event of an emergency and concluded that they would not be effective without secondary confirmation; instead, a phone contact list was chosen.

Additionally, James River and Daishowa maintain a U.S. Geological Survey automated gauging station at the MacDonald Bridge.

Ecosystem Management

Issues:

- Need for long-term ecosystem management planning to monitor resource effects of dam removal; replacement of and impacts on existing ecosystem
- Feasibility of restoring the Elwha River ecosystem; restoration to a "pristine" condition
- Cumulative impacts to the ecosystem

See Comment Letters: Caltrider, Melanie J - C97; Clark, Robert J - C599; Loucks, J. &. M. -C63; Main, Jerrine and Earnest - C336; Murray, Floyd - C70; Olympic Park Associates - C612; Payne, Randall D - C30; Rescue Elwha Area Lakes - C333; Schwagler, Albert J. - C561; Towslee, Charles E. - C199; Tveit, Gary - C462; Washington Department of Natural Resources - C577

Issue: Need for long-term ecosystem management planning to monitor resource effects of dam removal; replacement of and impacts on existing ecosystem

Q: Commentors recommended that a comprehensive long-term ecosystem management plan be developed to monitor and manage resources after the dams are removed. Some suggested that the plan be jointly developed and implemented by a partnership of state, local, federal, and tribal entities.

A: A comprehensive resource management plan for acquired lands is important. In the Implementation EIS, the Department of the Interior would analyze impacts of general land uses proposed by each of the entities that may receive lands--Olympic National Park, the Lower Elwha S'Klallam Tribe as lands held in trust, and the state of Washington. Once ownership has been determined, more precise planning for use of these lands can begin.

Q: Commentors asserted that the Department of the Interior would be replacing the reservoir ecosystem with the river ecosystem.

A: Interior's proposal is not to replace, but to remove the impediments to a naturally functioning ecosystem that existed for thousands of years prior to construction of the dams. Given the same

habitat and environmental conditions, the same group of species tends to occur. Therefore, returning the Elwha River habitat to its pre-dam condition would result in the natural complement of species, including salmon and seagoing trout that lived there for centuries.

Issue: Feasibility of restoring the Elwha River ecosystem

Q: Commentors asked whether the river ecosystem could be restored to a pristine or pre-dam condition.

A: The vast majority of the Elwha River valley is within Olympic National Park boundaries and is in pristine condition. Some development on tributaries has sent silt and other pollution into the river. However, non-point sources of pollution, such as agricultural and urban run-off, have a minor influence due to the small number of farm operations or development within the river basin (BOR, 1995a). The waters remain "Class AA," of very high quality, much as they were before the dams were built. Elwha River water is used by residents and industries in Port Angeles, but the diversion for this use is only three miles upstream of the mouth of the river, so water quantity is the same as before the dams were built along most of its length.

Existing levees protect property from flood damage. However, the largest levee is located on the Elwha S'Klallam Reservation and was designed to prevent the river from meandering over only the very widest piece of the floodplain, thereby minimizing impacts to the natural system.

Although water diversions, levees for flood protection, and development of lands for residential or other (logging, etc.) use will continue outside the park whether or not the dams are removed, they are not impediments to the physical or biological processes required for ecosystem restoration. The presence of the dams is.

The entire terrestrial and aquatic ecosystem of the Elwha Valley has been altered from building the dams and precluding anadromous fish from entry beyond the first five miles, inundating important terrestrial and river habitat, and restricting sediment, nutrient, and woody debris transport (see Impacts to River Ecology section of this EIS). In addition, because of concerns over precipitous population declines and the potential for additional extinctions, hatcheries were built on the river in the mid- 1970s to artificially rear salmon and steelhead. However, hatcheries generally produce fish less adapted to the natural environment as a result of inbreeding (producing large numbers of fish from few parents) and rearing in a manufactured environment. The Proposed Action would phase out the use of hatcheries, and phase in reliance on wild salmonids to populate the Elwha River. It would also restore physical and biological processes such as sediment transport and fish passage, thereby both fully restoring the native anadromous fisheries and Elwha River ecosystem.

Q: Some commentors observed that local residents may not see fisheries restoration as a national issue, or be aware of the opportunity the Elwha River provides for restoration because of its relatively pristine surroundings.

A: Interior agrees problems salmon are experiencing reach far beyond the Elwha River or Puget Sound. In fact, many species have recently been listed as threatened or endangered, or are proposed for listing. For example, on March 10, 1995, the National Marine Fisheries Service (NMFS) proposed wild steelhead runs from the Klamath River, California north to Port Orford, Oregon be listed as threatened under the Endangered Species Act because of population declines

resulting from habitat destruction, such as logging, mining, and irrigation, as well as recent El Nino weather patterns. This action follows listings of salmon stocks in the Columbia River Basin and Sacramento River, California largely as a result of habitat degradation including dams and water withdrawals. NMFS is continuing its review of Pacific Northwest salmon and steelhead populations, including those of Washington. Restrictions necessary to restore listed species can have ramifications far beyond the boundaries of the immediate watershed.

Salmon and steelhead restoration is not only a regional issue, but a national and even international one as well. Fish produced in the U.S. traverse the waters of many states and are captured throughout their range, including by Canadian fishermen as the fish move south from Alaska. U.S. fishermen also capture fish produced in Canada. Harvest management occurs on the international (Pacific Salmon Treaty), national (Pacific Fisheries Management Council), and local (State of Washington and treaty tribes) levels. Although overharvest does at times occur, most population declines of these fish result from diminished and degraded habitat. Small streams produce relatively few fish but their combined production is large. Unfortunately, most small streams on the West Coast have been damaged from urbanization, water withdrawals, or other land management activities (Nehlsen et al. 1991). This is true with the large rivers, as well. As a result, very few pristine watersheds are left in the United States. The Olympic Peninsula is unusual in having several with large portions intact, primarily due to the management policies of Olympic National Park. These streams support healthy populations of salmon and steelhead (WDF et al. 1993). With dam removal and fish access to existing pristine and restored habitat currently inundated by the two reservoirs, the Elwha River could once again be one of the premier salmon producing streams in Washington and benefitting the region.

Issue: Cumulative impacts to the ecosystem

Q: Commentors asked for more analyses on the cumulative impacts of each alternative on a variety of resource topics, e.g., wildlife, living marine resources, fisheries, ecosystem management.

A: The text in this document has been expanded to provide further analyses of cumulative impacts.

Fisheries

Issues:

- Probable success of fish restoration
- Factors that limit salmon and trout populations
- Positive cumulative impacts
- Definition of full restoration and the length of time to achieve it
- The Department of the Interior's assumptions/methods for full restoration; hatcheries, harvest restrictions, escapement
- Tribal fishing practices
- The effect of dam removal on water temperature; fish disease present in the lower part of the Elwha River
- Use of modern technology to pass fish through the dams, as is used on the Baker River system
- Enhancement vs. restoration
- Use of experimental dredging and sediment deposition below both dams to increase certainty of the effects of sediment on the fisheries

- Restoration and/or passage of pink and chum salmon
- Indirect impacts of power generation from other sources on salmon population
- Use of Elwha River as a pilot program area to raise salmon as is now done in the Cowlitz hatchery
- Historical access; data

See Comment Letters: Anderson - Huber, Noni M. - C102 ; Bussell, Eldon - C431; Caltrider, Melanie J, C97; Chadd, Edward - C545; Childs, Phyllis and David - C105; Clark, Robert J. - C599; Cole, Jollefern M. - C34; Copeland, Delbert - C280; Dalton, Robert - C74; Dart, Richard - C604; deBord, Linda - C564; Diimmel, Denise - C84; Doull, Robert H - C111; Dry Creek Grange #646 - C596; Ensor, Lavonne - C560; Erickson, Dale - C519; Federation of Fly Fishers - C182; Gehrke's Gink - C148; Goin, Dick - C414; Graf, Thomas G. - C300; Hampton, Haidie M. - C107; Henry Sr., William P. - C249; Hilt, Dowell -C477; Johnson, Buck - C603; Johnson, David Sirrine - C93; Johnson, Gladys B. - C600; Julian, Tony - C478; Ladley, Russ - C310; Latuala, L. F. - C15; Lonn, Benjamin - C335; Machenheimer, Fred &. Nora - C139; Main, Jerrine and Earnest - C336; Maupin, Eddie - C48; McAfee, Carey - C87; McHenry, Michael - C518; McHone, Larry &. Laura - C77; Mohr, Chris - C197; Murray, Floyd - C70; North Peninsula Home Builders and Building Industry Association of Washington - C449; O'Sullivan, J. M. - C606; Okanogan County Citizens Coalition - C552; Olympic Park Associates - C612; Philpott, Bob - C117; Pulkownik, Susan - C334; Reed, Sandra E. - C562; Rescue Elwha Area Lakes - C333; Santos, Thomas - C556; Sargent, Joan K. - C450; Schmitt, Francis J. - C68; Schwagler, Albert J. - C561; Schwagler, Jacqueline - C598; Smith, Cheryl - C555; Smith, Leland - C455; Stachorek, Richard W. - C243; Tobin, Eric - C59; Towslee, Charles E. - C199; Tveit, Gary - C462; Tveit, Larry R. - C142; Tveit, Marcella - C291; Tveit, Mrs Larry - C413; Warber, Garry - C62

Issue: Probable success of fish restoration

Q: Many commentors questioned the feasibility of removing the dams and restoring the native anadromous fisheries, the degree to which the fisheries could be restored, the cost, and methods to mitigate fisheries impacts during and after dam removal. Many asked whether anything like this had been done before, and wondered whether fish would survive the release of stored sediment. Some cited Mount Saint Helens as a comparative example.

A: Other dams have been successfully removed, and for a variety of reasons. The Harpster Dam on the South Fork Clearwater River in Idaho was an arched concrete structure 440 feet long and 56 feet high. This Washington Water Power Company dam was removed in 1963 because the equipment was obsolete and it was in the public interest to remove it. Removing the dam was also in keeping with the established Idaho Department of Fish and Game fisheries rehabilitation program. The Sweasey Dam, approximately 55 feet high on the Mad River in California, was removed in 1969 because the reservoir had completely filled with sediment, rendering it useless for water storage. These dams were removed simply by dynamiting, with no provision for sediment management. Fish passage was restored at both sites and salmon and steelhead runs have benefited (Winter, 1990).

As to whether fish can withstand or recover from the release of suspended sediment, the eruption of Mount Saint Helens serves as an interesting comparison. The May 18, 1980, eruption caused a debris torrent that sent an estimated three billion cubic yards of material into the upper 17 miles of the North Fork Toutle River basin and approximately 50 million cubic yards into the South Fork Toutle River (Lucas, 1985). Approximately 90% of the upper North Fork and tributaries

previously accessible to salmon were buried to depths up to 213 yards by the mud flow. Corresponding numbers for the South Fork were 89% and 10 yards, respectively (Jones and Salo, 1986). Also, the eruption blast wiped out riparian vegetation, resulting in significant increases in water temperatures (Lucas, 1985). Efforts to restore the riparian areas are an important aspect of habitat recovery in the Toutle drainage (Martin, et al., 1984; Jones and Salo, 1986).

In contrast, the total estimated sediment that would be released from behind the dams is 9 to 12 million cubic yards, and riparian vegetation would be largely unaffected by sediment releases.

Even though the eruption devastated most of the anadromous fish habitat previously available in the Toutle, natural fish recovery quickly began. Initially, many adult fish avoided the Toutle River because of high sediment loads and strayed to other Columbia River tributaries (Lucas , 1985). However, the first adult summer steelhead was observed in the North Fork Toutle River in August 1980, only three months after the eruption. Steelhead redds were observed in Alder Creek, a North Fork tributary, in the spring of 1981. That spring also saw steelhead redds in many South Fork Toutle River tributaries and fry were later captured in these tributaries, indicating successful reproduction (Rawding, 1995). The numbers of yearling and older steelhead increased ten-fold from 1981 to 1984 in a South Fork tributary (Lucas, 1985). Fish in the Elwha basin would have access to clean water tributaries or the watershed above Lake Mills during dam removal, and so would be expected to have at least similar, and probably better, responses.

Stober et al. (1981) characterized much of the material released by the eruption of Mount Saint Helens as "solid glass or obsidian-like pieces, or more porous-looking particles." These particles are abrasive to fish gills and are different from the glacial sediment stored in Lake Mills and Lake Aldwell. However, fish populations are thriving both in the Toutle River drainage and in Pacific Northwest glacial streams.

Another example of a successful fish restoration project is the South Fork Skykomish River near Seattle. No anadromous fish populated the river above an impassable natural barrier. Notably, no reservoirs hindered the downstream migration of juveniles. The Washington Department of Fish and Wildlife developed salmon and steelhead runs above the barrier, initiating salmon production by releases of coho fry and fingerlings into the upper watershed from 1952 to 1958. Coho are now the most abundant anadromous salmonid in the South Fork; the adult run has increased steadily from 1,561 in 1958, when the last planting of hatchery-produced juveniles took place, to 30,000 in 1979 (Seiler et al., 1981).

Q: To what extent will the loss of indigenous salmon gene pool affect restoration of Elwha River stocks.

A: Brannon and Hershberger (1984) claimed that the indigenous stock of Elwha River chinook salmon, including genes for "100 pounders," has been maintained at the state's rearing channel on the river. No large fish are seen because of the hatchery environment suppression of factors that produce large fish (e.g., slow early growth rates). Once this stock of fish is allowed to rear in the natural environment, large fish should grow over time, as should the different run times (spring, summer, fall).

The indigenous coho salmon stock has largely been maintained at the tribe's hatchery on the river, although Dungeness River coho salmon have been introduced into the Elwha River a

number of times. Recent genetic stock identification work by the tribe and the U.S. Fish and Wildlife Service indicates that the early returning chum salmon are related to indigenous Strait of Juan de Fuca chum--more likely to be Elwha River native stock than an earlier introduced stock of Hood Canal chum. Pink salmon returns are very low and the subject of an Endangered Species Act petition. However, it is possible that Elwha River pink salmon are part of the same "evolutionarily significant unit" that includes indigenous Dungeness River pink salmon; Elwha and Dungeness pink salmon may very well be genetically identical. Elwha River sockeye salmon are generally considered to be extinct, although the Department of the Interior is investigating the possibility that Lake Sutherland kokanee (land-locked sockeye salmon) are descended from Elwha sockeye.

Winter run steelhead are reared in the tribe's hatchery. It is not clear how much the hatchery fish have influenced a later return of naturally spawning winter run fish. However, a source of native Elwha steelhead may be available in the river population of resident rainbow trout, as these fish are a freshwater race of steelhead. Reisenbichler and Phelps (1989) suggested that the upper river rainbow trout are descended from the indigenous Elwha River steelhead. Steelhead smolts have been documented migrating past the dams although no steelhead were planted upstream (Stone and Webster Engineering Corporation, 1991). Summer run steelhead may also be related to the upper river rainbow trout. Indigenous populations of cutthroat trout and char (Dolly Varden and bull trout) exist in the upper Elwha and may also be producing seagoing smolts. The availability of indigenous Elwha or related (e.g., Dungeness) fish stocks would allow full restoration of the Elwha native anadromous fisheries.

Q: The EIS rates availability of some stock as less than favorable. How can a run be restored if this is the case.

A: The availability of all stocks is rated as: favorable (summer/fall chinook); marginal/favorable (winter steelhead); marginal (coho, summer steelhead, chum, searun char); unfavorable/marginal (spring chinook, pink, and sockeye); or unknown (searun cutthroat). The environmental impact statement notes that the sockeye salmon stock is probably extinct, but that kokanee (land-locked sockeye) in Lake Sutherland may be descended from the native sockeye run.

Although stock availability is significant, other factors such as access to and recovery of habitat also figure importantly in eventual restoration success. In nearly all cases, stock availability is not the overriding factor because alternate brood sources exist. The Elwha Report (Appendix G) lists 28 different options for restoring the 10 original Elwha fish stocks. Of these, only sockeye salmon have significant import restrictions because of the potential for disease introduction. To ensure that brood sources are eventually available, surveys are currently underway for all identified sources (both Elwha remnant and non-native stocks) so that brood collection and development can be undertaken if needed before dam removal. These surveys currently cover the Elwha River (for remnant spring chinook and winter and summer steelhead, the Dungeness River (for pink salmon), and certain other coastal Olympic Peninsula streams (for summer steelhead).

Issue: Factors that limit salmon and trout populations

Q: Commentors asked whether Elwha River anadromous fisheries could be restored when other North Coast Rivers with no dams, such as the Hoh, have few fish.

A: It is a common misperception that most salmon and steelhead populations in Olympic Peninsula rivers are critically depressed. Most fish stocks, including those in the Hoh River, are not dying out. The status of each species varies, but chinook salmon and winter steelhead in the Hoh (and most other North Coastal rivers) are considered to be in good condition. In the 18-year period from 1976 (when good information on population size became available) through 1993, spawning escapement, the number of fish needed for spawning to perpetuate the runs, of Hoh spring/ summer chinook exceeded agency goals in every year but three. During this same period, fall chinook abundance exceeded the spawning requirement in each year. During the 17-year period from 1976 through 1992, spawning escapement of winter steelhead exceeded agency goals in all but four years.

Although the Hoh River coho salmon stock is considered healthy, returns for this species have not been as strong as desired. Returns have been within ranges set by agencies for escapement, but rarely exceed the upper end. Principal factors influencing returns of coho are suspected to be heavy ocean interceptions, especially in Canadian fisheries, and adverse land-use activities.

The Washington Department of Fisheries et. al. (1990) determined that nine fish stocks in the Strait of Juan de Fuca are healthy, 14 depressed, five critical and the status of 12 unknown because of limited data. For the Washington North Coast, 35 stocks are healthy, four depressed, none critical, and the status of 33 unknown. The reasons for the depressed conditions of stocks vary by species and river system.

Within the Hoh River watershed, extensive timber harvest and the associated road system have significantly impacted salmon and steelhead spawning and rearing areas. Other adverse practices within the Hoh are agricultural activities and bank hardening to protect roads and private and public property. Lower salmon productivity of essentially all rivers due to adverse land-use practices is widely evident and the most serious long-term threat to the state's anadromous fisheries resources.

Q: To what extent is restoration a function of restoring Elwha habitat vs. other factors such as overfishing.

A: The Elwha Report contained the following quote by Lower Elwha S'Klallam Tribal elder, Mr. George Bolstrom:

"It's not just about taking the dams out, or even just putting the fish back. It's about the whole picture, the human population, marine predators, overfishing, the works. If the whole system is addressed, then maybe restoration will work."

Unfortunately, it is not possible to place a significance value (in terms of contribution to fish declines) on each of the factors. However, it is reasonable to state that the presence and operation of the dams, more than any other factor or combination of factors, have resulted in the greatest declines of Elwha River anadromous fish. The dams block access to or inundate more than 93% of the historic fish habitat. Reducing the productive capacity of any river by this amount would seriously threaten any fish stocks. In addition, elevated water temperatures resulting from heat storage in the reservoirs exacerbate fish diseases in the lower river, seriously impacting the remaining chinook salmon population. Blockage of the natural sediment transport regime has resulted in an armored river bottom and reductions in fish spawning success, threatening all remaining fish stocks. Lower sediment supply has reduced the size and complexity of the estuary,

which also impacts all fish stocks. Although fish harvest must be properly managed, dam removal and the resulting habitat restoration would allow the historic fish runs of the Elwha River to be restored.

Q: Comments were received stating that the salmon population decline is related more to the activities and fishing pressures on salmon in the ocean, not the presence of the dams. Since these fish spend 80% of their life in salt water, aren't causes of their decline ocean-based? The commentors cite the Elwha Report, saying that only 10% of the salmon spawned by the hatchery would return and they believe this is further evidence that the problem is not the dams, but drift nets and other pressures. Commentors stated that a return of 300,000 fish is pure speculation. They also asked when the hatcheries first started and how low the salmon population was at that point. What is the effect of an overall warming of ocean water that adversely impacts all fish?

A: We respectfully disagree that "the problem is in the ocean." The destruction of the species' freshwater habitat--not overfishing--is primarily responsible for declines of specific runs. Agricultural, residential, and industrial development, as well as logging and roads send sediment and pollutants into spawning rivers. Surface water withdrawals, channeling rivers for flood protection, development of estuary habitat, and drought have also added to habitat degradation for anadromous fish. Dams that totally or partially block upstream and downstream fish migration from spawning grounds and inundate habitat have had major impacts on salmon and seagoing trout populations. Some forces in the marine environment, such as fishing and the warm El Nino current, also affect salmon, although marine survival rates for chinook and coho salmon appear to be improving as the warm El Nino waters leave the Pacific Northwest coast.

Also, it is inaccurate to state that "these fish spend 80% of their life in salt water." Natural steelhead generally spend two years in freshwater and two years in the ocean; coho spend one year in freshwater and two years in the ocean; and chinook may spend either several months or one year in fresh water and three to fours years in salt water. Low hatchery return rates do not signify "that the primary case lies in the ocean." Rather, many factors, including reduced fitness of hatchery fish, diseases, and increased stress in fresh water from higher water temperatures and reduced habitat quality, contribute to low return rates of hatchery fish.

The Department of the Interior believes that the comment that the Elwha River had "lots of salmon for 50 years after the dams were installed" is an overstatement. The almost instantaneous elimination of 93% of the historic habitat by Elwha Dam had immediate and dire consequences to Elwha salmon and steelhead. Sockeye salmon, cut off from their nursery lake (Lake Sutherland), were probably eliminated within a matter of a few years. Spring chinook salmon, a stock that enters early and penetrates upper river areas, probably followed soon after sockeye, as would have summer steelhead. The remaining stocks decreased in time as Lake Aldwell trapped needed spawning gravels, Glines Canyon Dam construction impounded Lake Mills and elevated water temperatures, and extreme river fluctuations during the 1930s and 1940s stranded adult and juvenile fish in the lower river. Unfortunately, fish were not counted then to document long-term declines. The 1975 mitigation agreement between the Washington Department of Fisheries and the construction of the tribal hatchery were both responses to unacceptable declines in Elwha River fish from the presence and operation of the two dams.

Removal of the dams would result in the potential production of more than 380,000 salmon and steelhead and escapement of an estimated 140,000 fish (FERC, 1993). These estimates are based on comparisons to other western Washington streams that are not in pristine condition as is most of the Elwha. If high quality habitat is provided and harvest is managed, the fish will return.

Q: Many commentors questioned what the impact of the practice of high seas drift netting is on the fisheries. They also allege that seals are the reason for decreasing fish stocks on the Olympic Peninsula. Some commentors think that commercial trawlers must also be controlled to allow salmon to be restored.

A: An international ban on high seas driftnet fishing went into effect on December 31, 1992 and is widely held to have been effectively enforced. For instance, in 1993, the U.S. Coast Guard and Canadian Pacific Maritime Forces conducted surveillance activities in the North Pacific routinely fished by driftnet vessels. Coast Guard cutters logged 148 vessel days at sea and Coast Guard aircraft 829 patrol hours as a part of the program (Secretary of Commerce, 1993). Canadian aircraft provided an additional 180 patrol hours. United States units located four vessels equipped for driftnet fishing. Three of these were boarded and had driftnets on board but no fish. All three were turned over to authorities of the Peoples Republic of China which took appropriate action under their law. The fourth was a Honduran-flagged vessel that departed the area before a boarding could take place. An additional six vessels were sighted in transit by Canadian forces, but it could not be confirmed whether four of these were rigged for driftnet fishing. Patrol activities provided no evidence of any unauthorized driftnet fishing (secretary of commerce, 1993).

In 1994, U.S. Coast Guard cutters logged 146 vessel days at sea and Coast Guard aircraft put in 223 hours as a part of the monitoring program (Steve Springer, National Marine Fisheries Service, Office of Enforcement, Silver Spring, Maryland, personal communication, 1995). Canadian Pacific Maritime Forces aircraft contributed seven one-week patrols to the effort. One vessel in transit with a driftnet on board was observed by Canadian Forces. Patrol activities in 1994 provided no evidence of unauthorized driftnet fishing. No nets were observed in the water in either 1993 or 1994, suggesting that there has been a high rate of compliance with the international moratorium in the North Pacific.

In terms of marine mammals, the impact to salmonid populations in the Puget Sound area is generally from sea lions, rather than seals. The following is from NOAA et al. (1992):

"Many of the salmonids consumed by sea lions in Puget Sound are likely removals from fishing gear, especially gill nets used in salmon and steelhead fisheries in various locations around Puget Sound (Gearin et al., 1988.).

"Although sea lions are known to prey on free swimming salmonids, the high frequency of such predation has been documented only in the area of the [Ballard] Locks to date. The problem at the Locks is the most severe sea lion-fishery interaction documented to date and only at this location has it been demonstrated that sea lion predation on free swimming fish is excessive and is threatening the viability of run of wild fish."

Recent modifications of the Marine Mammal Protection Act allow the killing of nuisance animals such as those at the Ballard Locks.

Another source of potential impact to salmon mentioned by commentors is trawling. Trawl gear (mid-water, bottom, and shrimp) takes nearly 96% of all ground fish in the U.S. fisheries, and salmon are sometimes inadvertently part of the catch. This salmon "bycatch" (the accidental take of non-targeted species) has been well monitored by the National Marine Fisheries Service Fishery Observer Program since 1977, which has focused on the foreign, joint venture, and at-sea domestic whiting fishery. The whiting fishery represents more than 70% of Pacific coast ground fish landings and is the principal mid-water trawl fishery (National Marine Fisheries Service, 1992). Additional bycatch information was obtained through mesh size experiments conducted on trawlers during actual fishing operations off California, Oregon, and Washington.

From 1977 to 1991, with the exception of 1986, the annual salmon catch in the U.S. whiting fishery ranged from 2,300 to 16,000, averaging 9,500. The salmon catch in 1986 exceeded 40,000. Chinook salmon comprised 82 to 98% of the salmon bycatch in the 1986-1990 U.S. joint venture whiting fishery; most of the remainder were chum and coho (National Marine Fisheries Service, 1992). Although salmon are found in approximately 27% of all whiting tows, approximately 2% of the tows result in 50% of the salmon bycatch.

It is difficult to project the magnitude or distribution of salmon bycatch in the whiting fishery for future years. Bycatch will depend on the abundance of salmon and the success of management measures designed to reduce bycatch without unduly constraining the whiting fishery. It is likely that the Pacific Fisheries Management Council will continue to experiment with management actions that can be used to reduce salmon bycatch (National Marine Fisheries Service, 1992).

Q: To what extent do conditions in the marine environment versus freshwater habitat affect salmon?

A: Habitat degradation is a long-term problem that reduces the capacity of the freshwater environment to produce fish at its full production potential. Fewer fish migrating to sea as smolts results in fewer adult fish being produced for catch and spawning escapement. Further, freshwater habitat recovery is slow, often taking decades as the stream adjusts to altered channel, flow, wood and sediment conditions, resulting in a protracted period of lower fish productivity and stock recovery. Should marine survival be unusually low, as has been the case for the last few years, even fewer adults are produced.

Unlike freshwater habitat degradation, marine conditions can improve dramatically in a short period of time, returning ocean survival to higher, more typical rates. Marine survival rates for chinook and coho salmon appear to be improving as the warm El Nino waters leave the Pacific Northwest coast.

Unlike most Peninsula streams, the area above Lake Mills provides salmon and steelhead pristine spawning and rearing habitat because it has been spared the adverse, long-term impacts from recent timber harvest, water use, and human development that many other Peninsula streams are now experiencing. The habitat within the park will be preserved as mandated by federal law.

Q: What is the effect of overappropriation of water in the Elwha River on the decline of salmon stocks.

A: Since a minimum flow for the Elwha River has not been established, it is difficult to state whether the river has been overappropriated. Nonetheless, water withdrawals during the low flow period in the late summer and early fall probably negatively impact fish stocks. With removal of the dams, fish will be able to migrate past the affected reach quickly (approximately the lower three miles of the river) and into a natural flow regime.

Issue: Positive cumulative impacts

Q: What has been the regional positive impact on salmonids from watershed restoration, fishing restrictions, etc. Conversely, what are the cumulative negative impacts of logging, habitat development and destruction, and harvest on the decline the species have exhibited since the dams were built. Are there restoration projects in the region that have contributed to salmon population increases.

A: Negative cumulative impacts are discussed above. For a summary of large-scale restoration projects in the Pacific Northwest, see pages 20-21 of the Elwha Report.

More locally, some smaller restoration projects such as the addition of instream structures, have shown positive changes in juvenile fish abundance. For example, the Washington Department of Natural Resources (J. Cederhold, personal communication, 1995) has been conducting experiments in a small south Puget Sound stream and has demonstrated that juvenile salmon populations significantly increase following restoration of some of the instream habitat (large woody debris placement). Likewise, experimental placement of brush piles in the mainstem of a Washington coastal river, the Clearwater, was found to increase the density of juvenile coho salmon there.

Most freshwater habitats in the region for salmon and trout are in developed and/or degraded conditions. Repairing watershed damage requires extensive mitigation, much of which entails long-term, continuing costs. Also, on private land, there are no long-term guarantees that restored habitat will remain restored, that additional sources of water pollution will not surface, or that other alterations will not be made. In contrast, most of the Elwha watershed is within Olympic National Park, where it would be maintained in its present pristine condition in perpetuity.

Issue: Definition of full restoration and how long would it take to achieve it

Q: Commentors asked whether the fisheries could be fully restored, and, if so, how long it would take.

A: When we speak of full restoration, we are referring to pre-dam levels (but not to "Jurassic Park" or "pre-Columbian" as some have postulated). Essentially, unimpeded fish passage must be provided and inundated habitat and natural physical and biological ecosystem processes restored. In so doing, the conditions necessary for fish and wildlife populations to recover and the ecosystem to be restored would be provided.

Restoration timing would vary by stock and some harvest restrictions are already in place. Let's examine each stock individually.

1. Summer/fall chinook salmon: The Elwha stock of summer/fall chinook is currently sustained by both natural and hatchery production. Using Ricker curve-based recovery models, peak returns of chinook could occur in five cycles (21-25 years). This type of modeling assumes no outplanting effort. With outplanting, recovery time is shortened by one-half. Chinook harvest restrictions in the Elwha would probably be in place for the first two complete cycles (8-10 years). Additional harvest restrictions in localized marine fisheries (e.g., area closures in the Freshwater Bay vicinity) might be necessary during the same time period. Harvest restrictions in other Washington sport and commercial fisheries or Canadian fisheries to specifically accommodate Elwha restoration are not likely, as the depressed status of many other native Western Washington and Columbia River chinook stocks would probably have a larger influence in shaping fisheries for the foreseeable future. Elwha chinook would benefit from management actions aimed at rebuilding these other stocks.

2. Spring chinook salmon: Elwha spring chinook, if present, are likely present only in small numbers. It would be expected that, with restoration of summer/fall chinook stocks, a spring component would ensue; individual fish migrating to the upper reaches of the river and entering earlier would eventually form an isolated sub-population of spring chinook. The time frame for this is probably in terms of decades. Active outplanting of eggs and alevins in the upper river could speed up the process. No additional harvest restrictions for this stock beyond those already in place would likely be needed.

3. Coho salmon: Elwha coho are sustained by both natural and hatchery production, although hatchery fish predominate. Using Ricker models to predict recovery rates, peak returns of coho could occur in as little as five cycles (15-18 years). Assuming continued hatchery augmentation during the rebuilding phase, harvest restrictions in the Elwha River would be relatively minor and designed to mitigate impacts suffered during the deconstruction and immediate post-deconstruction period (5 years). Harvest restrictions similar to those for chinook salmon in marine fisheries (e.g., area closures in the Freshwater Bay area) might be necessary during the same five-year period. Also, as with chinook, harvest restrictions in other Washington sport and commercial fisheries or Canadian fisheries to specifically accommodate Elwha restoration are not likely, as the depressed status of other Western Washington and Columbia River coho stocks would probably have a larger influence in shaping fisheries for the foreseeable future. Elwha coho would benefit from management actions for rebuilding the other coho stocks.

4. Winter steelhead: The early returning portion of the winter steelhead run is heavily supported by hatchery production. Harvest restrictions would be minimal, based on run return strength. The late portion of the run is wild and considered depressed due to loss of habitat related to the dams. Based on Ricker models (no outplanting or hatchery influence), peak returns of wild steelhead could occur in as little as five cycles (15-18 years). Outplanting of eggs or alevins in the upper watershed would reduce this timeframe by one-half. Freshwater harvest restrictions, such as catch and release of wild steelhead, would probably be in place until sufficient numbers of spawners returned to the river (12-16 years). No restrictions would be anticipated for marine fisheries.

5. Summer steelhead: The outlook for restoration of summer steelhead is similar to that of winter steelhead, although the restoration period may be longer (20-25 years). Harvest restrictions would consist of catch and release of wild summer steelhead, as have already

been implemented throughout the state. Monitoring of adult returns would determine when harvest restrictions could be lifted.

6. Pink salmon: Elwha pink salmon are a native, wild stock of critical status, as evidenced by chronically low escapements (four returning fish in 1989, ten in 1991, none seen in 1993). Broodstock would probably come from the adjacent Dungeness River stock, depending on its status. Using the Sunset Falls example, returns remained low until a population threshold (2,000 adults) was reached, after which numbers increased rapidly. Ricker curve modeling predicts peak production occurring in 8 to 10 cycles (16 to 20 years). Outplanting or remote incubator sites would enhance this effort immensely. The Elwha River is already closed to the harvest of pink salmon. No additional harvest restrictions in marine areas are anticipated, as the harvest rate is already at the level needed for restoration purposes.

7. Chum salmon: The Elwha chum salmon population is estimated at between 200 and 500 returning adults. Chum population dynamics and life histories are similar to that of pink salmon in that spawning occurs over a relatively short period, the eggs incubate concurrently, hatching and emerging from the gravel at approximately the same time. Migration to salt water, done passively and en masse, tends to swamp predators. This strategy requires the production of large numbers of alevins before substantial population increases occur. Like Sunset Falls pink salmon, Elwha chum could remain at low numbers until a large increase in survivorship allows rapid population increases. Ricker models predict chum recovery in as few as six cycles (18 to 21 years). Outplanting at incubator sites would help shorten the time needed for recovery. Harvest restrictions would require closure of the sport harvest of chum in the Elwha during the early years of restoration, although the present harvest in the river is estimated in the tens of fish. No additional restrictions of marine fisheries would be expected.

8. Sockeye salmon: Elwha River sockeye salmon are essentially extinct. Sockeye restoration would probably require augmentation of the anadromous component of kokanee (landlocked sockeye) that reside in Lake Sutherland or the importation of a suitable stock. Once sufficient numbers of brood were secured, recovery could occur rapidly (3-5 cycles; 12-20 years). Since the recovery rate of sockeye was not addressed in the Draft Staff Report, a rebuilding curve based on Sunset Fall chum was used to simulate a sockeye recovery. A remote site incubation station would help boost production of this stock. Since there is no harvest of sockeye in the Elwha at this time, potential harvest restrictions would depend on the recovery of the species and the timing of the stock's return.

9. Searun cutthroat: The status of Elwha River anadromous cutthroat trout is unknown, although a small population is believed to persist. Since resident cutthroat trout in the upper Elwha River probably produce seagoing smolts, similar to that of resident rainbow trout, restoration is expected to occur naturally. However, the restoration timeframe is unknown for this stock. No additional harvest restrictions would be anticipated for this stock.

10. Searun char (Dolly Varden and bull trout): The status and restoration of Elwha River anadromous char is similar to that of searun cutthroat trout, although there is a larger population of char in the upper river than cutthroat trout. Restoration of this stock is expected to occur naturally and no additional harvest restrictions are anticipated.

Issue: Interior's assumptions/methods for full restoration; hatcheries, harvest restrictions, escapement

Q: To what extent will the Department of the Interior use hatcheries or other artificial means to restore or maintain fisheries.

A: The Department of the Interior is investigating the use of alternative fish habitat to mitigate the immediate short-term impacts that would result from the sediments should they be naturally eroded--for example, the feasibility of using springs as a water source for a downstream side channel now used by spawning chum salmon. Netting off the entrances and exits to existing off-channel pools in the upper watershed for use as acclimation ponds also is being considered. Fish reared in a hatchery could be placed in these ponds to acclimate to the waters of the upper watershed before being allowed to migrate downstream, thus accelerating and increasing the numbers returning to the upper watershed as adults. These measures and others would be described in the Implementation EIS.

Hatchery involvement in the Elwha River restoration process would reflect three primary needs. First, Elwha spring chinook, pink, and chum salmon stocks may not be present or may be in such low numbers that hatcheries may be needed to develop brood sources either from (1) the remnant fish in the Elwha or (2) the nearest compatible brood sources outside the basin. For stocks of winter and summer steelhead, cutthroat trout, and native char, existing resident populations may be producing seagoing smolts sufficient for restoration, or they could be placed in hatcheries to increase their numbers. More detailed descriptions of stock status are available in Appendix G of The Elwha Report. In developing hatchery brood sources, measures will be taken to protect the genetic integrity of the donor stock and the hatchery stock introduced into the Elwha. Second, continued hatchery production in the lower river may be needed during dam removal to maintain existing stocks of and coho salmon and steelhead if adverse water quality conditions arose from sediment releases. Third, hatcheries might serve as brood sources for salmon and steelhead outplanting in the upper river after dam removal. Outplanting could accelerate restoration of anadromous fish without adversely affecting the long-term genetics and success of the restoration program (Wunderlich and Pantaleo, 1995). Refinement of methods and sunset clauses on hatchery restoration would be further investigated in the Implementation EIS.

Q: Commentors asked what the impact of large amounts of sediment loading on fish would be and the whether fish would find "refuge" in pools created by river channels.

A: Although some fish might find refuge from high sediment loading of the river, it is primarily the finer or smaller particles--silt and clay--that affect them. These fine particles are likely to be in suspension through the water column, and would be difficult for fish or other aquatic life to avoid. Several options for protecting immigrating fish from sediment washing downstream, such as catching them during clean water times and moving them to off-river clean water areas or creating holding areas within the river that would not be subject to the sediment loads (above the dams, for instance) would be fully analyzed in the Implementation EIS.

Q: One commentor suggested that the slough at the mouth of the Elwha should be reopened to the river as an excellent smolting area for the "dog salmon."

A: The slough (Bosco Slough) area directly east of the mouth is accessible to and from the mainstem Elwha River. Bosco Slough was historically very important as spawning and rearing habitat for chum salmon and other species. The Elwha S'Klallam Tribe is presently working to improve the habitat in the slough by routing more water through it, flushing fine sediment out of the upper end, and restoring high quality spawning areas for natural fish production.

Q: Why restore native anadromous fish, rather than counting on hatcheries to supplement populations? The Department of Fisheries is taking only a certain quota of spawning chinook from the Elwha. Why does the state take only some of the eggs and let other spawn in the river if taking more eggs would produce larger runs?

A: Hatcheries and other artificial production facilities can accommodate only a certain number of fish. This production level may be the result of physical space limitations, water limitations, or budget constraints. Artificial fish production also may be limited to minimize impacts to naturally spawning fish populations in adjacent streams or rivers. In the Elwha, the Washington Department of Fish and Wildlife egg takes have been limited by the numbers of adult chinook salmon returning to the river. Although the department has always supplemented the egg take from fish that return to the channel trap by gaffing spawning chinook in the river, they seek to avoid taking too many naturally spawning fish so that production occurs both in-river and in the channel.

Naturally spawning fish are subject to natural environmental regulators that result in the unique genetic characteristics of fish stocks. In contrast, animal husbandry (e.g., raising fish in a hatchery) imposes constraints, either intentional or unintentional, that result in an organism poorly adapted to the natural environment. After a few generations, a highly inbred population may result (Davidson et al., 1989). It has been demonstrated that hatchery trout stocks have genetically changed from the indigenous source populations (Reisenbichler and McIntyre, 1977; Allendorf and Phelps, 1980). Maintenance of naturally spawning populations in the Elwha River help maintain natural genetic selection, as well as avoiding the risk of losing the chinook stock through the loss of hatchery production. For example, since the Elwha facility is not equipped to raise fish from egg to smolt, the eggs used to be shipped to the Solduc Hatchery. When diseased fish were found in the Solduc facility, one brood year of Elwha chinook had to be destroyed to prevent disease transference back to the Elwha. Naturally spawning fish in the Elwha maintained that brood year.

Q: Will fish be affected by sediment releases; if so, how will fish be collected for removal to clean water areas?

A: Some fish could die from sediment releases resulting from dam removal. However, the numbers (if any) would depend on the sediment methodology. Sediment releases can be managed by how the dams are removed and how fast. It may also be true that the Elwha fish would be less sensitive to sediment than conservative estimates. A case in point is the recorded return of an adult steelhead captured through electroshocking in the North Fork Toutle River only three months following the eruption of Mount Saint Helens when the river was still highly turbid.

Fish are commonly captured in rivers by electroshocking, whereby an electric current is used to stun fish. Electroshockers can be mounted either on a backpack or on a boat. Other methods include hook-and-line, beach seining, and trapping. Gill netting can also be used to capture adult fish without injury; a mesh small enough is used so that the fish get their snouts and teeth

hooked in the net without allowing the mesh material to reach the gills. Gill netting in this manner has been previously used on the Elwha River (see Winter, 1989). Many of these options for capturing and temporarily relocating anadromous fish, if needed, would be explored in the Implementation EIS.

Q: In the EIS, the Department of the Interior states that some management of the fisheries is needed, including a complete closure of the coho commercial fishery, to restore Elwha stocks. Interior does not have the power to enforce these needed management measures. How will these cuts in the catch of tribal, recreational, and commercial fisheries be implemented?

A: The environmental impact statement does not state that commercial fishing for Elwha River coho salmon would be closed; it states that hatchery production would be "phased out" over a number of years to move to a natural stock fishery. In fact, additional closures on any of the stocks would be minimal. (See the question in this section on time to achieve full restoration for additional information.)

Harvest management within Washington State waters is primarily conducted by the Washington Department of Fisheries and Treaty Tribes (see also The Elwha Report, p. 15) consistent with the Puget Sound Salmon Management Plan, although federal agencies provide input. The Department of the Interior has met individually with both the state and the Lower Elwha S'Klallam Tribe and is satisfied that additional harvest restrictions, if any, necessary to restore the Elwha River would be implemented.

Q: How will Interior set target escapement numbers and how will it commit to achieving them.

A: Interior would consult and coordinate annually with the other fisheries managers (the state and tribe) to set escapement goals for each fish stock. These goals would vary (usually upward until restoration was achieved) based on restoration response of the stock and, for some, on the rate of phasing out of hatchery production. Each of the fisheries management agencies and the tribe are committed to providing adequate escapement to fully restore the native anadromous fisheries.

Issue: Tribal fishing practices

Q: What are the Lower Elwha S'Klallam Tribe's rights to Elwha River fish?

A: Treaty tribes are entitled to up to 50% of the harvestable surplus of salmon and steelhead returning to their treaty-reserved fishing places. In the state of Washington, the tribes collect data and develop fish run size estimates in consultation and coordination with the Washington Department of Fish and Wildlife consistent with the Puget Sound Salmon Management Plan. Over the years from 1989 to 1992, tribal and non-tribal fisheries in Washington have harvested:

Year	Non-Tribal	Tribal
1989	4,855,000	4,752,000
1990	3,078,000	2,968,000
1991	4,788,000	4,040,000
1992	1,999,000	1,772,000

(Hoines, 1994, 1995, and Washington Department of Fish and Wildlife, January 1995)

The Elwha Tribe, and all Treaty Tribes of western Washington, are bound by the decision of U.S. vs. Washington in that they must take any steps "reasonable and necessary" to meet the burden of conservation. This responsibility is shared equitably with the state of Washington.

Q: Commentors asked Interior to explain the impact of the Boldt decision, full-mouth netting, and escapement on current and future Elwha River fishing stocks.

A: Cutting off approximately 93% of the accessible habitat by installing the Elwha Dam caused immediate and tremendous reductions in fish production. Nevertheless, many salmon and steelhead continued to return to the river, but their numbers decreased with time. Although commentors suggested that the Boldt decision, upholding Treaty Tribes' right to 50% of the harvestable salmon and trout, resulted in large decreases, no evidence was found that fish numbers in the Elwha declined abnormally following the Boldt decision.

The Boldt decision requires both the Treaty Tribes and non-Indian management agencies to maintain fish stocks by allowing adequate escapement (fish allowed to spawn). While non-Indian commercial and recreational fishermen capture a large portion of their harvest in marine areas before the fish return to the rivers, most Treaty Tribes prefer to take much of their harvest share in the rivers. In the Elwha, treaty fishermen often use gill nets hung from lines stretched across the river. Individuals viewing this activity may mistakenly believe that the line across the river represents a net hung fully across the river or its mouth; closer examination reveals that the net is hung across only half or less of the river width. The tribe limits the stretch across the river, the distance between the nets, the time, and the place of fishing to provide for adequate escapement.

Although the Boldt decision resulted in increased economic benefits from fish harvest for the tribes, they were historically major harvesters of the Elwha River fish stocks. Prior to the arrival of European settlers, harvest of the fish was "economic" and cultural. The economic value of harvest to the tribe prior to the Bolt decision is not known, but some of the fish could be harvested and sold. Had the dams not been present, there probably would have been more tribal harvest of these fish.

Issue: The effect of dam removal on water temperature; fish disease present in the lower part of the Elwha River

Q: How does removing dams cure fish disease?

A: Removal of the dams would not cure fish diseases, per se, but would improve conditions that influence its occurrence. Higher water temperatures generally exacerbate fish diseases. The two reservoirs store heat, resulting in elevated water temperatures downstream, primarily during the late summer and early fall (Draft Staff Report p. 3-23). Chinook salmon returning to the river at this time of the year are most susceptible to diseases and the compounding effects of higher water temperatures. Removal of the dams would reduce water temperatures as much as 4 degrees C in the summer. In addition, removal of the dams would allow the chinook (the spring run, in particular) direct access to the upper watershed to hold in deep, cool pools and to spread out, thereby avoiding the crowded conditions of the lower 4.9 miles of river. Crowding results in further stress to the fish and greater conveyance of diseases from one to another.

Issue: Use of modern technology to pass fish through the dams, as on the Baker River system

Q: Commentors challenged whether removing the dams would be more effective than fish passage measures such as those on the Baker River System.

A: (Also see Alternatives section) Approximately 16,000 sockeye salmon returned to the Baker River system in 1994, the largest returns on record. However, it only tells one small part of the story.

The Baker Lake fish collection barge was first put into operation in 1960 (Warner, 1961). By artificially creating waterflow through the barge exceeding that of the surrounding reservoir water, fish are meant to be attracted into the barge and collection system for transport around the dam. The effectiveness of the system is measured as the "fish guidance efficiency"--the percentage of those smolts migrating downstream that are captured in the trap. It is estimated each year by releasing a known number of marked hatchery coho salmon smolts above the trap and recovering those that enter the trap.

Prior to 1988, the apparent fish guidance efficiency was between 2 and 12%. Since 1988, following the installation of a barrier net that stretches bank to bank and from the water surface to the reservoir bottom, the efficiency has ranged from 27 to 73%, averaging 50%. Therefore, of the smolts migrating downstream, only half on average are captured to transport downstream.

Additional losses of fish occur as a result of the transport process. The Washington Department of Fisheries marked coho salmon smolts captured in the Baker trap and released below the dams. These fish were recaptured in a trap on the Skagit River at only a 70% rate of marked fish captured and released in Skagit River tributaries upstream of the Baker River. Much of this difference can be accounted for only by mortalities (Dave Seiler, personal communication, Washington Department of Fish and Wildlife, Olympia, Washington, 1995).

Supplementation, the release of hatchery fish to augment the numbers of naturally produced fish (see questions on hatchery fish in this section for additional information on associated problems), is necessary to achieve a desired escapement of approximately 4,000 coho to the Baker system. For the brood years 1989 to 1993, an estimated 30% of the returning coho were from natural production while 70% were from hatchery production. Chinook salmon do not appear to sustain themselves either (Steve Fransen, personal communication, U.S. Fish and Wildlife Service, Olympia, Washington, 1995). The Baker system has generally not been managed for the natural production of steelhead.

The fish guidance efficiency for pink and chum salmon is very poor. For example, 6,123 adult pink salmon of the 1993 brood were transported to the upper Baker. During the 1994 spring outmigration period, only 45 juvenile pink salmon smolts were collected and transferred downstream. Nine adult chum salmon were transported upstream and no juveniles were collected.

The fish passage systems described in this document for the Elwha River (see Dam Retention alternative) provide much greater passage efficiency than that of the Baker system. The Department of the Interior expects that the Baker fish collection and transport system will require extensive review and comparison with more current technologies during the upcoming relicensing process for that project.

Q: Would less expensive Eicher screens work on the Elwha River dams?

A: The Department of the Interior participated in the extensive testing of the experimental Eicher screen at Elwha Dam. Although the Eicher testing program was never completed by the Electric Power Research Institute and James River, the results indicate that this experimental technology offers promise for passing fish past Elwha Dam and projects with similar configurations. Conventional screen and bypass systems can provide results similar to or better than the Eicher screen system, but generally at greater cost. The dam retention alternatives propose the installation of Eicher screens at Elwha Dam with a fallback to conventional screens if the expected performance is not achieved by the Eicher system. Because of the high head at Glines Canyon Dam (the greater the fall of water, the greater the head of pressure produced within the penstock), the Eicher screen was not proposed to pass fish at Glines. Additional testing would be necessary if the Eicher screen was proposed for Glines Canyon Dam.

Regardless of the screen system used, juvenile fish must reach the dam in order to be screened and bypassed. Most juvenile pink and chum salmon would not pass through the reservoir and reach the dam to be bypassed. Losses of other salmon in the reservoirs also occur, but in lower numbers. Neither installation of Eicher screens nor other technology at either dam would solve this problem.

Issue: Enhancement vs. restoration

Q: Some commentors believe that full restoration is impossible and fisheries enhancement is a more accurate term and goal for the Elwha River.

A: Removal of the Elwha and Glines Canyon dams would be a restoration, not an enhancement project. Removal of dams and restoration of fish runs is not an "unproven theory." Dam removal and fish restoration has been done on the South Fork Clearwater River in Idaho and the Mad River in California (Winter, 1990). Fish runs have been established in habitat previously barren of anadromous fish (as the upper Elwha is now) in the South Fork Skykomish River and Deschutes River (Seiler et al., 1981). Fish are being restored in the Toutle River following the eruption of Mount Saint Helens (Lucas, 1985).

The Department of the Interior is currently assisting the Washington Department of Fish and Wildlife and area tribes in restoration efforts on the Dungeness and Hoh rivers. The problems in the Dungeness River include too much gravel and too little water; the Hoh has been impacted by timber harvest activities. While enhancement is the common terminology applied to such efforts, restoration of the runs would be more descriptive. (See Issue titled "Definition of full restoration and how long would it take to achieve it" above for more information.)

Issue: Use of experimental dredging and sediment deposition below both dams to increase certainty of the effects of sediment on the fisheries

Q: Comments were received about experimental dredging and deposition to restore downstream silt and gravel migration below both dams to a degree beneficial for fisheries. Commentors noted that mimicking nature with maximum bedload movement during peak flows may not always be beneficial for fish egg or alevin (early juvenile) survival. By the same token, excess deposition during low flow periods may accumulate to exaggerate impacts of bedload movement during subsequent peak flows.

A: Sediment could be transported below both dams, but would not result in fish restoration. Pink and chum salmon cannot be restored as long as Lake Aldwell remains, regardless of whether gravel is provided to the middle or lower river. Such a scheme also would be expensive and have additional impacts to the park and potentially to species listed under the Endangered Species Act (e.g., noise effects on spotted owls and marbled murrelets).

Salmon and steelhead have evolved in fluctuating and unstable environments. While high bedload movement during peak flow could result in mortalities during the incubation period, salmonid populations are generally dispersed enough to overcome such losses. Also, deposition does not occur during low flow periods, so does not exaggerate the impacts of bedload movement during later peak flows.

Issue: Restoration and/or passage of pink and chum salmon

Q: Commentors noted that the Federal Energy Regulatory Commission goal was not full restoration and that their fish passage measures never included those for pink and chum, including increasing drawdowns. The commission focus for fish passage was the "high-value" chinook, coho, and steelhead, and not "lower value" pink and chum.

A: Two of the Federal Energy Regulatory Commission's "three principal resource objectives" were "(1) restoration of anadromous fish production throughout the Elwha River Basin" and "(2) restoration of natural environmental conditions within [Olympic National Park]" (FERC, 1993). The commission addressed fish passage for all species, including pink and chum salmon, and concluded, consistent with federal, state and tribal fish and wildlife agencies and the consultants for James River, that extremely poor reservoir passage would preclude restoration of pink and chum salmon with the retention of Elwha Dam, regardless of any fish passage facilities at the dam. Experiments on the Columbia River to assist the downstream migration of chinook and sockeye salmon smolts involve reservoir drawdowns to as closely as possible mimic the natural river velocities. Since water withdrawal at Elwha Dam is by means of a surface diversion, drawdown to increase velocities is not possible for this reservoir. To maintain river flow in the event of a turbine shutdown, Lake Mills cannot be dropped below the level of the spillway. Interior was a full participant in the commission's fish passage deliberations and incorporated all practical measures that would aid the passage of all species, including pink and chum salmon through the reservoirs.

The statement that pink and chum salmon are of lower economic value so "there has been less emphasis in designing passage facilities to accommodate their special needs" is not true. Both the Washington Department of Fish and Wildlife and the National Marine Fisheries Service have developed fish passage criteria for the equally important species of pink and chum salmon. These criteria are constantly upgraded as new information and technology becomes available, as is true for all salmon species. New fish screens for the Yelm Hydroelectric Project were based on the needs of pink and chum salmon, species that require more stringent fish passage designs than other salmon because of their comparatively reduced swimming abilities. In addition, the fish ladder designed for that project adequately passes adult pink salmon. Once again, fish passage facilities are not the problem; getting juveniles through the reservoirs is.

Q: Public comments during The Elwha Report process suggested construction of a channel or tube to bypass fish around the reservoirs, particularly pink and chum.

A: This alternative has several significant problems associated with it (see Elwha Report, p. 226 of Appendix M). Passing fish down an artificial channel offers no particular engineering problems, assuming a feasible channel route could be located. However, fish would have to be directed from the Elwha River into the artificial channel, and this would be difficult. To be effective, a large amount of screen attached to a low dam would need to be built. The surface area and porosity of screen required varies; for pink and chum, current screen criteria require that water velocities approaching the screen not exceed 0.4 feet per second. Based on mean average daily flows during the outmigration months of March to June, more than 4,200 square feet of screen would be required. Since fish would migrate downstream during the entire year, the diversion facility would probably be designed to pass the relatively common flow of 10,000 cubic feet per second. To ensure velocities would not exceed the required 0.4 feet per second, 25,000 square feet of screen arranged in a deep "V" would be needed to direct pink and chum into the channel. Potential icing problems and litter washing down the river would present a virtually impossible task of keeping the structure clean enough to maintain velocity criteria and prevent screen failures. Because of this and cost, Interior does not consider building a channel around Lake Mills or Lake Aldwell to be a practical alternative.

Q: A comment was received stating that there are no self-sustaining populations of pink or chum above dams or reservoirs because these species historically spawn in lower river areas, and dams are in the upper rivers.

A: We respectfully disagree. Pink and chum populations can be found above dams with small backwater areas (e.g., the Yelm Hydroelectric Project on the Nisqually River in South Puget Sound), but they are not maintained above large impoundments even when fish passage facilities are provided (e.g. Baker Lake).

Q: Clarification was requested of EIS findings implying that passage of pink, chum, and sockeye is not feasible. Commentors note that the Skagit system, Lake Washington, and Fraser River have had success using fish passage measures for these species.

A: For pink and chum salmon, see response above. The environmental impact statement does not imply that sockeye salmon fish passage is not feasible. Sockeye passage at Elwha Dam is estimated as unfavorable to marginal. The Eicher screen is proposed for Elwha Dam, a technology that can result in greater smolt contact with the screen surface. Because sockeye salmon smolts tend to lose their scales as smolts more so than any other salmon (Elwha Report, 1994), fish passage for this species was rated down, but not out.

Issue: Indirect impacts of power generation from other sources on salmon population

Q: A request was received that the environmental impact statement include the indirect impact on other salmon populations from power sources that would be used to replace the power now provided by the Elwha dams. The commentor thought that other dams providing replacement power would need to release more water for salmon to migrate.

A: Because of the relatively small amount of energy produced, no specific project has been identified to replace the power from the Elwha and Glines Canyon projects. Rather, a mix of resources, including energy conservation, would make up the difference (see Elwha Report, p. 123). Also,

hydropower projects are required to produce power within the framework of their individual mitigation requirements. If those requirements adequately mitigate the impacts of the project, there would effectively be no additional impacts to other salmon populations.

Issue: Use of Elwha River as a pilot program area to raise salmon as now used in the Cowlitz hatchery

Q: A suggestion was received that the Elwha River should be used for a pilot program to maximize egg production, fertilization, hatching, and growth of naturally smart smolt that would return to the sea past dams and impoundments; the entire returning run could be used for commercial products while still maximizing egg production. The commentor suggested that a system used in the Cowlitz hatchery be installed for total capture, sorting, ripening, and spawning of salmon for fertilized eggs as close as possible to the river mouth. All non-spawners would be sold and the spawners would be ripened in ponds. Carcasses would be smoked and sold. The commentor notes that this system does not require fish ladders.

A: This scenario would not restore the ecosystem and would be inconsistent with treaty reserved fishing rights of affected tribes. A "pilot program" is unnecessary since we already have hatchery propagation in lieu of fish passage measures at other locations, including the Cowlitz River. Also, ladders are not necessary for Cowlitz River fish to return to that hatchery.

Issue: Historical access; data

Q: To what extent have salmon and trout had access historically to the upper reaches of the Elwha River given the presence of falls below the dams.

A: There is no documented record of any falls below either dam that permanently blocked adult upstream migration of salmon or steelhead. Historical access to areas above Glines Canyon Dam is not completely known for all species. It is possible that the rapids in the reach above Lake Mills (Goblins Gate area) may have inhibited or stopped upstream migration of pink and/or chum salmon since these two species do not pass barriers as well as some other salmon and steelhead stocks. A falls at river mile 33.7 on the mainstem river (18 miles above the Glines Canyon Dam), at times, may have stopped upstream passage of chinook and coho salmon. Successful passing of these falls would have been dependent on the flow at the time the fish were attempting to pass and condition of the fish. "Partial" barriers such as this can lead to the spatial separation of a species resulting in distinct run timing (e.g., spring and summer/fall chinook salmon). Steelhead are unlikely to have been impeded by these falls and would have had access to all of the mainstem Elwha River.

Q: Any historical fishing records for the Elwha? Please provide.

A: Summary data is available in the Draft Staff Report.

Flooding

Issue: Condition and management of existing levee system and flood impact to downstream structures

See Comment Letters: Caltrider, Melanie J. - C97; City of Port Angeles - C43; Craker, Marion F. &. Helen - C85; Dry Creek Grange #646 - C596; Ensor, Lavonne - C560; Hampton, Haidie M. -C107; Hartford, Kenneth - C471; Johnson, David Sirrine - C93; Ladley, Russ - C310; Lauderbaugh, Jack and Besteman, Laurie - C26; Main, Jerrine and Earnest - C336; Okanogan County Citizens Coalition - C552; Olympic Park Associates - C612; Philpott, Carol - C116; Warber, Brenda - C151; Washington Department of Natural Resources - C577

Issue: Condition and management of existing levee system and flood impact to downstream structures

Q: A number of questions were raised about the effect of dam removal on large floods and river "aggradation" or increases in riverbed elevation. Commentors wanted to know whether their property would be flooded, and whether impacts would be mitigated.

A: Flooding is a source of concern at the Elwha River mouth, with or without the dams in place, as levees on both the east and west side of the lower river indicate. Lake Mills and Lake Aldwell capacities' for flood control are small to none; they provide only minimal flood protection and only for short duration events. The dams are operated in a run-of-river mode most of the year, mimicking natural flow regime. Although hydrologic information shows there were some differences in pre- and post-dam flows (small floods were slightly larger before the dams were built), they are very small in comparison to their absolute magnitudes.

Both magnitude and frequency of flood events would change somewhat with removal of the dams because the riverbed and surface water elevation would rise (or aggrade) to approximate pre-dam levels (i.e. what it would be if the dams had never been built). In some places, the river might overflow its banks more often, causing localized flooding. Also, the channel could migrate more with greater erosion and sediment deposition along its length. Since flood level is a function of several factors (channel area, discharge, slope, channel roughness, velocity, and channel form), an increase in the volume of riverbed material does not cause a linear increase in flood elevation. More work would be required to determine where local flooding would occur if the dams were removed. Modeling is now underway to more specifically predict the degree of riverbed aggradation; this information would be available in the Implementation EIS.

Q: Commentors questioned the methodology used to predict the degree of flood that could occur if the dams are removed.

A: The methodology in predicting flood stages after dam removal is directly related to the sediment transport modeling, which was covered in the Draft Staff Report. To summarize the modeling approach used by the Federal Energy Regulatory Commission, observed water surface elevations were available at 1,568 cubic feet per second and 3,481 cubic feet per second for the lower river and were measured at 248, 1,200, and 12,000 cubic feet per second at 18 middle reach cross-sections. Calibration of the hydraulic model in the lower reach was a compromise between matching the observed low-flow water surface elevations and duplicating the original U.S. Army

Corps of Engineers calculation for flood flows along the set-back levee at the river mouth. The Elwha hydraulic model was converted to a sediment transport model (HEC-6) that was intended to estimate sediment transport and flood levels; calibration was for the higher flow range.

Hydraulic modelers hope to mimic observed conditions within approximately 0.5 foot in hydraulic models. Model calibration in the lower Elwha River at cross-sections upstream of tidal influence was within 0.5 foot of observed elevations for both flows at four cross-sections, within 1 foot at one flow and one cross-section, and within 2 feet of observed water surface elevation at one flow at two cross-sections. The middle reach consists of a sequence of high gradient riffles and lower gradient pools that would have required far more surveyed cross-sections than were practical to obtain at the time. Calibration at most of the middle reach cross-sections was within 0.5 and 2 feet. At several cross-sections, the calibration was poor, but considered adequate for routing sediment delivered from upstream, which was the main purpose of the model. Additional modeling of the potential impacts is being analyzed based on new cross-sections surveyed by the Bureau of Reclamation and Corps of Engineers.

The modeling approach and calibration are presented in Appendix C, Section C.2.1 of the Draft Staff Report (Volume I). When sediment transport is added to the HEC-6 model, flood levels depend on how fast sediment is released, how fast it moves down channel, and on the hydrology during the decade after sediment release. The models provide examples of what could occur. The models also allow us to compare how the river could respond to various alternatives.

Mitigation, including upgrades to the levee and water supplies, is discussed in this document, and would be more fully analyzed for public review in the Implementation EIS. The flooding and sediment analysis in the Implementation EIS would include the timing of lowering the reservoirs incrementally, both to control flooding and for worker and resident safety.

Q: Many specifically questioned the structural integrity of the existing levee system and how it would be modified to protect residences, historic structures, the fish hatchery, etc. from increased flooding.

A: The federal levee, constructed to U.S. Army Corps of Engineers specifications at the mouth of the river, was designed to provide a 200-year level of protection. No evidence of failure has been observed to date. The possibility of a major flood exceeding design capacity and causing a big washout is very remote. Mitigation for any impact to the levee from dam removal to ensure its original design level of protection would be explored and analyzed in the Implementation EIS. The Corps of Engineers is also investigating the west side levee and other flood protection measures and would recommend any structural changes necessary to maintain the present level of protection.

Q: One commentor noted that there was a bad storm in December 1993 and thought that, without the dams, the lower Elwha would be under water.

A: The two dams on the Elwha River did not provide any reduction in discharge to the lower Elwha valley during the December storms. Conditions during the storm would have been the same with or without the dams.

Q: A number of commentors advocated that the existing levees be removed so that natural flood events would not be artificially controlled, but questioned the effect of levee removal. Some view levee improvements in the lower river as potentially inconsistent with the restoration of the braided delta habitat that was a key component of the system's historic anadromous salmonid production.

A: The largest levee is the federal one on the east side of the river near the mouth. This structure protects 700 acres and much of the Lower Elwha S'Klallam Tribal reservation from a 200-year or less flood. However, it is set back a distance from the river, well out of the range of the natural meander. Because of the setback, the construction of the federal levee did not significantly affect channel morphology, wetlands, or the riparian vegetative zones in the lower river. The levee on the west side of the river constrains westward migration of the river channel and cuts off a relatively small portion of the former estuary. Although the removal of this levee on the west bank would restore this portion of the estuary and probably result in a larger post-project estuary, its removal is not necessary to fully restore the ecological functions or anadromous fisheries of the Elwha River. Removal of the levees is not authorized by the Elwha Act and is not being pursued.

Indian Trust Assets

Issues:

- Fulfillment of the federal government's legal responsibilities now and in the future to protect resources that may be impacted by the removal of the dams and restoration of the ecosystem
- Commitment from Lower Elwha S'Klallam Tribe to abide by fishing restrictions

See Comment Letters: Henry Sr., William P. - C249; Tveit, Mrs Larry - C413; Hilt, Dowell - C477

Issue: Fulfillment of the federal government's legal responsibilities now and in the future to protect resources that may be impacted by the removal of the dams and restoration of the ecosystem

Q: Some commentors asked for more details about how the federal government would fulfill its legal mandate to protect resources impacted by the project for tribal use now and into the future. Some maintained that the tribes needed to take specific actions to protect the fishery during river restoration.

A: Maintenance of the restored ecosystem and fisheries in consultation, coordination, and co-management with the tribe would protect treaty resources following dam removal. The tribe has indicated its intention to undertake the actions necessary to protect the fishery during restoration.

Q: Some questioned the economic gain to the Lower Elwha S'Klallam Tribe if the Elwha River were restored and whether this would be in the tribe's best interest. (Also see responses under the "Alternatives," "Cultural Resources," and "Socioeconomic" sections)

A: The tribe's valuation of the "gain" that would be achieved includes non-economic gains such as restoration of cultural and religious sites in addition to tangible, traditional economic values. Whether it is in the tribe's best interest is for the tribe, and not this environmental impact statement, to determine.

Authorization of the two dams, which preempts tribal treaty fisheries in the Elwha River, violates the Treaty of Point No Point and the federal trust responsibility to protect treaty fisheries as well as other trust resources. The Proposed Action would fully restore the Elwha River ecosystem and native fisheries, and uphold the federal trust responsibility to affected Indian Tribes. All other action alternatives would partially restore the ecosystem and native fisheries in varying degrees, but would not uphold the federal trust relative to the fisheries resource and access to usual and accustomed fishing places.

Q: One commentor alleged the draft environmental impact statement was in error to state Klallams were party to the Treaty of Point No Point, as the Jamestown Band was not given treaty rights until 1981.

A: It is incorrect to state that the Jamestown Band was given treaty rights in 1981. All of the three federally recognized Klallam Tribes--Elwha, Jamestown, and Port Gamble--are successors to the Klallam signers of the Treaty of Point No Point. By that treaty, the Klallams reserved hunting, fishing, and gathering rights to which the United States promised to give legal protection. The Jamestown Tribe was recognized by the federal government in recent times as having continued its governmental existence since the treaty. Its fishing rights were affirmed in federal court.

Issue: Commitment from Lower Elwha S'Klallam Tribe to abide by fishing restrictions

Q: Commentors were concerned that the tribe would not abide by any fishing restrictions necessary to complete fishery restoration. Some suggested the tribe commit in writing to honor any such restrictions.

A: It would not be appropriate for the tribe to commit to fisheries restrictions in an environmental impact statement. As a practical matter, the tribe, as is the state of Washington, is bound by federal law and the rulings of the court in United States v. Washington to those fisheries restrictions necessary to conserve and improve anadromous fisheries (see responses to related issues in the "Fisheries" section). The Department of the Interior is satisfied that the tribe and the state will manage fisheries to meet restoration goals.

Land Use

Issues

- Future management plans for project lands; how private property might be affected by future management of project lands
- Mitigation of impacts to public and private lands and property.
- Impact of dam removal on uses of Ediz Hook and consequences of transferring property there to the Lower Elwha S'Klallam Tribe
- Access to the river corridor after dams are removed
- Acknowledgment of Glines Canyon Gorge as an esthetic resource
- Development of interpretive opportunities after dams are removed for public education
- Impact of disposal of demolition waste material

See Comment Letters: Hartford, Kenneth - C471; Michalczik, Joe - C578; Washington Department of Fish and Wildlife - C577; Washington Department of Natural Resources - C577

Issues: Future management plans for project lands; how private property might be affected by future management of project lands

Q: Commentors asked for clarification how the project lands would be managed and what entity would be responsible for management in the future. Some commentors had suggestions for who should manage project lands once the dams are removed. Washington Department of Natural Resources indicated it would like to ensure that the lands are managed to achieve objectives of the proposal and comply with Wild and Scenic Rivers Act. The department also said it may be interested in acquiring some of the land if public access provisions are not guaranteed and/or may now be interested in acquiring some of the Lake Aldwell lands and cooperatively managing them with the tribe.

A: Several options for management of lands associated with the Glines and Elwha hydroelectric projects would be explored in the Implementation EIS. Lands acquired that are now part of the Elwha Dam project may be managed by Olympic National Park, by the state of Washington, held in trust for and used by the Lower Elwha S'Klallam Tribe, or co-managed by multiple entities. Projected land uses and impacts for each of these scenarios would be examined in the implementation EIS. A fourth option, to be placed in a wildlife refuge and managed by the U.S. Fish and Wildlife Service, has been rejected by that agency (the Elwha project lands are not believed to be large enough for a suitable refuge). More information on land use options and their impacts would be part of the Implementation EIS.

The Department of the Interior is aware of the Washington Department of Natural Resources interest and involvement in the land issues and plans to continue dialogue in areas of mutual concern.

Q: The Washington Department of Fish and Wildlife asked that the majority of project lands remain in a natural or semi-natural state to preserve biological integrity of the river corridor and compensate for wildlife resources lost for the 60-80 years since the dams were built. It recommended economic, residential, or mixed use be minimized and confined to already

disturbed areas, and asked that criteria to preserve land in its natural state include low gradient areas as well as land with steeper slopes.

A: The Implementation EIS would further examine land use options. However, criteria for management of the lands may be a third stage of planning outside the jurisdiction of the Department of the Interior, within the control of the newly designated owner or manager.

Q: Some commentors suggested that the National Park Service acquire James River land at the state rearing channel to convert these lands within the floodplain to their original use. Others suggested that the Park Service buy a large corridor north of Highway 101 and turn the land over to the tribe for economic development.

A: The Elwha Restoration Act authorizes only the acquisition of project (dams and reservoir-related) lands owned by the James River Corporation. Any addition to a national park must be approved by Congress. The Department of the Interior is not seeking to acquire additional lands to provide a "land corridor" along the Elwha River. Interior will not manage any lands outside the project boundaries. The Lake Aldwell lands are currently managed by James River and Daishowa America for hydropower production and timber management. Future management of these lands will depend on disposition (to the state of Washington, to Olympic National Park, or held in trust for use by the Lower Elwha S'Klallam Tribe, according to the Elwha Restoration Act).

To date, the National Park Service has not expressed any specific interest in the lands mentioned except to state ecosystem restoration should not be threatened by future uses of the land. The Elwha Report documented that the Aldwell project lands would qualify for inclusion in the national park system. Whether these lands are transferred to Olympic National Park is up to Congress.

Q: Commentors asked why the Olympic National Park boundary could not be changed to place the Glines Canyon Dam on private land outside the park boundary.

A: Removal of the Glines Canyon project from the park would not meet requirements of the Elwha Restoration Act to restore the ecosystem and native anadromous fisheries, and would not uphold treaty obligations of the federal government to affected Indian Tribes. In addition, a national park boundary revision requires an act of Congress--even land exchanges with Olympic National Forest. The 1986 land exchange between the park and the forest was authorized by Public Law 99-635.

Q: One commentor asked whether the Park Service was going to buy the "third dam site" above Glines Canyon Dam (a 121-acre site, Goblin Gate's, owned by Crown Zellerbach).

A: Crown Zellerbach owned approximately 121 acres in the Rica Canyon/Goblin's Gate area. The National Park Service purchased this parcel in 1984. The only private parcel in this area is owned by James River for the Glines Canyon project.

Issue: Mitigation of impacts to public and private lands and property

Q: Some commentors asked if public and private properties would be prioritized differently for mitigation

A: Public and private properties would not be prioritized differently for mitigation. The Department of the Interior does not contemplate any loss of property, although the U.S. Army Corps of Engineers has not yet completed their flood analysis study. Appropriate mitigation is currently being identified for private wells that could be adversely impacted by dam removal. The feasibility of establishing a contingency fund to cover mitigation costs for unanticipated well impacts is also under investigation.

Issue: Impact of dam removal on uses of Ediz Hook and consequences of transferring property there to the Lower Elwha S'Klallam Tribe

Q: Some commentors noted that Ediz Hook is used for a variety of purposes (fishing, picnicking, boat launching, log storage, etc.) and wanted to know how these uses would be impacted by dam removal and by the tribe's management of Ediz Hook.

A: Section 6 of the Elwha Restoration Act authorizes Interior to issue a lease to the city of Port Angeles for the lands currently included under the existing lease and to lease lands to the tribe. Under the Act, the tribe would have a long-term lease on 600 feet of the inside of the Hook on which to located a cultural facility. Although this development would have absolutely no effect on other activities occurring on the Hook, the act also explicitly provides for public access to the beach, construction and maintenance of a waterfront trail, and specifies that parking shall be open to the public at all times.

Issue: Access to the river corridor after dams are removed

Q: Comments were received about access to the restored lands after the dams are removed. One commentor asked that a legal easement for an Elwha public trail be developed along the river from the Elwha Dam site to the McDonald bridge crossing. Other suggestions for trails and access were also received and reviewed. The Washington Department of Natural Resources would like public access protected and addressed in any plan for disposition or management of lands acquired. The Department of Natural Resources would like to help develop provisions for public access in the second EIS (for trails, boat ramps, interpretive facilities).

A: Access to the project lands now include both the Elwha and Glines Canyon dams, boat launch sites at the south end of Lake Aldwell and the north end of Lake Mills, and hiking trails along limited sections of the reservoirs' shorelines. The Elwha Report states "with the removal of both dams and the potential connection of trails within Olympic National Park with the City of Port Angeles' waterfront trail, hiking and possibly biking opportunities would increase. Such a trail could become an important interpretive corridor...." (p. 44). Olympic National Park proposes interpretive programs with facilities possible at several sites within Glines Canyon project lands if they are acquired. The possibility of access would be generally examined in the Implementation EIS, and explored in even greater detail in a post-EIS planning process.

Issue: Acknowledgment of Glines Canyon Gorge as an esthetic resource

Q: Commentors noted that much of the river corridor can be considered as an esthetic resource, especially the Glines Canyon Gorge.

A: The Glines Canyon Gorge is a dramatic site--as are other locations in the project areas. The specific impacts to this and other selected esthetic sites during dam removal would be part of a visual analysis in the Implementation EIS.

Issue: Development of interpretive opportunities after dams are removed for public education

Q: Many commentors suggested that, if the dams are removed, sites be used to interpret the Elwha River story to the public through educational programs.

A: There would be extensive opportunities to interpret restored natural systems, at the river, riparian areas, and reservoir sites, if the dams are removed. Additional interpretive themes could include the deconstructed dam sites, the natural and cultural history of the Elwha River valley, impacts on fisheries and wildlife from dam construction, and the history of the dams. The Elwha Report (Appendix J) has more information on interpretive opportunities, as would the Implementation EIS.

Issue: Impact of disposal of demolition waste material

Q: What will be the effect of disposing of dam rubble, in particular on the marine environment and productive forest lands?

A: Options for the disposal of dredged silt and clay to an upland site to avoid impacts to the marine and freshwater environments may be further assessed in the Implementation EIS. The use of concrete rubble and rock from the removal of the two dams for restoration projects and for other beneficial uses, e,g., nearshore reef, would be considered during the evaluation of possible disposal options.

Living Marine Resources

Issues:

- Impacts of an increase in sediment on living marine resources in Freshwater Bay
- Increased sediment impacts to the Elwha River estuary
- Armoring the marine cliffs as a contributing factor in affecting living marine resources

See Comment Letters: Olympic Park Associates - C612; Schmitt, Francis J. - C68; Warber, Garry - C62

Issue: Impacts of an increase in sediment on living marine resources in Freshwater Bay

Q: Comments were received about the potential impact of increased turbidity during and after dam removal on Freshwater Bay, particularly to the bay's living marine resources. Some commentors asked that an outfall to pump slurried sediment, should this method of sediment

management be selected, be strategically located to have minimal impacts on living marine resources.

A: A decision whether to pump sediments into the marine environment, or where an outfall would be located if the slurry option were selected, would not be made until all reasonable sediment management alternatives were examined in the Implementation EIS. The Department of the Interior and its bureaus are still reviewing recommendations and concerns from the state and federal resource agencies and the general public, as well as additional biological and hydrological information. This information would be used to provide a sound biological basis for locating a pipeline outfall, should that be the method selected to remove sediment, in an area that would result in the least impact to important biological resources.

The impacts to plants and animals from pumping sediments into the marine environment would be primarily from smaller sized sediment. Sediment transported by pipeline and discharged to the Strait of Juan de Fuca would consist primarily of silt, clay, and lesser amounts of fine sand. Most silt and clay would not settle out but would instead remain suspended in the marine environment and be widely dispersed throughout the Strait, ultimately settling in deeper areas of the Strait. Fine sand also would be dispersed, but not as rapidly as silt and clay, by the relatively strong bottom currents. If the pipeline outfall were located on or near the shore, an even greater proportion of the fine sand would be transported in an easterly direction along the shore toward Ediz Hook.

Under the natural erosion alternative, silt and clay would mostly remain in suspension and become rapidly diluted with the large volume of marine water. The river and marine environment at the river mouth would appear very turbid during removal.

Larger grained sediment, which is likely to be sent into the marine environment via natural erosion, would initially settle out at the river mouth. Without tidal or littoral currents, deposition of this stored sediment could result in an area stretching approximately one-half to one mile out from the present river mouth, developing into a river delta in the first three years or so after dam removal. Since strong currents and wave energy exist at the mouth of the delta, sediment would subsequently redistribute into deeper water and along the coast.

Barrier bars would develop in front of the delta as they did historically. These bars would change form and be breached periodically depending on river flow and ocean conditions. Such activities are natural events of river mouths with high energy ocean conditions, and would continue after the sediment load returned to natural levels. These conditions are typical of occurrences at other river mouths, such as the Dungeness, under natural conditions.

Q: Commentors asked which species are most likely to be affected, and in particular how will clams fare?

A: The Draft Staff Report and this environmental impact statement predict the probable return of three hardshell clam species--littleneck, butter, and horse clams--in greater abundance than at present. The pre-dam species composition and abundance of these species is not known. However, all thrive on sandy or gravel-sized substrate which would be expected to return if the dams were removed (See Impacts to Living Marine Resources section of this document and FERC, p. 4-121).

Species most affected by the temporary increase in larger grained sediment would be sessile and benthic organisms currently within a quarter to a half-mile of the existing Elwha delta, although the actual range of effects may be greater. Species would include organisms such as attached macrophytic algae, clams, and polychaete worms. During the first few years of development, this zone might experience substantial loss of these types of organisms; but, marine life would reestablish within a short period. Mobile organisms such as crabs and fish would be less directly affected because they would be able to move out of the area and later return. However, the food source supplied to these organisms initially might be lost.

In the longer term, as the existing rocky substrate was replaced with a more sandy bottom, organisms such as large macrophytic algae and various types of snails, mussels, barnacles, and other crustaceans would remain in low abundance. A different set of organisms, such as horse clams, smaller algae species, eel grass, and crustaceans adapted to sandy conditions and possibly lower salinity, would replace these.

Issue: Increased sediment impacts to the Elwha River estuary

Q: What would be the extent of impact to the estuary and its function as a fish nursery, and how long would recovery take if the dams were removed?

A: The Elwha River now has a limited estuary. Only a very small zone near the river mouth, probably less than 300 feet wide, has any estuarine characteristics. Since the river flows almost directly into salt water with no transition area from low to high salinity, there are no habitat types typical of brackish water areas (e.g., eel grass beds, shallow fine sediment pools, and channels). Thus, there is little estuarine habitat to be impacted. The original fresh-salt water interface at the mouth of the Elwha River is estimated to have been at least 1000-2000 feet larger than it is today. This interface was an important habitat for all species of salmonids using the river, as well as for many other aquatic animals and plants.

The increased sediment load and turbidity of dam removal would initially impact the use of this small region, burying much of it in fine sand. When the initial load of sand reached the estuary, currents would begin to distribute sediment, and the development of a new and larger nursery habitat would begin.

Initially, the quantity of sediment may be large, but the wave transport capacity along the coast is high. The U.S. Army Corps of Engineers estimate that waves and currents in the area of the Elwha River mouth and Ediz Hook can move between 250,000 and 350,000 cubic yards per year--the same order of magnitude as the river's estimated pre-dam sediment supply. With the addition of approximately 6 million cubic yards of sand now stored behind the dams, sediment would initially deposit in an area 100 to 500 feet off shore. Coastal currents would immediately start to spread this material into a spit-like landform that would eventually extend 1000 to 2000 feet to the east, forming elongated offshore bars. The net eastward transport would tend to force the main river channels to turn in that direction. During storms or watershed floods, breaks would form in the offshore bars. Areas within the offshore bars receive fresh water from the river and saltwater flows during flood tides. In-flowing salt water contains large amounts of nutrients that support the rich ecology typical of estuaries.

In addition to fueling the growth of the estuary, increases in sand would replenish the nearshore area at the Elwha River mouth. Beaches would be wider with lower beach profile slopes and

more offshore bars, adding to the total area within the intertidal zone. Beach conditions would change farther along the coast over many years as the net longshore sediment transport distributed the sand along the coast. Sediment would be completely redistributed along the coast in 15-20 years.

Issue: Armoring marine cliffs as a contributing factor in affecting living marine resources

Q: One commentor asked that cumulative impacts to Freshwater Bay living marine resources include those which resulted from armoring marine cliffs and the resultant reduction in sediment load.

A: Impacts have been and would be largely to the east of the Elwha River, avoiding impact to Freshwater Bay except during ebb tides.

The Corps of Engineers, during its investigation of the erosion of Ediz Hook, estimated that, prior to the 1914 completion of Elwha Dam, the total sediment supply to to the hook from the Elwha River and the eroding sea bluffs to the east was approximately 320,000 cubic yards annually. Of this total, the Elwha is estimated to have supplied 50,000 to 80,000 cubic yards annually, and the eroding bluffs, 240,000 to 270,000 cubic yards annually. The construction of a wooden bulkhead in 1930 and the placement of riprap in 1958 to protect the water supply line reduced the sediment supply from the sea bluffs to approximately 90,000 cubic yards. Corps analysis indicates that waves in the vicinity of Ediz Hook have the ability to transport approximately 270,000 to 350,000 cubic yards annually, which far exceeds the present sediment supply. The sediment transport capacity in the area immediately to the east of Angeles Point would presumably be considerably less because of its more protected location. Because the transport capacity exceeds the present sediment supply, the beach slope has eroded and steepened and now consists of larger substrate and marine species that prefer this kind of habitat. With the return of the sediment supply from the Elwha, some beach areas to the east of Angeles Point would probably return to pre-dam conditions over time, i.e., more gradual slopes consisting primarily of sand and pebbles. As a result, nearshore habitat more suited to such marine plants and animals as sea lettuce, eel grass, flatfish, juvenile lingcod, cragon shrimp, and Dungeness crab would increase.

National Environmental Policy Act Process and Other Legal Issues

Issues

- General NEPA issues; the NEPA process and No Action
- Public participation in the EIS process; tribal role in NEPA.
- Ownership of the dams and the expiration of the Federal Energy Regulatory Commission's license

See Comment Letters: Caltrider, Melanie J. - C97; Clallam Bay / Sekiu Chamber of Commerce - C463; deBord, Linda - C564; Doyle, Genelle A. - C61; Dry Creek Grange #646 - C596; Fant, Karen M. - C547; Hartford, Kenneth - C471; Hulse, Clinton - C153; James River Corporation - C479; Mogck, Cal - C89; North Peninsula Home Builders and Building Industry Association of Washington - C449; Pulkownik, Susan - C334; Reed, Sandra E. - C562; Rescue Elwha Area Lakes - C333; Schwagler, Jacqueline - C598; Tveit, Gary - C462; Tveit, Mrs Larry - C413; Wise Use Movement - C521

Issue: General National Environmental Policy Act issues; NEPA Process and No Action

Q: Commentors with doubts about the success of ecosystem restoration questioned how a decision could be made without all the "answers."

A: It is rare that any entity, public or private, proposing any major project understands all possible impacts and the extent, duration, timing, etc. of those impacts. Environmental science deals with complex natural and living systems, yet the National Environmental Policy Act asks federal agencies to do their best to predict impacts and outcomes. This document does that--it uses the best science and specialists available to predict the outcome, knowing that a high degree of complexity and variability is inherent in the project.

Q: Some argued that the "No Action" alternative should be fully analyzed and considered a reasonable, selectable alternative, regardless of whether the Elwha Restoration Act asks for a determination of full restoration of the ecosystem.

A: Analysis of the No Action alternative is required by the National Environmental Policy Act to be a part of any environmental impact statement, and it is fully analyzed in this document. The No Action provides the baseline or environmental yardstick against which to compare action alternatives. The No Action alternative describes conditions as they are now, i.e., with the dams in place and no provisions for fish passage. The impacts of No Action are therefore the impacts the hydroelectric projects have caused. These impact are significant and adverse both in the short and long term. No Action also does not meet the congressional mandate as defined in the Elwha Act or Interior's objectives in fulfilling that mandate. It is Interior's least preferred option for these and other reasons.

Q: Commentors asked for clarification on the impacts of the No Action alternative on the potential for continued litigation, loss of jobs, etc.

A: If the dams remain in place without fish passage measures, litigation over final disposition of the projects and the potential violation of tribal trust rights and laws requiring fish passage would probably ensue. If lengthy litigation was resolved in favor of leaving both dams standing but required the owners to obtain a license to operate, Federal Energy Regulatory Commission-imposed mitigation would cost between $17-$34 million, plus annual operation and maintenance costs. Assuming these costs are passed on to the mill, there might be economic consequences, such as loss of jobs, etc.

Issue: Public participation in the environmental impact statement process; tribal role in NEPA

Q: Some commentors believed there had not been adequate opportunities for involvement in the Elwha Restoration planning process.

A: Public information and opportunities for involvement have been available and extensively advertised since the Federal Energy Regulatory Commission began its formal licensing process in August 1989 and include: two commission scoping meetings, a scoping document sent to all who attended or were interested, a draft environmental impact statement, a draft Elwha Report (later submitted to Congress), an open house to answer questions on the Elwha Report, public workshops for the Department of the Interior draft environmental impact statement, a scoping

workshop for the Implementation EIS, extensive periods to submit written comments on all documents, and thousands of pages of material in response to those questions. Notice of these opportunities and paid advertisements were placed in local and regional newspapers; copies of documents were mailed to a very long list of interested parties; and every effort was made to include all interested in the project. The Department of the Interior regrets having missed any interested resident.

Q: Some thought that the method for obtaining public input at the public meetings held in November, 1994 did not allow sufficient opportunity for public comment. Commentors thought that only one side was heard at the meetings. Some asked why meetings were held in Seattle, Washington.

A: The purpose of public workshops, hearings, open houses, or other involvement efforts on environmental impact statements is primarily to gain insight on issues and determine information gaps in the document. Traditionally, agency staff conduct the involvement effort, collect and respond to comments, and rewrite the draft as completely as possible before it is finalized and sent to the agency decision-maker. In some cases, all comments, even if they are not substantive but argue for or against the proposed project itself, are made available to the decision-maker. This is National Park Service policy, and a copy of each letter received within the allotted time period has been included in this environmental impact statement.

Since it is the staff and not the decision-maker who conduct the public workshop or hearing, debate on the pros and cons of the proposal would be misdirected. This is why the Park Service provided a comment form for participants to complete and mail, thereby ensuring that their opinions become part of the record presented to the decision-maker.

The Department of the Interior specifically and deliberately chose the public workshop format, rather than hearings, to encourage public comment. Agencies that routinely conduct public hearings are often criticized for overly formalizing the process by using hearing officers, restricting comment time, requiring commentors to arrive at a certain time and sign up to speak, and using microphones and court reporters. Many members of the public find this combination overwhelming and intimidating, and decline to comment as a result. The workshop was specifically designed to be a comfortable place for all to comment and get answers to their questions. The comments heard at each workshop were recorded, summarized, and are responded to in this final environmental impact statement.

Restoration of the Elwha River is of local, regional and national concern. It involves Olympic National Park lands, which belong to all citizens of the United States. Therefore, workshops were held in Seattle, and information about the environmental impact statement was published in the U.S. Federal Register, a document which is distributed nation-wide.

Q: Comments were received questioning the role of the tribe in the EIS process.

A: The Lower Elwha S'Klallam Tribe is one of several agencies cooperating with the National Park Service in the preparation of the environmental impact statement and the Implementation EIS.

Issue: Ownership of the dams and the expiration of the Federal Energy Regulatory Commission's license

Q: One commentor asked whether ownership of the dams wasn't supposed to revert to the tribe or a public utility district since their "licenses had expired."

A: The Federal Energy Regulatory Commission, pursuant to the Federal Power Act as amended by the Electric Consumers Protection Act of 1986 and the U.S. Department of Energy Organization Act, is authorized to issue licenses for terms from 30 to 50 years for the construction and operation of non-federal hydroelectric developments. The Elwha Dam has never been licensed; the Glines Canyon Dam license expired in 1976 and it has since operated under annual licenses.

The two dams on the Elwha River are owned by James River Corporation and operated by Daishowa America. The Elwha Restoration Act specifies acquisition of the dams by the federal government.

Q: It was suggested that, in the event the selected alternative does not require removal, a provision should be made in the license to finance the removal of the dams if and when a future decision was made requiring dam removal.

A: This comment would be appropriate to pass on to the Federal Energy Regulatory Commission, should the projects not be acquired by the Department of the Interior and the licensing process reinstated.

Power Generation

Issue:

- Sources and costs of replacement power

See Comment Letters: Caltrider, Melanie J. - C97; Childs, Phyllis and David - C105; Copeland, Delbert - C280; deBord, Linda - C564; Hampton, Haidie M. - C107; Hartford, Kenneth - C471; Julian, Tony - C478; Maupin, Eddie - C48; North Peninsula Home Builders and Building Industry Association of Washington - C449; Okanogan County Citizens Coalition - C552; Pirie, Ken - C284; Rescue Elwha Area Lakes - C333; Schwagler, Jacqueline - C598; Swinford, D. G. - C76; Tisch, Edward L. - C55; Tveit, Mrs Larry - C413

Issue: Sources and costs of replacement power

Q: Commentors wanted to know the conservation potential at the mill.

A: Daishowa began to rebuild and upgrade conservation measures in 1989. These measures have accounted for an annual savings of 26.6 gigawatt-hours (Draft Staff Report, p. A-137). For the sake of comparison, the two dams on the Elwha River provide approximately 172 gigawatt-hours; the mill's annual requirement is about 400. Power generated by the Elwha and Glines Canyon dams provides approximately 43% of that required to operate Daishowa mill. An energy audit conducted for the Port Angeles Light Department in 1991 identified additional potential savings of 9.6 gigawatt-hours annually, approximately 2% of the mill's load. The source of these savings could be realized by installing adjustable speed drives, high efficiency motors, and a system of

motor shedding on refiner lines that would reduce eddy current coupling. Other energy saving items were identified, but their cost effectiveness was not determined in the audit.

For comments about use of "co-generation" of power at the mill as an energy conservation measure, please see the "Alternatives" section.

Replacement power for the Elwha and Glines Canyon projects would come from any of a wide variety of conservation and electrical generating resources. Recent proposal requests for new power sources by regional utilities have received responses from various conservation projects, hydroelectric facilities, and cogeneration gas projects. Because of the mix of new power sources and the small size of replacement power needed (only about one-third of the mill's power), there would be no significant changes in the regional power supplies (or, as one questioner asked, in the national balance of payments).

Q: Commentors questioned whether costs of providing replacement power would be prohibitive and cause the mill to go out of business. They also asked what the environmental costs of replacement power would be.

A: Loss of hydroelectric generation would represent a marginal decrease in regional energy supply. This deficit would be made up from combined sources available to the regional energy grid and provided to Daishowa at Bonneville Power Administration's preferred industrial rate. Associated environmental consequences might be localized, as in the case of specific generating projects, or widely distributed, as with conservation programs or across Bonneville's regional supply. There would be a slight increase in power plant emissions from the replacement source, depending on the type of facility generating the power. Air emissions are associated with combustion turbines, cogeneration installations, and coal-fired power plants. Both the Draft Staff Report (pps 4-213 to 215) and Elwha Report (pps 128-129) contain additional information on environmental impacts of replacement power sources.

Q: Commentors were concerned about the impacts of a third trunk line potentially needed to supply replacement power to the mills.

A: Bonneville Power Administration intends to construct the trunk line regardless of the outcome of the river restoration project.

Recreation

Issues

- Current use of area and mitigation for loss of reservoir recreation
- Access into the park during dam removal
- Increased use of park lands after fishery is restored and efforts to maintain the "wilderness" character of the park

See Comment Letters: Clark, Robert J. - C599; King, David - C393; Okanogan County Citizens Coalition - C552; Olympic Rivers Council - C271; Rescue Elwha Area Lakes - C333

Issue: Current use of area and mitigation for loss of reservoir recreation

Q: Some commentors disagree with statements that the Elwha River and/or Lake Mills and Lake Aldwell are not well known for recreation and ask that data on current use be updated.

A: The Elwha area of Olympic National Park is not as heavily visited as other areas in the Park, such as Hurricane Ridge, Lake Crescent, the Hoh River rain forest, or the Pacific shoreline at Kalaloch. To quote the Draft Staff Report, "The Elwha subdistrict generally receives less recreational use than most other subdistricts within ONP. The Elwha district generally receives one-fourth as many annual visitors as the neighboring Hurricane subdistrict, and only one-twentieth the Lake Crescent district."

Current uses on the reservoirs are oriented around fishing and boating. The Draft Staff Report states that anglers spent between 8,500 and 9,500 hours fishing both lakes in the summer of one year. Impacts from these activities include the taking of fish, noise from boat motors, and those of providing access to the reservoirs. Current uses do not create significant environmental impacts, although this document reveals that the reservoirs have had a serious negative impact on the Elwha River ecosystem and native anadromous fisheries.

User numbers and characteristics were investigated and discussed in the Draft Staff Report (p. 3-86) and are included in this document (see "Impacts to Recreation, Esthetics and Land Use" in this document). Other uses of the area are acknowledged, such as surfing at the mouth of the Elwha River, but these dispersed uses were not considered significant. More current user numbers would be provided in the Implementation EIS, if available from federal, state, or local recreation providers.

Q: A number of comments were made about the impact of dam removal on recreational use of the two reservoirs, expressing the belief that mitigation for loss of this use is required.

A: Reservoir recreation would be irretrievably lost or displaced to other reservoirs or lakes in the region. This recreation would be replaced by river recreation activities under the Proposed Action--for instance, river paddle sports would be enhanced. Other area lakes, particularly Lake Crescent, would continue to provide slack water recreational activities. The Implementation EIS would further quantify the economic and social impacts of loss of reservoir recreation and that of increased river recreational opportunities.

Issue: Access into the park during dam removal

Q: Commentors asked whether the Elwha subdistrict of the park would be closed during construction.

A: Access into the national park up the Olympic Hot Springs Road into the upper Elwha River valley during dam removal would probably be restricted to shuttle buses or tours to avoid conflicts with the large amount of construction traffic on the narrow park roads. Also, during the dam removal phase and for the first year thereafter, large sediment loads and increased woody debris or a slurry pipeline along part of the river may make boating use on the river less attractive. Restrictions expected to be in effect for six months to two years might be seasonal, daily, or otherwise staggered. Additional study would be a part of the Implementation EIS

and/or the permitting and design phases of the project. (Additional information on access can be found in the question and answer section on Land Use).

Issue: Increased use of park lands after fishery is restored

Q: How will increased use affect efforts to maintain the "wilderness" character of the park?

A: The wilderness nature of the park would be reinforced through the restoration of the salmon and steelhead runs to the upper Elwha River and the animals that feed on them. Olympic National Park anticipates that restoration of the ecosystem would draw many who are interested in observing restoration in progress and those who would like to fish in an undisturbed, natural setting. The Elwha basin would be like other popular areas of the park that now receive high use. Proper management would prevent overuse.

Sediment Management

Issues:

- Dam Removal impacts on Ediz Hook
- Impact of dam removal on sediment supply and methods and costs for controlling sediment
- Time required to restore landscape
- State ownership of riverbed
- Investigation of options for disposal of concrete debris
- Rate at which sediment would fill Lake Aldwell if only Glines Canyon Dam were removed

See Comment Letters: Henry Sr., William P. - C249; Johnson, Edwin - C115, C287; Ladley, Russ - C310; Loucks, J. &. M. - C63; Maupin, Eddie - C48; Mossman, Barbara E. - C75; Olympic Park Associates - C612; Rescue Elwha Area Lakes - C333; Stachorek, Richard W. -C243; Tutton, Thomas A. &. Mary Ann - C99; Washington Department of Natural Resources - C577

Issue: Dam removal impacts on Ediz Hook

Q: Commentors questioned the draft environmental impact statement conclusions on the impact of dam removal on Ediz Hook: How the existing dams and reservoirs and the marine bluffs affect the sediment supply to Ediz Hook and the current and projected costs of maintaining Ediz Hook with and without the dams.

A: Material from the historic Elwha delta helped to create and feed Ediz Hook, an above-surface extension of sand, gravel, and cobbles that forms the bayward side of Port Angeles Harbor (FERC, p. 3-20). This material has also nourished beaches and nearshore areas. The drastic reduction in sediment supply from the river has caused some erosion of both beaches and the western edge of Ediz Hook.

The U.S. Army Corps of Engineers, which spends approximately $100,000 annually to control further erosion of Ediz Hook (U.S. Army Corps of Engineers, Jan. 1995), estimates contribution from the river before the dams were built to have been between 50,000 and 80,000 cubic yards

per year. Currently, the river contributes a negligible volume of sediment to the Hook. A set of marine cliffs east of the river mouth also helped form and sustain Ediz Hook, but this source, too, has been vastly reduced. In 1930 and again in 1958, the cliffs were stabilized to control erosion and protect the city water supply line at their base. These actions reduced total sediment loads to the area's coastal zone by approximately 55%. Sediment from the Elwha River before the dams were built contributed an estimated 35% of that supplied to the coastal zone.

Q: One commentor suggested that a report by Galster and Schwartz (Ediz Hook--A Case History of Coastal Erosion and Rehabilitation) be reviewed by the environmental impact statement team since it apparently conflicts with the draft environmental impact statement findings on the erosion rates of the marine bluffs and Ediz Hook, as well as the composition of Ediz Hook. The commentor suggested Ediz Hook was composed primarily of Elwha River, and not marine cliff, sediments.

A: The environmental impact statement team, which includes Maurice Schwartz, co-author of the cited study, notes that the reported one-foot-per-year bluff recession rate is an approximate long-term average based on the interpretation of former coastline locations over the past 5,000 years as the current sea level was established. Based on historical maps and photos, the Corps estimated erosion to be 4 to 5 feet per year in recent years (U.S. Army Corps of Engineers, 1971, 1976).

The long-term average rate is a very rough estimate that does not show periods of increased or reduced erosion caused by changing coastal conditions. The Corps estimate reflects erosion since about 1884 when the first maps of the coast were prepared. Rates in the past 110 years may be more rapid than in earlier years or the long-term estimate may be inaccurate.

The marine cliffs consist of glacial outwash and till that are a mix of silt, sand, gravel, and cobbles. Erosion of the bluffs was a major source of sediment to the coastal zone along with sediment from the Elwha River. Based on an update of the Corps report, which used more complete estimates of the Elwha River sediment yield, Elwha sediments have contributed a larger portion of Ediz Hook than the draft environmental impact statement estimated. The Corps (a cooperating agency) has updated its estimate and now believes the dams have reduced sediment to the coastal area from the Elwha River mouth to Ediz Hook by 35%, and armoring the marine bluffs by 55%.

Issue: Impact of dam removal on sediment supply and methods and costs for controlling sediment

Q: Some commentors asked for more clarification on how the sediment stored behind the dams would react and/or the impacts it would have. Some asked for results of reservoir drawdown tests that agencies have conducted. One commentor asked that the amount of sediment that would be expected in the Elwha after dam removal be compared with that in a river after a clearcut. Others asked to what extent natural processes would remove the sediment behind the dams and whether artificial stabilization was really needed.

A: Two reservoir drawdown tests have been conducted to assess how fast the delta sands and gravels would erode should the dams be removed. Both tests indicate that the deltas would erode as quickly as the reservoir can be drawn down. Both the tests and drawdowns to augment low summer flows have redistributed sediment to a point farther downstream and closer to the dam, as well as resulted in channel erosion of the delta. Finer grained sediment (silt and clay) is expected to erode even quicker than the delta sands and gravel.

Releasing sediment would affect water quality, fisheries, and the marine environment in the short term. Although now only 20 to 40% of the fine grained sediment in the Elwha River is captured in the reservoirs (the rest flows to sea), approximately 9 million cubic yards of this material has accumulated behind the two dams.

Although releasing this much sediment at once would exceed yields typically following timber cuts, impacts to the main river channel from timber cuts are similar to impacts from dam removal. A study of the Huelsdonk Ridge, Hoh River, indicates approximately 9,000 cubic yards of material per square mile per year was mobilized in the basin following a clearcut (Logan et al., 1991). Of this amount, an estimated 3,200 cubic yards of material per square mile per year was delivered to the main channel; this compares to the estimated natural upstream sediment supply of the Elwha River of approximately 1,200 cubic yards per square mile per year. The impacts of dam removal would be of much shorter duration than those from clearcutting a watershed. Whereas a portion of the material that has accumulated in the reservoirs would wash downstream in one or two years, the effects from a typical clearcut watershed may persist over decades.

Suspended fine sediment would wash into the river and marine nearshore environment of Freshwater Bay and Puget Sound. Some of this silt and clay as well as the coarser sand and gravel would build up on the river mouth delta similar to pre-dam conditions, typical of river mouths. Some would be actively transported east by the dominant littoral currents, or by ebb flow to the west into Freshwater Bay. Freshwater Bay would evolve toward a natural river mouth condition.

As stated in this environmental impact statement, cost estimates of sediment management vary, depending on the option. The Department of the Interior estimated reasonable upper and lower limits of cost for the full range of possible scenarios. In the Implementation EIS, this range would be refined and narrowed. Some of the more costly scenarios presented in the Elwha Report will probably be eliminated since they do not protect important resources, such as the returning fish, water quality, or private property along the river, to a greater degree than the less expensive options. In this document, costs are updated as the result of new information; cost numbers will continue to be refined in the Implementation EIS.

Q: Some commentors stated that activities and costs associated with mitigation of dam removal impacts are peripheral and should be secondary to restoration of the ecosystem.

A: The Department of the Interior does not consider sediment stabilization or removal, or protection of water quality, to be peripheral to the project, even though the main goal is to restore the Elwha anadromous fisheries and ecosystem. Dam removal itself accounts for approximately $20 million of the estimated $75-$100 million to restore the fish and ecosystem. Other costs, such as $29.5 million to acquire the dams and those for sediment management and water quality protection, are delineated in the Elwha Report and this environmental impact statement. As stated above, these costs are being refined as more is learned.

Issue: Time required to restore landscape

Q: Commentors asked that the environmental impact statement elaborate on the time it would take to restore the river channel after removing the dams.

A: The rate for most of the sediment to be transported out of the system would vary depending on weather conditions and erosion control efforts. Bedload sediment stored along the river channel would take between 1 and 20 years to move downstream depending on grain size; cobbles and boulders move most slowly. Major impacts from the fine lake bottom sediment would cease within the first year. More sediment and woody debris would be exposed along the river and on the bar tops because of the increased sediment and woody debris delivered from upstream; however the river would look like most rivers in the region. Within 3 years, pioneer plants on reservoir and delta sediments would be established.

Issue: State ownership of riverbed

Q: The state of Washington has stated that it owns (exclusive of tribe-owned lands or lands held in trust for the tribe) the beds and shores of all navigable waters in the state, including those of the Elwha River, up to and including the line of mean high tide and/or the line of ordinary high water or permanent vegetation up to river mile 14. The state would like assays conducted for valuable minerals, and multi-agency planning and legal agreements in place before sediments are removed.

A: The environmental impact statement team is working with the Washington Department of Natural Resources to assess the nature of the sediment and locate markets or uses for it. If appropriate, these options would be presented in the Implementation EIS. Delta sediments have been preliminarily checked for hazardous materials; none were found. Assays for valuable minerals are not planned. Based on the geology of the basin and past investigations of the area, commercial quantities of minerals are unlikely. Regardless, the Department of the Interior intends to comply with all legal and permit requirements, including those of the state.

Issue: Rate at which sediment would fill Lake Aldwell if only Glines Canyon Dam is removed

Q: How long would it take to fill Lake Aldwell with sediment released from Glines Canyon Dam if only it is removed?

A: If the Glines Canyon Dam is removed, 7 to 9 million cubic yards of sediment (one-half to two-thirds of the total) stored in Lake Mills would end up in Lake Aldwell, reducing its capacity by 40% to 60%. The remaining storage would fill in 40 to 50 years.

Socioeconomics

Issues

- Reducing costs or increasing benefits
- Economic and environmental costs of replacement power
- Effects of relicensing scenarios on costs and the cost of fish passage measures for dam retention alternatives
- Cost of hatchery operations
- Future benefits of restoring the Elwha River ecosystem and fisheries; future costs of No Action
- Economic impacts to those potentially affected: private property owners, Clallam County, shellfish industry, Lower Elwha S'Klallam Tribe, park concessionaires.
- Evaluation of other potential economic opportunities for the tribe
- Economic impacts of potentially listing additional salmon species on the Endangered Species list
- Cost of restoring the Elwha River ecosystem compared to costs of salmon restoration projects in other areas of the Pacific Northwest
- Historic or past economic impact of the dams on the decline of the fishery
- Use of survey to measure public opinions about restoration of the Elwha River Ecosystem
- Cost of flood protection and mitigation of impacts to wells as a result of dam removal
- Quantification of the cost to rebuild roads to accommodate construction equipment, i.e., Olympic Hot Springs Road
- Potential marketability of gravel and/or silt recovered during dam removal

Comment Letters: C118; American Whitewater Affiliation - C576; Beil, Ronald - C119; Bender, Tom - C36; Bussell, Eldon - C431; Caltrider, Melanie J. - C97; Chadd, Edward - C545; Childs, David - C52; Clallam Bay / Sekiu Chamber of Commerce - C463; Clark, Robert J. - C599; Copeland, Delbert - C280; deBord, Linda - C564; Dry Creek Grange #646 - C596; Ensor, Lavonne - C560; Erickson, Dale - C519; Evans, Daniel J. - C609; Friends of the Earth -C542; Gehrke's Gink - C148; Grover, Kelly - C483; Hewes, Patrick - C433; James River Corporation - C479; Latuala, L. F. - C15; Lombard, John A. - C248; Lonn, Benjamin - C335; Lydiard, Harry - C109; Main, Jerrine and Earnest - C336;Mantooth, Roberta T. - C426; Mazamas - C610; McNulty, Tim - C549; Mossman, Barbara E. - C75; North Peninsula Home Builders and Building Industry Association of Washington - C449; Okanogan County Citizens Coalition - C552; Olympic Park Associates - C612; Olympic Rivers Council - C271; Pirie, Ken - C284 ; Powne, Bob - C540; Pulkownik, Susan - C334; Reed, Sandra E. - C562; Rescue Elwha Area Lakes - C333; Roline, Les - C86; Santos, Thomas - C556; Schwagler, Albert J. -C561; Schwagler, Jacqueline - C598

Issues: Reducing costs or increasing benefits

Q: Comments were received requesting that Interior clarify its conclusions about economic costs of the project compared to the benefits gained from dam removal and ecosystem restoration. Commentors requested that the document break out costs for sediment management, dam removal, rubble disposal, water quality mitigation, etc. Cost estimates seem too high in the Elwha Report for removal ($180-$300 million) based on dams removed on the Clearwater River in Idaho.

A: Additional discussion on costs and benefits is in the socioeconomic section of the document. Cost estimates will be refined for specific dam removal and sediment management project alternatives in the Implementation EIS. The U.S. Bureau of Reclamation heads the project cost estimation team and regularly designs, costs, and supervises projects of the scale described here. If dam removal is selected, the bureau will manage dam removal and disposition of stored sediment.

Based on recent estimates, total costs for the Proposed Action are expected to be between $75 and $101 million; this includes the $29.5 million to acquire the dams, a price determined by the Elwha Restoration Act. Approximately $20 million of the total cost would be for engineering design and dam removal, including disposal of rubble. Another $4 to $31 million would be spent to manage the sediment stored behind the dams (i.e., erode, pump out and slurry, or recontour and stabilize on site), and between $7 to $35 million to ensure adequate mitigation for municipal and industrial water quality. Costs to protect water quality are inversely related to those required to manage sediment. A further breakout of relative costs is in the appendixes to the Elwha Report (Section VII, beginning on p. 133). More precise estimates of sediment management and water quality costs would be available in the Implementation EIS, but this information would not be expected to change total project costs beyond the range reported here.

The dams removed from the Clearwater River in Idaho are not comparable in cost. The Harpster Dam on the South Fork Clearwater River was much smaller (56 feet in height) and was simply dynamited with no provision for sediment management (Winter, 1990). Lewiston Dam was removed from the mainstem Clearwater River, again with no provision for sediment management. In contrast, provisions of the Elwha Act require protection of resources and so would require expenditures not part of the Clearwater dam removals.

Q: Many commentors asked for more clarification on the methodology for estimating project costs and made suggestions about what to include in the analysis (i.e., comparison of costs and benefits in real financial terms to include paying going interest rates on the unamortized amounts outstanding).

A: To clarify, this document provides cost and benefit comparisons in real rather than nominal terms and makes appropriate adjustment for the opportunity cost of capital. Other assumptions are spelled out in the methodology and impact to socioeconomic sections of this document.

Q: Precise costs of the proposed dam removal are not given as required by law. Additional costs, especially those of the many bureaucracies involved, are hidden. Agency costs are unquantified in the EIS and will continue after the EIS process, i.e. the living laboratory will go on for years and cost more money (Elwha Report, pps 121-122).

A: Post project study costs have been removed. If any such studies are undertaken, they will be proposed for funding from agency budgets approved by Congress. This document has been modified accordingly. Also, costs will be refined as the environmental impact statement team discovers additional information and modifies alternatives based on this information. For instance, it is now clear based on modeling results that larger sized sediment will not be as problematic for fish as originally thought, and so can erode naturally in all alternatives. This reduces costs of sediment management for all alternatives, and lowers overall project costs.

Q: A commentor suggested re-evaluating the need for compensating owners of the dams (they have already reaped the benefits of the power) and property owners (they must have been aware of the risks of building on such sites).

A: Congress has already decided the owners should be compensated, and has agreed to pay them up to $29.5 million in the Elwha Restoration Act. Impacts to and mitigation for damage to property owners will be evaluated as appropriate in the Implementation EIS.

Q: How will the loss of property taxes and other tax losses due to employment and businesses lost be offset by a restored fishery.

A: The socioeconomic analysts saw no reason to expect increases in unemployment, and actually predict hundreds of construction jobs and employment to support increased spending in the community as a result of dam removal (See Socioeconomics section of the text for more information).

Issue: Economic and environmental costs of replacement power.

Q: Commentors requested the clarification of methodology used in determining costs of replacement power at the mills and wondered who would be responsible for bearing increased costs.

A: Assumptions and methods underlying estimates of cost of replacement power are fully outlined in the documents, "Discussion and Extended Analysis of Energy Portions of the FERC Draft Staff Report on Glines Canyon and Elwha Hydroelectric Projects, Washington." by Meyer Resources (1994) and "Elwha River Restoration Project: Economic Analysis," by Meyer et.al. (1995). A summary of those assumptions and methods appears in the "Impacts to Socioeconomics" section of this environmental impact statement. Power replacement cost calculations are based on the latest data supplied by Bonneville Power Administration, and have been reviewed by a multi-agency economic team to ensure validity. Factored into the cost of replacement power is the cost of fish passage and mitigation which would be required before either or both dams could ever be licensed.

Under the Proposed Action, Daishowa America would pay for its replacement power, which it would obtain from the Bonneville system through Port Angeles City Light. The rate the mill would pay is consistent with the rate Bonneville has traditionally charged major industrial customers in the Pacific Northwest. Impacts on the electric energy bill of the average regional consumer would be negligible under any of the options considered.

Q: Commentors challenged replacement power cost figures as understated and not including cost increases already projected by BPA. One commentor claimed that approximately $16.5 million of electricity would be lost annually if the dams are removed and states that this assumes replacement power costs of 9.6 cents per kilowatt hour rather than the 2.4 cent rate Bonneville is currently charging Daishowa America.

A: Energy costs assumed for the Proposed Action or any other alternative are calculated both at the rate at which energy would be locally available from Bonneville Power Administration(local power cost), and at which Bonneville could produce additional required power in its grid

(regional avoided cost). After consultation with Bonneville, Interior presumed hydropower supplied by the dams would be replaced by sources of energy available to the Bonneville grid at costs estimated for regional replacement of power by BPA. These costs are estimated to increase over the next 20 years at rates equivalent to increases in the real cost of natural gas. The Socioeconomics section of this environmental impact statement has more information on these costs and assumptions, by the latest data supplied by Bonneville and reviewed by a multi-agency economic team (see Meyer, et.al. 1995) including Bonneville, are used. The data are considered correct.

Q: Some commentors asked for clarification of how costs were estimated for the No Action alternative. They questioned how costs of replacement power for the Proposed Action (removal of both dams) could be lower than that of taking No Action (leaving the dams in place).

A: Costs for power under the No Action alternative are lower than for Proposed Action, however they are not lower than for the Dam Retention alternative. This is because the Federal Energy Regulatory Commission and other regulatory agencies have indicated that substantial improvements would need to be made to the two dams for fisheries and other reasons as a condition of licensing and that continuing the operation of the dams without fish passage is unlikely. The energy cost estimate for the Dam Retention alternative includes costs to install fish passage measures, which is why it is more expensive.

Q: Commentors asked for more information on the costs to the mills under the No Action alternative vs. the Proposed Action, particularly related to potential for loss of jobs.

A: Under the No Action alternative, dam owners would not meet requirements stated in the recent Federal Energy Regulatory Commission licensing review, and could be affected by future legal action for fisheries trust violations and by further restrictions should any Elwha salmon species be listed under the Endangered Species Act. Altogether, these potential effects would likely raise energy production costs for dam retention alternatives higher than the energy costs shown for any option in the environmental impact statement, and could imperil continued operation of the dams as energy producers. Daishowa America would then need to seek an alternative energy supply. In the event that Daishowa was unsuccessful, 320 mill jobs could be lost. Since county taxes are assessed on land and improvements, rather than jobs, it is unclear what the associated tax loss to the county would be under this scenario.

The Proposed Action would resolve these issues, and is expected to create up to 1,000 construction jobs, as well as many more to support increased spending by construction forces in the community.

Q: Commentors asked whether the "energy drought" in the region would mean Bonneville might be unable to supply replacement power to the mills if the dams are removed

A: The environmental impact statement team reviewed the situation and finds that Bonneville Power Administration does not consider itself in a supply-deficient status for the immediate future. It has, however, adjusted its energy avoided cost projections to allow for some regional loss of generating capability due to drawdown (to help mitigate impacts from other dams). The environmental impact statement uses Bonneville's data, and therefore compensates for this possible effect to cost.

Q: Commentors asked whether Bonneville would need to bring in replacement power via a new transmission line if the dams are removed.

A: An additional trunk line to the study area is planned by Bonneville, whether or not the dams are removed. Although removing the dams may change the time line for the implementation of the trunk line by as little as one year (Tony Rodriguez, Bonneville, personal communication, April 1995), it would not have more than a very slight impact on costs for power, since Bonneville sets its rates on a regional basis.

Issue: Effect of relicensing scenarios on costs and the cost of fish passage measures for dam retention alternatives.

Q: Commentors asked what difference changing the relicensing period from 20 to 50 years would make in amortizing the cost of installing the fish passage system.

A: Extending the payback period would reduce annual payments for an element of cost. Whether this would be practical would likely depend on whether fish passage costs were paid by dam owners or by public entities. Assuming straight-line amortization over the lifetime of the project, annual depreciation costs would decrease, but total costs remain constant.

Issue: Cost of hatchery operations

Q: How will costs of hatchery operations be affected if the dams are removed?

A: Under the proposed action, hatcheries would be used to assist restoration in initial years, and then be phased out of use for planting fish in the Elwha watershed. Capital costs for this program are included in the draft environmental impact statement. Hatchery and fish passage costs recommended by the Federal Energy Regulatory Commission and/or quantified in the Elwha Report are included in assessment of the two dam retention option. The potential to incur such additional costs is identified in this environmental impact statement, but the magnitude of these costs has not been quantified. (See the "Fisheries" section of the EIS text for more information.)

Issue: Future benefits of restoring the Elwha River ecosystem and fisheries; future costs of No Action

Q: What are the economic values of enhancing the natural ecosystem over the very long term. People will visit the area for decades. What is the vicarious value of the project for people who will never visit the area but place a value on a natural restoration of this kind.

A: In many cases, important resources do not lend themselves to quantification. For instance, the value of restoring wilderness or a wild and scenic river is not economic, but is invaluable for those persons who seek such an increasingly rare experience. The National Environmental Policy Act requires analysis of environmental pros and cons of an agency proposal and states that federal agencies must try to determine impacts on all resources, to "insure that presently unquantified environmental amenities and values may be given appropriate consideration in decision making along with economic and technical considerations" (Sec. 102(B)).

One such amenity is the very long-term benefit or vicarious experience that citizens might enjoy simply knowing the river ecosystem and native anadromous fisheries have been fully restored.

A recent study (Loomis, 1995) polled residents in the local area, in Washington State, and across the country to determine the "non-market" value they attributed to restoring the river ecosystem and native anadromous fisheries. Economists sometimes define this as the value people associate with a good or service over and above its selling price. The study analyzed more than 1300 surveys and found that U.S. citizens value restoration of the Elwha River at an amount equivalent to between $3.5 and $6.3 billion, even if they never visit the area. These data are included in the Socioeconomics section of this document.

Specific estimates of the value of restored fish runs to commercial, sport, and tribal fishers are included in this document. Estimated values for recreation and tourism are also reported.

Q: Commentors asked that the economic analysis account for the values, both in the river and ocean, of the restored wild fish runs that would result from the removal of both dams. The value of a restored shellfish harvest in a restored delta and the cost avoidance by the Corps of Engineers in maintaining Ediz Hook should also be included. The recreation values to both the local tribes and the larger region should be included as well as the value to the local tribes for food and ceremonial purposes.

A: The socioeconomics section includes these values. Removing both dams would result in a $3.46 million annual fishery. Recreation and tourist visitors would spend an estimated additional $133 million in Clallam County over the life of the project (discounted at 3%). This would be expected to generate additional in-county payroll of $4.6 million per year, 446 additional in-county permanent jobs, and additional local tax revenue of $296,000 per year.

Q: What is the relative value of tribal and non-tribal fisheries?

A: Table 10 in the Socioeconomics section estimates the value of fisheries for each alternative. Total annual fisheries benefits for the No Action alternative are $840,000; for the Dam Retention alternative, $1.07 million; for removing Glines, $1.97 million; for removing Elwha Dam, $1.57 million; and for the Proposed Action, $3.46 million. Benefits are divided approximately equally among tribal and non-tribal fishers.

Q: In an article in the local paper, Daishowa America expressed uncertainty over its ability to license and operate the dams if they aren't removed and may have to close the mill (from a Peninsula Daily News article, Oct. 25, 1994).

A: Relying on the dams for power, when they continue to operate on a year-to-year basis without a permanent license and in violation of Olympic National Park policy, may not provide the stability Daishowa America mill requires. There may be a potential for downsizing or closing because of this. However, many unknowns preclude meaningful analysis of this possibility in this document.

Q: In determining the benefits of leaving the dams in place, has Interior factored in the useful life of the projects (i.e., with safety considerations, silt filling in, etc.)

A: Project costs and benefits were calculated out to 100 years. This is within the operational life of both reservoirs.

Issue: Economic impacts to those potentially affected: private property owners, Clallam County, shellfish industry, Lower Elwha S'Klallam Tribe, park concessionaires

Q: Commentors expressed concern that property values in the Elwha Valley area would drop if the dams are removed.

A: Property values would depend on the perceived benefits of owning property in the area. There is no evidence that residential property values would fall under the proposed action; in fact, given increased recreation and tourism interest, they would likely increase. The only commercial property affected is the motel/trailer park facility at the Highway 101 bridge. It would probably incur some moderate expense to re-establish access trails to the restored river corridor. Information on property tax lost under each of the alternatives is presented in the section "Impacts to Socioeconomics" in this environmental impact statement.

Q: What are the economic benefits to the shellfish industry from dam removal?

A: Restoration of a broader estuary would change nearshore species of shellfish. On balance, the economic impact on shellfish gathering is expected to be positive, particularly for hardshell clams. Since pre-dam levels of shellfish are unknown, the Department of the Interior has not been able to quantify the increase expected if the dams were removed and sediment transport restored.

Q: Much of the growth predicted for Clallam County is from recreation and tourism. With the loss of recreation areas created by the reservoirs and the destruction of several historic sites (i.e., the dams, and potential flooding of the Elwha Historic District structures), these industries could suffer. What is the impact on rural residents?

A: The restoration of the Elwha River ecosystem and fisheries would be expected to bring a great deal of economic vitality to Clallam County, both from increased catches of fish and from the direct and indirect dollars spent by tourists who would visit the river to fish, view the restoration process, and see where the dams were removed. The restoration of the river would provide a unique opportunity for river-based recreation and wildlife viewing, although reservoir recreation and tourist income would be lost. Highly valuable salmon and steelhead would be added to the commercial fishery. This project would affect rural lives, particularly of fishermen, in a very positive way.

Construction benefits to Clallam County associated with the Proposed Action are estimated to produce a total of $40 to $56 million of business revenue, between $21 and $29 million in income, and 763 to 1,067 jobs over the 10-year construction period. At full restoration, recreation and tourism spending is estimated to produce $4.6 million in payrolls, $296,000 in taxes, and 446 jobs each year in Clallam County. An estimated $133 million in additional revenues from tourism and recreation are expected over the 100-year life of the project.

Q: The summer of 1994 was slow for visitors to Port Angeles and Clallam County. Can we afford to eliminate two of our tourist attractions--Lake Mills and Lake Aldwell?

A: Although some recreationists will go to nearby reservoirs, the economic analysis predicts a significant net gain of $133 million in recreation and tourism dollars if the dams are removed.

Q: Commentors were interested in whether removing the dams would be a project set aside for local construction firms.

A: Federal regulations preclude limiting competition for the contracts to local contractors. Likewise, federal agencies would be constrained from requiring contractors to give local preference in hiring or subcontracting. Nevertheless, using local labor as much as possible would reduce contractor costs over that of "imported" labor.

Q: One commentor questioned whether dam removal would change the negative economic trend in Clallam County.

A: Clallam County is in transition from an economy based on the consumptive use of natural resources to one based on tourism, retirement, and associated service-based industries. Removing the dams would generate additional recreation and tourism dollars, as well as business revenue, personal income, and local tax revenue in the long term. In the short term, money spent on deconstruction would directly and indirectly boost the local economy.

Q: What mitigation or compensation will be offered to the Lower Elwha S'Klallam Tribe for lost fishing opportunities while construction is ongoing and restoration efforts underway?

A: Although the extent of any additional loss of the tribe's fishery resources cannot be predicted at this time, the tribe has not requested compensation as one of the associated costs and has stated that it welcomes any positive steps toward meeting the United States' Treaty obligation. Potential mitigation for short-term losses of tribal fisheries would be assessed in the Implementation EIS as appropriate.

Q: Some commentors suggested that concessionaires (primarily rafting operations) temporarily impacted by dam removal be compensated for loss of business.

A: This is under consideration by the National Park Service.

Issue: Evaluation of other potential economic opportunities for the tribe

Q: Several commentors suggested the tribe pursue options other than restoring the anadromous fisheries in the Elwha River, i.e., casino or tribal operation of the dams to sell power

A: These issues are outside the scope of the Elwha Restoration Act and this environmental impact statement. The tribe's opportunities for and its choices about its own economic development rest with the tribe, not with the Department of the Interior or this document.

Issue: Economic impacts of potentially listing additional salmon species on the Endangered Species list

Q: How would listing Elwha salmon species as endangered affect fishers in the region.

A: The economic impacts of endangered species listings would depend on the fish stock listed and the harvest restrictions necessary to restore it. Please see the fisheries section of this document for examples of these kind of issues (stocking and harvest restrictions).

Issue: Cost of restoring the Elwha River ecosystem compared to costs of salmon restoration projects in other areas of the Pacific Northwest

Q: How do costs of restoring the Elwha River ecosystem compare to costs of salmon restoration projects in other areas of the Pacific Northwest.

A: Although analyzing specific costs for restoration projects in the northwest is outside the scope of this analysis, most freshwater habitats for salmon and trout are in developed and/or degraded conditions. Repairing watershed damage requires extensive mitigation, much of which entails long-term, continuing costs. Also, on private land, there are no long-term guarantees that restored habitat will remain restored, that additional sources of water pollution will not surface, or that other alterations will not be made. Interior believes there is no better restoration opportunity on the Olympic Peninsula than the Elwha River. (See page 20 of the Elwha Report for more information).

Issue: Historic or past economic impact of the dams on the decline of the fishery

Q: Commentors asked for information and quantification of how much, in dollars, the dams have cost the Port Angeles economy from loss of fishing resources since they have been in place.

A: We know of no published estimates of historic fish losses due to Elwha dams. Comparison of annual fishery benefits, in this document, between the Proposed Action and the No Action option probably understates such losses, but gives an order of magnitude estimate.

Issue: Use of survey to measure public opinions about restoration of the Elwha River ecosystem

Q: A comment was received about a public survey released in 1994 with information about the economic impacts of the project.

A: This survey by "Decision Data" was part of a just-completed study of economic impacts of the Proposed Action by Dr. John Loomis of Colorado State University. That survey did provide estimates of expected fish recovery to respondents, and also indicated that full recovery would not be expected for 20 years.

Issue: Cost of flood protection and mitigation of impacts to wells as a result of dam removal

Q: (See also issues under the topic of "Flooding.") Commentors asked for clarification of costs to provide flood protection.

A: Flood protection, expected to be provided primarily through levee upgrades and strengthening, is estimated to cost approximately $2 million. Costs for mitigation of anticipated impacts to groundwater systems are estimated at $1 million.

Issue: Quantification of the cost to rebuild roads to accommodate construction equipment, i.e., Olympic Hot Springs Road

Q: Commentors noted that reconstruction of the Sol Duc road was approximately $8 million, and would be at least $20 million today.

A: Figures for modifications to roads, should they be required, would be developed as part of the Implementation EIS and/or design and permitting phase of the project. Estimates are included as part of total project costs reported in this document.

Issue: Potential marketability of gravel and/or silt recovered during dam removal

Q: Some commentors believe that gravel and silt should be considered a resource that could be sold to offset project costs.

A: This is being investigated; findings would be presented in the Implementation EIS. Much of the gravel would be required to reseed the riverbed from Glines Canyon Dam to the mouth of the river to help fisheries restoration. Although some gravel and silt may be worth money, it lies in lenses or pockets in the delta and upper lake bed sediments and is not easily accessible.

Vegetation and Wetlands

Issues:

- Threatened or endangered plants in impact area
- Impacts to wetlands and riparian vegetation
- Potential inability to revegetate sediment due to presence of fines or unstable material
- Length of time required to restore the river corridor and vegetation

See Comment Letters: Philpott, Bob - C117; Environmental Protection Agency - C438; Page, Timothy D. - C557; Olympic Park Associates - C612

Issue: Avoiding major mechanical means to stabilize sediment

Q: Commentors suggested that revegetation of areas uncovered during reservoir removal would be preferred to use of major mechanical means to stabilize sediment.

A: The Department of the Interior generally agrees that major efforts to stabilize sediments with heavy equipment or artificial means would be both unnecessary and ineffective. Some regrading and recontouring of material remaining after sediment management efforts are complete is likely, as is initial revegetation of delta sediments. These options would be more fully analyzed in the Implementation EIS.

Issue: Threatened or endangered plants in impact area

Q: Are there any protected plant species in the area; if so, how will they be protected during removal?

A: There are sensitive plant species in the area, including porcupine sedge, tall bugbane, giant helleborine, water lobelia, and branching montia; however, these species would not be expected to be impacted by the project. (See Affected Environment section for species of special concern in this environmental impact statement for additional information)

Issue: Impacts to wetlands and riparian vegetation

Q: A number of commentors wanted more detail on the amount of wetlands and/or riparian vegetation in and around the project area, how these would be impacted, and what mitigation would be required and implemented to replace them.

A: As part of the evaluation of habitat within the project area during the relicensing process, the applicant estimated a total of 43 acres of wetlands presently associated with or close to the reservoirs. However, recent information indicates it is likely only a small portion of those wetlands would be eliminated or degraded should the dams be removed and reservoirs drained.

Approximately 38 of these 43 acres are on or just upstream from the Lake Aldwell delta. Review of the substrate composition study conducted by the U.S. Geological Survey and the habitat composition mapping by consultants for James River Corporation indicates that the majority of these wetlands are not on the Aldwell delta and, therefore, would not be destroyed by either the relocation or the natural erosion of the delta sediments. Some reduction in the size of this wetland, however, may occur if the water table dropped following the removal of Lake Aldwell. A large drop would not be expected as the proximity of the Elwha River and Indian Creek channels would moderate the change.

The remaining five-acre wetland is located near the boat launching area on Lake Mills. Preliminary analysis indicates it is maintained by seepage from upslope areas and, therefore, would not be affected by the removal of the reservoir.

In addition to affecting some of the wetlands associated with the reservoir, the Proposed Action would create streamside wetlands. The Draft Staff Report estimated 48 acres of wetland forest or shrubland would be restored and another 122 acres of wet channel/river and gravel bar wetlands created. Over time, these wetlands would establish along side channels, sloughs, and tributaries, and on a portion of the low terraces. The natural development of palustrine emergent wetlands could occur in a few years, with palustrine shrub and palustrine forested wetlands taking perhaps 10 and 20 years to develop, respectively.

Opportunities to restore or create wetlands within the lakebeds following dam removal would be considered, although restoration of the sediment transport and hydrologic processes is expected to naturally re-establish more wetland acreage than would be lost as a result of the removal of the two reservoirs. The percentages of sediment to be flushed, mechanically removed, or stabilized would be determined after the Department of the Interior completes its evaluation of a number of factors including fish and wildlife needs, water supply protection, the potential for increased flooding, and cost; these percentages would be presented in the Implementation EIS.

Before any dam removal affecting wetlands is implemented, the U.S. Army Corps of Engineers must permit the project. Any suspected wetlands must be inventoried and mapped. Required mitigation could include replacement in-kind, additional wetland creation, or possible determination that dam removal in itself is mitigation for their past construction. Inventory, impact analysis, and mitigation options would be included as part of the Implementation EIS and/or permitting process with the Corps.

The portion of restored vegetation that would be defined as riparian is difficult to estimate because the distinction between riparian and upland is gradual and somewhat arbitrary. Comparing the reservoir areas to a reference site, Krause Bottoms, which was considered similar to the pre-dam sites now inundated by the reservoirs (1988 HEP Analysis done by FERC), much of the reservoir area would return to riparian vegetation. Removing Glines Canyon Dam would restore 287 acres; Elwha Dam, 246 acres; and Proposed Action, 533 acres.

Of these acreages (for Proposed Action), at least 52 would be riparian deciduous forest and 65 cobble/gravel habitat.

Issue: Potential inability to revegetate sediment due to presence of fines or unstable material

Q: Concerns were expressed about the potential inability to establish vegetation on sediment remaining after dam removal. Commentors asked that long-term stability of sediment be carefully considered in the Implementation EIS.

A: Our vegetation specialists do not believe the fines would make revegetation of slopes impossible, but that the fines would probably need to be mixed with larger size sediments such as sand to prevent the formation of an impervious layer. Sediment left in place if the dams were removed would probably be stabilized initially through hydroseeding and then through the planting of native vegetation. For more information, see appendix H of the Elwha Report. These options would be more fully analyzed in the Implementation EIS.

Issue: Time required to restore the river corridor and vegetation

Q: Commentors asked how long it would take to restore the river channel and vegetation to its natural state.

A: Active erosion control measures would be implemented to reduce erosion during the first year and to speed the establishment of pioneer plant species. Within three years, vegetation would be well enough established that the area would begin to appear natural. It is estimated that it would take six to ten years for the river in the reservoir areas to establish natural channel structure and for the vegetation to become established enough to reduce erosion to pre-dam levels.

Development of the full range of original aquatic and terrestrial species along the river, in wetland areas, and at the restored estuary at the river mouth could take decades. However, many species would be present even within the first few years because of the natural ability of plants and animals to spread into newly available areas.

Water Quality and Quantity

Issues:

- Impact to local surface and groundwater supplies, now and future
- Protection and costs of water quality for Port Angeles, the hatcheries, and the mill; Best Management Practices
- Current practices of Port Angeles mills
- Field data to substantiate effectiveness of mitigation measures to protect industrial water supplies

See Comment Letters: City of Port Angeles - C43; Daishowa America, Port Angeles - C392; Dry Creek Grange #646 - C596; Ensor, Lavonne - C560; Environmental Protection Agency - C438; Graf, Thomas G. - C300; Loucks, J. &. M. - C63; Maupin, Eddie - C48; Mossman, Barbara E. - C75; North Peninsula Home Builders and Building Industry Association of Washington - C449; Okanogan County Citizens Coalition - C552; Philpott, Carol - C116; Pulkownik, Susan - C334; Sargent, Joan K. - C450; Schmitt, Francis J. - C68; Stachorek, Richard W. - C243

Issue: Impact to local surface and groundwater supplies, now and future

Q: Comments were received from the City of Port Angeles, local home owners, the mill operators, and others concerned about the impacts of dam removal on surface and groundwater quantity, particularly in a summer drought. More information was requested on how impacts were assessed and what mitigation measures were being considered to offset impacts.

A: The amount of Elwha River discharge available for municipal/industrial water supply would not change if the dams were removed. Since neither Lake Mills nor Lake Aldwell is used to store water for municipal/industrial supply purposes, their removal would not impact any present or future source of water.

The reservoirs are currently operated in a "run-of-the-river" mode in which natural flow volume conditions are mimicked. There is some deviation in summer droughts, when additional releases from Lake Mills augment downstream flows in an attempt to alleviate high water temperatures (although fisheries have benefited little) or prevent problems in the event of turbine shutdown. This additional water would be unavailable if the dams were removed. If the reservoirs were eliminated, fisheries would benefit by the return of water temperatures to natural levels.

If flows drop below 50 cubic feet per second in the lower river, the Port Angeles municipal supply may be affected. However, based on U.S. Geological Survey statistics of the Elwha River gauge at McDonald Bridge, daily streamflows drop below 50 cubic feet per second, on average, only once every five to ten years. This low-flow return period was estimated from observed streamflows from 1928 to 1979. In 1992, a recent dry year, the lowest daily streamflow was 245 cubic feet per second on September 20. September is typically the lowest flow month averaging 618 cubic feet per second (1898 to 1992), with a minimum monthly average flow of 330. The monthly average flow for September 1992 was 388. The 30-day low flow at the gauge at McDonald Bridge drops below the 1992 mean September flow about once every five years. The 10-year, 30-day low flow is approximately the same as the minimum average September flow. Removing the dams would have a very minor impact on summer flows.

Municipal customers are served by means of an underground Ranney well. The river is currently migrating away from the Ranney installation, reducing capacity or yield. If the dams were removed, the width of the river's meander might increase and migrate farther from the city's well, further reducing yield. Movement toward the Ranney well is a concern only from a flooding perspective, and the Corps of Engineers is studying the need for specific flood mitigation measures for the Implementation EIS.

Water supply mitigation options are presented in this document, but would be further analyzed in the Implementation EIS.

Q: Commentors asked whether removing the dams would affect water supplies in the future.

A: The city of Port Angeles currently holds a water right for 200 cubic feet per second on the Elwha. Of that, 50 cubic feet per second, or 32 million gallons per day, are held for municipal purposes. The Ranney collector, the city's sole domestic supply, presently pumps a maximum of less than 11 million gallons per day, approximately one-third of that to which it holds rights. The city would retain the right to enough water to facilitate quite a bit of new growth and development subject to limits imposed by natural flows and existing water rights. This is true whether the dams are in place or removed.

Q: Commentors asked whether local wells would be affected.

A: The bedrock underlying both reservoirs is nearly impermeable and the groundwater gradient (flow direction) is toward the river. Therefore, reservoir water is not recharging the surrounding upland aquifers where most of the private wells are located. The Elwha does recharge the sand and gravel (alluvial) aquifer in the river valley; changes of river stage would change groundwater levels within the alluvial aquifer.

A few wells located above Lake Aldwell, completed in the river alluvium in the confluence basin of Indian Creek and the Elwha River, might have lower water levels if Lake Aldwell were drained. The water levels in wells located in the Elwha River valley would be expected to have greater and more frequent fluctuations if the river returned to a more dynamic natural state. Wells in the lower Elwha valley, on and near tribal land, would be expected to have slightly higher water levels due to riverbed aggradation and higher river levels.

A few wells located downstream of the dams in the Elwha River valley would be subject to greater flood hazard if the dams were removed. Some of the wellheads could be extended and sealed to prevent flood damage. A few others would likely be relocated to facilitate access during high water events. More information on which of these wells may be at risk would be available in the Implementation EIS.

Issue: Protection and costs of water quality for Port Angeles, the hatcheries, and the mill; Best Management Practices

Q: How will industrial water quality be protected from short-term sediment loading during the period of dam removal?

A: Water from the Elwha River is periodically turbid now, especially during winter and spring flooding. The Federal Energy Regulatory Commission estimates that 99% of the very fine particles

(clay) and much of the silt escape through the penstocks and over the spillways. The long-term turbidity of the water would probably be similar to what it is now.

There could be short-term (six months to two years) significant periodic or continuous increases in suspended solids that would affect surface water users, such as the state rearing channel and the mills, during dam removal. If fine-grained material is slurried out by pipeline, higher than average suspended sediment concentrations could still be associated with construction or dredging activities. Impacts to these users would be mitigated as required by the Elwha Restoration Act. Some mitigation options being analyzed for the Implementation EIS include alternative intakes that do not rely on surface water, pretreatment improvements such as a settling basin at the intake, more frequent backwashing of pretreatment filters, and a full-scale treatment plant. Mitigation measures would be selected to ensure the mills a continued supply of the same volume and quality of water they now have. Some commentors suggested using Morse Creek as a backup water supply during the dam removal; however, the Port Angeles city engineer indicates that Morse Creek is not an option for an alternate water supply during restoration.

Q: Commentors asked what the cost would be and who would pay for water quality and quantity mitigation measures required by the Elwha Act.

A: Costs for mitigating impacts to the city's municipal and industrial supply and to other users would be inversely related to costs to manage stored sediment, and depend on the amount of water available to wash out sediment at the time the dams were removed (i.e., from snowpack or rainfall). A range of possible water quality mitigation costs to protect Port Angeles municipal and industrial water quality is $7-$35 million. These costs are included in total project estimates in this document. Options for protecting the municipal quality range from a relatively simple add-on, in-line filtration system to a temporary package treatment plant to a full water treatment plant, with combinations, permutations, or new solutions possible.

The Elwha Act specifies costs to design, construct, operate and maintain these facilities to mitigate against impacts from dam removal "...will be federal costs at the discretion of the Secretary of the Interior" (Section 4(3)(b). Water supplies, rights, and use would remain the same if the dams were removed. Revenue from water sales would presumably continue to be used to maintain and upgrade the systems. Further information on water quality mitigation is in this document, Elwha Report (sections V and VI) and the Draft Staff Report. Dam removal would have no impact on the ability of the city of Port Angeles or the local public utility district to finance new facilities.

Q: The Environmental Protection Agency asks that the Department of the Interior use standard Best Management Practices criteria to protect water supplies.

A: Every effort has been and will continue to be made to coordinate with the state and federal agencies having regulatory responsibilities that impact the project. All state, federal, and local requirements will be met. Several items (such as (a) and (c) in the EPA letter) would be addressed in the Implementation EIS. Language pursuant to the Best Management Practices criteria in the letter would be included in contracts for dam removal and sediment management as well as the monitoring plan.

Issue: Current practices of Port Angeles mills

Q: One commentor asked if it would be feasible for the mills to recycle their process effluent thereby reducing their amount of water demand.

A: There are zero-discharge mills, although they were designed to operate that way from inception. Retrofitting the mills is probably neither economically feasible nor logical at this time. It would be extremely expensive to construct new systems, and the mills might not be able to tolerate the down time and resulting loss of market share. Forthcoming regulations will force all pulp and paper mills to evaluate the potential for effluent reduction through process water recycling.

Q: To what extent does dioxin released from the mills in Port Angeles affect fish?

A: The Washington Department of Ecology requires discharge permits, sets limits, and monitors waste streams of industrial operations discharging to waters within the state. According to the department, only one mill releases any dioxin, and those releases are within permitted levels and presumed not to be contributing to the decline of the Elwha salmon.

Issue: Field data to substantiate effectiveness of mitigation measures to protect industrial water supplies

Q: One commentor asked whether field data existed to support predictions on the degree to which proposed mitigation for industrial water supplies would work.

A: Data exist for all mitigation options mentioned in this environmental impact statement. Any mitigation proposal that impacts existing discharge permit allowances would necessarily require relief under the permit for additional project-related loading. More specific information about mitigation measures to protect industrial water quality from the adverse effects of dam removal would be available in the Implementation EIS. It is worth noting that the additional multiple Ranney well option to supply water for the mills is no longer under consideration for site-specific logistical, hydraulic, and hydrologic reasons.

Wildlife and Species of Special Concern

Issues:

- Restoring the ecosystem as opposed to taking a species-by-species approach
- Impacts to species of special concern (spotted owls, marbled murrelets, fish)
- Conflict in protection of Steller sea lions and native anadromous fishery
- Impact from dam and reservoir removal to other wildlife of interest--trumpeter swans, amphibians, elk.
- Impact to wildlife from stabilizing sediments and/or changing the river channel; impact to wildlife migration (deer, elk) corridors from changing river channel

See Comment Letters: Clark, Robert J. - C599; North Peninsula Home Builders and Building Industry Association of Washington - C449; Okanogan County Citizens Coalition - C552; Olympic Park Associates - C612; Roberts, Donald L. - C57; Smith, Leland - C455; Winthrop, Judith L. - C190

Issue: Restoring the ecosystem as opposed to taking a species by species approach

Q: Commentors were concerned that agencies would focus on particular species, not on restoring the ecosystem.

A: The Elwha River Restoration Act specifically directs the Department of the Interior to develop a plan for the full restoration of the ecosystem and native anadromous fisheries. The department and its bureaus are following an ecosystem approach to restoration. Some species, however, will receive greater emphasis or discussion because of other laws and regulations, e.g.,. Endangered Species Act, or because of the need to adequately address comments and concerns received from the public and other groups.

Issue: Impacts to species of special concern (spotted owls, marbled murrelets, fish)

Q: A number of comments were received about the potential impact of dam removal equipment on species of special concern. Heavy equipment and human activity were primary concerns. More information was requested on the mitigation measures to protect these species. Some commentors requested more analysis of cumulative impacts from multiple activities in the region.

A: Noise and human activities associated with dam removal and sediment management required by the proposed action could disrupt nesting northern spotted owls and local movements of marbled murrelets if they are in the area. Field studies are being conducted in the Glines Canyon and Elwha dams areas to determine current nesting locations of these species. At this time, it appears adverse effects would not involve any long-term loss of habitat, and would instead be considered "interference with use of existing habitat" if they exist.

Over the long term, the proposed action would increase old-growth and mature forest habitat for these species, and thus help offset the cumulative impacts from continuing loss and fragmentation of old-growth forest habitat elsewhere in the Olympic Peninsula.

Survey information shows no nesting spotted owls within one mile of either dam. Because of the distance between the dams and spotted owl nest sites, it is unlikely that owls would be affected by project removal activities except for blasting and the removal of concrete rubble. The noise level from blasting can be greatly reduced by reducing the size of individual charges and using percussion blankets. Conscientious scheduling of work activities and modifying equipment could reduce noise to acceptable levels to avoid impacts to spotted owls.

A biological assessment pursuant to the Endangered Species Act would be prepared to detail the effects that implementation of the Proposed Action would have on spotted owls and other federally listed species. If the biological assessment indicates that removal of hydroelectric projects would potentially or definitely adversely affect the spotted owl, the Department of the Interior would take the necessary actions to ensure compliance.

Q: What will be the effects on threatened or endangered fish species and fisheries.

A: Petitioned and candidate fish species would probably suffer some short-term adverse effects from alternatives involving dam removal. As lake levels were drawn down, the middle and lower reaches of the Elwha River would carry more sand and silt, which would cover the gravel

substrate that these species use for spawning. Over the longer term, dam removal and river restoration would offset the cumulative impacts to these species elsewhere on the Olympic Peninsula. The cause or causes of cumulative impacts to petitioned and candidate fish species that have lowered populations to critical levels include loss of freshwater habitat through development, damming, sedimentation, pollution, over harvesting, and natural changes (such as El Nino) in the marine environment.

Q: Some commentors believe that the restoration of the Elwha River ecosystem might help avoid additional listing of salmon on the Endangered Species list; prevention of listing should be considered a benefit of the project.

A: In the long term, the only option for avoiding potential listing of Elwha salmon species is through dam removal. Restoration planning and implementation may be sufficient to avoid listing Elwha fish.

Issue: Conflict in protection of Steller sea lions and native anadromous fishery

Q: Commentors were concerned that the Department of the Interior is protecting the Steller sea lions that eat the salmon and contribute to the overall decline of the salmon population.

A: Interior's overall goal is to restore the Elwha River ecosystem and the native anadromous fisheries. The utilization of salmon by the Steller sea lion and other native mammals is consistent with that goal and would not be considered a problem, unless unnatural conditions from human activity resulted in a significant imbalance in predator-prey relationships within the ecosystem. For example, unnatural migration bottlenecks, such as the ladder at the Ballard Locks in Seattle, could create conditions conducive to increased sea lion predation.

Issue: Impact from dam and reservoir removal to other wildlife of interest--trumpeter swans, amphibians, elk.

Q: What are the general impacts of dam removal to wildlife.

A: As riverine and fast-flowing stream habitats replace existing lakeshore and lake habitats, wildlife populations in the Elwha valley would change. Species dependent in part on salmon, such as bald eagles, black bears, and various carrion feeders, would likely increase. Amphibian larvae, important stream predators that actively feed on aquatic insects, fish eggs, and fry, would benefit from increased food due to salmon restoration. Birds that feed on young fish include mergansers, great blue herons, and belted kingfishers; dippers, spotted sandpipers, and harlequin ducks also feed on aquatic insects that would increase with stream nutrient enrichments resulting from salmon restoration. Native mammals that feed on young fish include otters and mink. These species are expected to benefit from dam removal.

Similarly, species dependent on swift streams, such as harlequin ducks, would gradually replace species more closely linked to lakes and more slowly moving waters. The Elwha restoration project would provide extraordinary opportunities to learn more about the interactions among wildlife and habitat, particularly as salmon populations returned and vegetation reverted from managed timber to old-growth forest.

The removal of the dams and reservoirs would benefit many more species of wildlife than would be adversely impacted by the loss of lake-like habitat provided by the reservoirs. The two reservoirs provide relatively low value habitat because the shoreline is steep and most of the water is deep. The restoration of a free-flowing river with its riparian corridor would provide more productive habitat for a far greater number of wildlife species. Refer to both the fish and wildlife sections in this document for details.

Full restorative changes to native wildlife populations within the project area would begin after dam removal and continue for a decade or two.

Q: What would the impacts be to trumpeter swans, and how would Interior mitigate for those impacts?

A: Trumpeter swans are one of the few species that would be negatively impacted over the long term if the Elwha dams and associated reservoirs were removed, but impacts would be localized and minor when considering the species' status across its range. The swans currently utilize Lake Aldwell, particularly around the delta, as wintering habitat. Recent counts indicate that between 20 and 70 individuals use the area between November and April.

Habitat requirements for the trumpeter swan vary and are not well understood. The Pacific Coast population, comprising roughly 75% of the entire population in North America, has been observed wintering in wet agricultural lands and open water surrounded by forest. Individual colonies of wintering swans move around from field to field or from one forest pond or bay to another. Attributes of winter habitat that trigger movement from one area to another are unknown, which makes it difficult to identify specific factors that constitute acceptable or quality winter habitat for this species.

Trumpeter swans were historically abundant in the continental United States, but intensive hunting pressure led to their near extinction by the early 1930s (remnant flocks were known in Alaska and Canada). Conservation efforts including habitat protection, propagation, relocation, and protective status have slowly rebuilt population levels to relatively stable or increasing numbers. Recent data provided by the governments of Canada, Mexico, and the United States (1994 Update to the North American Waterfowl Management Plan) indicate that the status of the swan in the Pacific Coast region is above winter index goals and increasing. From 1990 to 1992, 13,500 trumpeters were observed in winter index areas. This number is 3,500 above the plan's goal for the year 2001.

The Elwha reservoirs are a very limited and only recently utilized wintering area for trumpeter swans; neither is native habitat for the species. It is expected that a free-flowing Elwha River would support some lower level of trumpeter swan rearing needs. Mitigation measures, including obtaining comparable native habitat for swans elsewhere on the north Olympic Peninsula to offset any apparent losses by dam removal, would be examined as appropriate as part of either the Implementation EIS or post-EIS permitting.

Q: What would impacts be of dam removal on amphibians.

A: It is generally accepted that amphibian populations would benefit if a free-flowing Elwha River were restored. The loss of 684 surface acres of reservoir would be more than offset by the creation

and re-establishment of approximately five miles of a natural river corridor and riparian zone. Surveys would be conducted to determine amphibian status in the area and any mitigation steps necessary to ensure their protection during dam removal would be implemented. There would be significant opportunities for restoration of amphibian habitat within the restored riparian and upland forest of the reservoirs; measures would be incorporated in habitat management plans. The utilization of accumulated woody debris in the two reservoirs is one component of amphibian habitat that could be incorporated in the restoration plan.

Q: One commentor noted there is a regional cumulative impact from conversion of former elk habitat (local Elwha area subpopulation) to residential and commercial uses and the loss of elk habitat due to inundation of habitat from the two reservoirs.

A: Removal of the dams and revegetation of exposed sediments would affect local elk population in two ways. The migration corridor connecting higher elevation subalpine parklands with low elevation forests would be extended down the Elwha valley. Although benefits of increased access to lowland forests and meadows would be curtailed by development of these areas to residential and commercial use, some portion of lowland habitat would be protected by the Olympic National Park and more accessible to migrating elk.

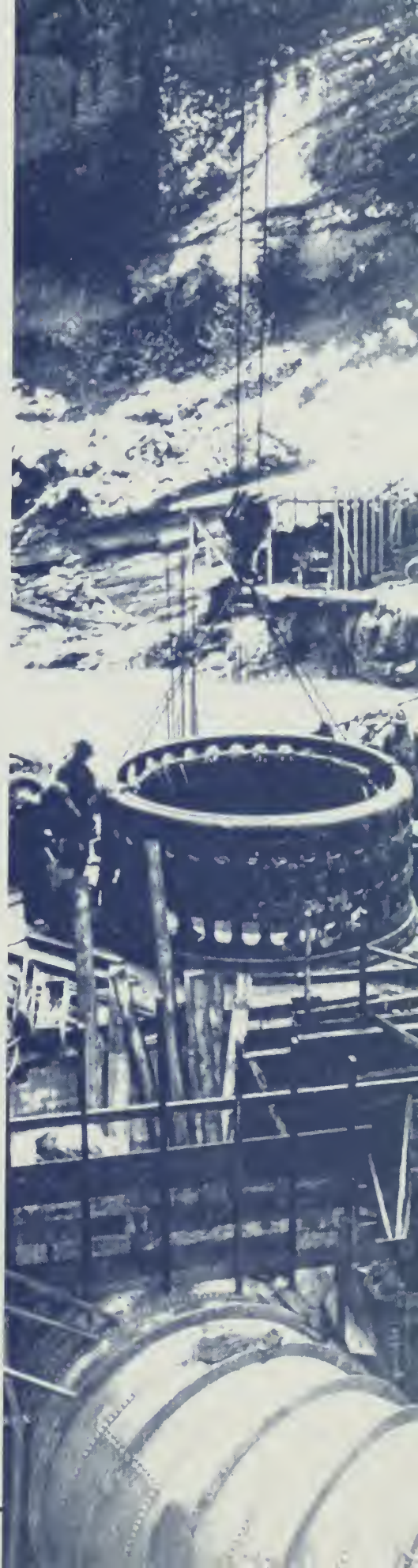
Dam removal would also create more elk habitat in the former lake areas. Alder scrub-shrub developing on exposed sediments would evolve into deciduous forest over 10 to 20 years. The additional 400 to 550 acres of high quality forage habitat would probably support a few more elk, which would help offset population declines resulting from conversion of other lowland areas to residential and commercial uses.

Issue: Impact to wildlife from stabilizing sediments and/or changing the river channel; impact to wildlife migration (deer, elk) corridors from changing river channel

Q: Commentors perceived that stabilizing large volumes of sediment would restrict the channel or change the course of the restored river and thereby change wildlife habitat or animal migration patterns.

A: It is not likely stabilizing large volumes of sediment in the riverway would be attempted, as natural erosion would undo human efforts. Some recontouring and revegetating may be possible, but these probably would not affect Roosevelt elk or black-tailed deer movement or migration patterns. Removing the reservoirs and restoring riparian and upland habitat would reestablish migration corridors and provide deer and elk forage--a positive impact on these species.

Comment Letters





Cedar tree, caption: "A Cedar Tree on The Elwha River, two miles above Mountain Inn, Washington. The Tree is 40 feet 8 inches in circumference". No date. (Clallam County Historical Society)

Previous page: Setting of generator on building base, 1921.
(Daishowa/James River Company Photo)

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Washington Department of Fish and Wildlife-C577; land use

Washington Department of Natural Resources-C577; sediment management, flooding, ecosystem management, land use

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CY3-Olym-404-06

CITY OF PORT ANGELES

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PORT ANGELES, WASHINGTON 98362
FAX: (206) 452-0353

November 9, 1994

Ms. Sara Bransom
National Park Service, Western Team
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

Thank you for the opportunity to review the above referenced draft EIS concerning the Elwha River Ecosystem Restoration. We understand that the DEIS has adopted the DEIS developed by FERC in March 1993 and the Elwha Report developed in Jan. 1994 by DOI, DOC and Lower Elwha S'Klallam Tribe.

Our most important issues at this time involve water quality and quantity. The City of Port Angeles and its mills have relied on the excellent water quality and stable flows of the Elwha River to support domestic and industrial users. Many of the reports and draft impact statements have noted that water quality will be impacted and the severity of the impact will depend on the method chosen for dam removal. We are also concerned about the flooding potential to our Ranney Well and industrial intake due to aggradation of the stream. We hereby reference and incorporate the comments we have previously submitted on the aforementioned reports and impact statements.

We are relying upon the statements made by Congress as restated in the summary of this document that DOI has been directed "to protect downstream water quality for tribal, domestic and industrial users, and NPS will commit to that protection in the Record of Decision in this draft EIS."

The timing of this protection is of extreme importance to the City. It is imperative that any replacement systems be in place and operational prior to the start of dam removal. We look forward to our participation in the future discussions and determinations regarding the solutions to water quality and quantity for the Elwha River.

Very truly yours,

Joan K. Sargent
Mayor

JNP:jp

Disk: c:\wp60\Jack\Dams\DOIDEIS.N94
File: Elwha Dam Removal
copies: Jeff Pomeranz, City Manager
City Council

QUILEUTE NATURAL RESOURCES

Quileute Indian Tribe

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DEC 12 1994
CY96-Olym-404-06

December 7, 1994

Sarah Bransom
National Park Service
Western Team
12795 West Alameda Parkway
Denver CO 80225-0287

Dear Ms. Bransom,

I am writing in support of the Glines Canyon and Elwha Dam removal. Fisheries are the Quileute's main cultural and economic base, and we understand the importance such a project has on future restoration and stream enhancement. This is an excellent opportunity to restore critical stocks as well as document the results of removing such a permanent anadroumous block, and we strongly support the effort.

Please keep us informed on the progress of the scoping process and the Environmental Impact Statement, and feel free to contact me at 374-5695 if our department can be of any assistance.

Beth Naughton
TFW Biologist

cc; Mel Moon
Anne Shaffer
Ron Figlar-Barnes

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

REPLY TO ATTN OF: WD-126

Received
DSC-TWE
DEC 22 1994
C438 OLYM 404-06

Sarah Bransom
National Park Service
DSC-TWE-Planning
12795 Alameda Parkway
Denver, Colorado 80225-0287

DEC 19 1994

Dear Ms. Bransom:

The Environmental Protection Agency (EPA) has reviewed the Draft Environmental Impact Statement for the Elwha River Ecosystem Restoration (draft EIS). The proposed action would fully restore the Elwha River ecosystem and native anadromous fisheries through the decommission of Elwha Dam and Glines Canyon Dam, located in Clallam County on the Olympic Peninsula in Washington State.

Five alternatives are examined, including a No Action alternative, to determine how to best achieve the goals of the Elwha River Ecosystem and Fisheries Restoration Act issued by Congress in 1992 (Public Law 102-495). EPA supports the proposed action, which would remove both the Elwha and the Glines Canyon Dams and their associated infrastructure.

From a regulatory standpoint, this project is very complicated. The Clean Water Act is designed to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. To that end, EPA is bound to assure that water quality impacts are kept to a minimum. However, the long term ecological benefits that this project will bring, must be kept in mind. Although short term impacts to wetlands, sediment loading, water level and in-stream species may occur, they will be minimal in contrast to the vast overall improvement in ecosystem conditions in and around the river as a whole. Detailed comments on these topics follow.

Rating

EPA has rated the draft EIS LO (Lack of Objections). A copy of our rating system is enclosed for your information. If you have questions about our review of this EIS, please contact John Bregar in our Environmental Review Section at (206)553-1984.

Sincerely,

Joan Cabreza, Chief
Environmental Review Section

cc: Brian Winter, NPS
Jeff Bohman, Elwha Klallam Tribe

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Environmental Protection Agency
Comments on the Draft Environmental Impact
Statement for the Elwha River
Ecosystem Restoration

Wetlands

Page 20, Table 1

- It would be helpful to include riparian habitat impacts and restoration.

Page 24, 25

- In the "restored wetlands" column there should be a reference to wetland loss at the Elwha River delta due to the sediment retention by the dams.

Page 53

- Second paragraph -- The three classes of wetlands should be specifically identified for clarification.
- Fourth paragraph -- Do wetlands comprise all 26 acres of reclaimed area, or is some of that riparian area as well?

Page 54

- First paragraph -- Do wetlands comprise all 22 acres of reclaimed area, or is some of that riparian area as well?

General Comments

For purposes of Clean Water Act section 404 permits where dredge or fill activity is proposed in waters of the United States, all aquatic resource areas, including wetlands, should be clearly identified and assessed in relation to project impacts.

EPA understands that this draft EIS is the first in a series of two EIS processes. The course of action chosen in the Record of Decision from this first EIS will determine the scope of analysis for the second EIS process. Therefore, although wetland impacts are not quantified in terms of delineations and inventories in this EIS, they will most certainly need to be addressed in the second EIS process. The following discussion describes the methodology that should be used in the analysis of wetland impacts.

Wetlands are one of a number of "Special Aquatic Sites" referenced in the section 404(b)(1) Guidelines. The section 404(b)(1) Guidelines provide the substantive environmental criteria for protecting waters of the U.S. under section 404 of the Clean Water Act. Wetlands are significant environmental resources that provide a wide range of important functions and values. They have experienced severe cumulative losses nationally. For these reasons protection of wetlands and other important aquatic resource habitats is a high EPA priority.

Wetlands in the project area should first be identified and delineated consistent with the Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, January 1987, Final Report and its recent guidance on implementation. Delineation should be followed by a functional assessment to determine the extent and importance of existing wetland and aquatic resources. Several options such as the Wetland Evaluation Technique are available for use in determining wetland and associated aquatic resources functions and their values. Any special features such as rare or unique habitats should receive special attention.

Once the wetland functions are defined, the possibilities for mitigating potential impacts can be explored. Planning and design should seek to avoid impacts wherever possible, to minimize impacts which are unavoidable, and, as a final alternative, to provide adequate compensation for all unavoidable impacts. This will require a thorough evaluation of all less environmentally damaging project alternatives. For non-water dependent activities, such as roads, alternatives to siting in wetlands are presumed to be available unless demonstrated otherwise. The 404(b)(1) Guidelines and EPA Wetland Specialists should be consulted for specific guidance on the scope of avoidance and minimization alternatives that need to be addressed under 404(b)(1).

In addition, we recommend that a detailed compensatory mitigation plan be developed and included in the EIS for unavoidable wetland and aquatic resource impacts (see attached Mitigation Plan Requirements). This mitigation plan should include consideration of both direct, indirect, and cumulative effects. It should contain a statement of goals, a monitoring plan, long-term management/protection objectives and a contingency plan (a commitment to conduct additional work if required to meet the goals of the plan). The mitigation plan should also include best management practices and mitigation measures that will manage stormwater runoff from roadways before it reaches wetlands, streams and other aquatic habitats. In general, wetlands, including mitigation wetlands, should not be used for treatment of stormwater.

We suggest that the lead agency meet with resource agencies, including EPA, to discuss mitigation options. To coordinate the wetland and aquatic resource impact aspects of this project, please contact Linda Storm, Wetlands Specialist, at (206) 553-2578 in the Seattle Regional EPA office.

Water Quality

Due to the potential short-term violation of Washington State Water Quality Standards, the Park Service should contact the Washington State Department of Ecology (DOE) in Olympia. The person to contact about a Water Quality Modification is Bill Backous at the DOE at (206)407-6271.

EPA's primary concerns regard project impacts on sediment loading, water level and in-stream species.

The implementation EIS should provide a detailed description of the existing physical, chemical, and biological characteristics of the Elwha River and its tributaries. The following items should be addressed in the EIS:

a. The EIS should clearly demonstrate that project implementation will comply with state Water Quality Standards, even though a short-term modification will be required. This section should include an antidegradation analysis, as specified in the Antidegradation Policy (40 CFR 131.12). The EIS should provide a quantitative basis to judge whether physical and chemical parameters, such as temperature, turbidity, and sediment accumulation, will be kept at levels that will protect and fully support designated uses and meet Water Quality Standards under each of the action alternatives.

b. Stream classification methodology and stream protection strategies should be outlined in detail.

c. Baseline water quality data at the pre-project level are key in the evaluation of projected impacts. Therefore, data from relevant sampling efforts/watershed analysis should be included as part of the "affected environment" discussion. The discussion should identify the amount and quality of available resource information, including data gaps and needs.

d. The EIS should show the extent to which fish habitat could be impaired by project activities, including effects on stream structure, seasonal and spawning habitats, large organic material supplies, and riparian habitats.

Best Management Practices (BMP's)

The achievement of Water Quality Standards for non-point source activities occurs through the implementation of BMP's designed to protect Water Quality Standards. Water quality criteria are the means by which BMP effectiveness is measured. While BMP's are intended to protect water quality, they should be monitored to verify their effectiveness. If found ineffective, the BMP's should be revised. Therefore, the EIS should:

a. Show a commitment to BMP monitoring within the framework of project monitoring plans (see discussion below).

b. Use monitoring feedback as a mechanism for BMP refinement.

LOWER ELWHA TRIBAL COUNCIL

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Received
DSC-TWE
DEC 27 1994
C507 olym404-06

Sarah Bransom
National Park Service
DSC-TWE-Planning
12795 Alameda Parkway
Denver, CO 80225-0287

23 December 1994

Dear Ms Bransom,

The Lower Elwha S'Klallam Tribe has been pleased to work closely with the National Park Service and other federal agencies as a cooperator in the development of the Elwha River Ecosystem Restoration Draft Environmental Impact Statement. That document, along with its adopted portions of The Elwha Report (DOI, 1/94) and the FERC Draft Staff Report on the Glines Canyon and Elwha Hydroelectric Projects (FERC, 3/93), represents a thorough and considered treatment of the options for restoring the Elwha River ecosystem.

At this time, the Tribe has no formal comments or requested changes to the DEIS. Beyond that, we look forward to working with all the agencies to respond to the issues arising during the public review period and in completing the Final EIS

Our sincere thanks to you, your colleagues and the many other dedicated professionals who have worked so hard to make this the high quality document that it is

Sincerely,

Frances G. Charles
Tribal Chairperson

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DSC-TWE
DEC 27 1994
C577 olym-404-06

December 21, 1994

Ms. Sarah Braneom
National Park Service
12795 Alameda Parkway
Denver CO 80225-0287

Dear Ms. Braneom:

Thank you for the opportunity to comment on the draft environmental impact etatement (DEIS) for the Elwha River Ecoeyetem Restoration. Consistent with the Department of Ecology's reeponsibilities ae Washington State's coordinator for National Environmental Policy Act documents, we are forwarding the comments from Waehington Department of Fieh and Wildlife, and Department of Natural Reeources.

Both departments concurred that removal of both dams was the only alternative to allow the restoration of the Elwha River ecoeyetem. They aleo had comments on eediment management and land uees for the area. The Department of Natural Resourcee had additional concerns dealing with dispoeal of demolition waete materials, and long-term land and reeource management. Please refer to the attached letters for epecific comments.

If you have any questione on the commente made by Washington Fieh and Wildlife, pleaee call Me. Chrie Drivdahl at (206) 902-2580. Questione for the Department of Natural Resources should be directed to the Resource Planning and Aeset Management Division at (206) 902-1600, or to the Aquatic Resourcee Division at (206) 902-1100.

Sincerely,

Barbara J. Ritchie
Environmental Review Section

BJR:ri
94-9082

Attachment

cc: Chrie Drivdahl, WDFW
Craig Partridge, DNR

WASHINGTON STATE DEPARTMENT OF
Natural Resources

JENNIFER M. BELCHER
Commissioner of Public Lands
KALEEN COTTINGHAM
Supervisor

Received
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DEC 27 1995
0571 -olym-4040

December 22, 1994

Ms. Rebecca Inman
Environmental Review Section
Washington Department of Ecology
PO Box 47600
Olympia, WA 98504-7600

Subject: Elwha River Restoration DEIS1 and DEIS2 Comments

Dear Ms. Inman:

Thank you for your efforts in coordinating a state response to the *Draft Environmental Impact Statement Elwha River Ecosystem Restoration.* The enclosed is intended to serve as both comment to the draft environmental impact statement (DEIS1) and as scoping period comments for the implementation draft environmental impact statement (DEIS2).

The Department of Natural Resources (DNR) has provided comments on components of the proposal on previous occasions. This letter supports those previous comments, adds detail to some, and offers new ones.

The Department of Natural Resources supports the full restoration of the Elwha River ecosystem and concurs that removal of both dams is the only alternative that has the potential for full restoration. As we have previously stated, the project provides both the possibility for a high degree of success and the opportunity to greatly advance our knowledge of riverine ecosystem restoration.

The DNR believes that full restoration of the Elwha River ecosystem cannot be achieved for the long term without lower watershed upland, aquatic land, and water resource management practices consistent with that goal. We view full restoration as a three phase process that begins with the removal of the dams to restore the physical, hydrological and biological processes of the free flowing river and nearshore marine area. The second phase of the process addresses the disposition and/or management of the lands acquired as part of the removal project to provide for the restoration and protection of the river corridor ecosystem. The third phase, a phase we do not see addressed at present, would entail a comprehensive ecosystem management planning process. The resulting long term resource management plans for uplands, aquatic lands, water, fish, and wildlife, developed and agreed to by all interested

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parties, would ensure that the restoration investments of the first two phases would be protected for the long term. We, therefore, strongly recommend that provisions be made to involve all interested parties in at least beginning an ecosystem management planning process as part of the implementation. The anticipated small incremental cost of the third phase would be well worth the protection and management guidance it would provide.

The Elwha proposal provides a unique opportunity for re-establishing a healthy complete natural river ecosystem from source to nearshore marine area in a near pristine condition. As such, the Elwha River could serve as a living laboratory. We concur with *The Elwha Report* that study of the project can add significantly to our knowledge of river/estuary restorations. In the long term it could serve as an invaluable healthy watershed reference area for use in evaluating the effectiveness of management practices in other watersheds throughout the Pacific Northwest.

Sediments management in the nearshore marine environment continues to be a primary concern of the DNR. It has been established that restoring the free flow of the river waters and bedload materials will re-establish a larger delta and change the character of the longshore transport segment to a finer grained sand/gravel substrate in waters less than 20 feet deep. Recent work on quantification of nearshore habitat and characterization of the sediment transport segment has begun to define the scope of the potential impacts. We strongly recommend that the proponents conduct further studies on the short and long term impacts of the proposed options, including more detailed analysis of the delta building process and the development of outfall site scenarios for the options. Further study will be necessary to arrive at a responsible sediment management plan that will optimize system productivity.

Presently, our greatest concern regarding the potential impacts for marine disposal is the lack of analysis on the effect the suspended silt and clay fraction may have on the productivity of the marine communities in the short term. We have welcomed the proponents' efforts to convene a scientific panel to address the issue. Dr. Tom Mumford of our Aquatic Resources Division staff looks forward to participating on the panel.

Additional sediment management and disposal alternatives may need to be developed and evaluated as the advanced planning for implementation proceeds. We still have questions as

to how much of the fine sediments need to be dredged and piped to saltwater to avoid freshwater impacts under the non-retention scenarios. We have previously suggested you explore the potential use of the sediments as a soil amendment. We strongly recommend that land disposal of the dredged silt and clay fraction in the lower Elwha valley be further explored as a means of avoiding marine, as well as, freshwater impacts. As we have recently noted, the sediments may have a commodity value. The feasibility of stock piling and sale should be explored by the proponents.

The DNR has some concern that the levees in the lower river may constrain the restoration of the braided delta habitat that was most likely a key component of the system's historic anadromous salmonid production. We view levee improvements as potentially inconsistent with the primary goal of the proposal. Therefore, we suggest the proponents initiate a discussion with concerned parties to further explore the need for and impacts of levees. Mitigation options for potential damage to properties and or facilities may need to be considered. It may be that expenditures are better directed at mitigation to assure the long term health of the ecosystem, the salmon stocks, and the people and animals that rely on them; than on measures to reduce short term environmental impacts.

Under Article 17 of the state constitution, the State of Washington asserts its ownership to the beds and shores of all navigable waters in the state up to and including the line of mean high tide, in waters where the tide ebbs and flows, and up to and including the line of ordinary high water or permanent vegetation.

The DNR accepts either evidence that a water body was used in the past for the transport of useful commerce or that it was capable and susceptible of being used in it's natural state for the transport of useful commerce (among other conditions) as sufficient evidence to establish the navigability of a water body. By reason of the evidence that the Elwha River was used for the transport of useful commerce and the capability of being navigated in it's natural state, the DNR reserves the right to assert state ownership of the original bed and shores (as they existed at statehood) at least up to approximately river mile 14. The above is not intended to address or assert any claim to properties owned or held for or by the Lower Elwha S'Klallam Tribe.

A legal agreement may need to be executed with the DNR for any dredging or mechanical movement of sediments in the deltas or the river beds within the lakes. We reserve the right to assert an ownership claim for any portion or all of the sediments described in the proposal. We also request that assays of the sediments for valuable minerals content be conducted during the advanced planning stages of the implementation process.

We would also like to explore the possibility of agreements between all interested parties regarding impacts of demolition works and short term bedload increases on property ownership. The excavation or dredging of sediments could have a substantial effect on ownership issues within the drained areas. The lower river may also be effected by the project; as it may be more susceptible to evulsive channel changes for a period of several years after the dams are removed and the bedload is distributed.

The DNR has previously stated that we are not interested in acquiring the lands that will be exposed as uplands when the lakes are drained. We presume that, regardless of the manager selected, those lands will be managed to achieve and protect the full restoration objectives of the proposal and to comply with the Wild and Scenic Rivers Act as mandated by Public Law 102-495, section 3(c)(3). We would recommend recording of easements to that effect on the title(s) to the subject property(s) at acquisition be considered as a prudent first step in protecting the watershed. The DNR's trustee obligations to protect public access to aquatic lands for fishing, recreation, navigation and commerce will need to be addressed in any plan for disposition or management of the lands acquired. That may require that we reconsider acquisition of some portions of the exposed lands if provisions for access and navigation are not otherwise made. We may also choose to express an interest in acquiring and/or managing portions of the current uplands within the proposed Lake Aldwell parcel acquisition as the implementation planning process proceeds.

We appreciate the significance of the proposed acquired lands to the Tribal culture and their potential importance to the Tribal economy. We are willing to participate in discussions to further explore the tribe's proposal for a cooperative management venture.

The DNR would like to participate in developing provisions for public access as part of the implementation DEIS. The Aquatic Resources Division's Strategic Plan reaffirms the state's commitment to preserving the public's right of access over navigable waters. We feel that the

implementation plan should provide for securing and developing boat ramp access sites from near the head of Lake Mills downstream to the mouth. Some of the other access options we would like to explore further are foot trails along the river and beach corridor, ideally connecting the park to the coast, and interpretive facilities. Regional trail connections would add to the use and value of the restored area.

Dam removal may result in the installation of a third BPA transmission line sooner than would otherwise be necessary. An additional powerline right-of-way corridor (50 ft. X 120 miles) through the forest land would significantly reduce the forest land base across the Olympic Peninsula. An enlarged powerline right-of-way would also increase the potential for long-term forest ecosystem degradation. The DNR, therefore, concurs with the encouragement provided in *The Elwha Report* for the BPA and affiliates to investigate local opportunities for development of replacement power. We also encourage the evaluation of power transmission facilities and/or technologies options that could minimize any necessary right-of-way expansion.

Road access improvements and hauling activities associated with demolition of the projects and dredging of sediments will require more evaluation to quantify impacts and define specific permitting issues. We reserve the option to participate in further development of waste disposal and dredging planning that may result in conversions or other forest land permitting issues.

Disposal of demolition waste materials has not been adequately addressed to this point. Waste materials, including debris from the dams and excavated rock and fill from both the dam sites and access road construction, will require proper storage and disposal. We would like to work with the project proponents to develop waste disposal options that will minimize the loss of productive forest lands areas to conversions for disposal site(s). We also do not advocate the disposal of waste materials in marine disposal sites. There may, however, be opportunities for creative solutions to a number of project impacts. In particular, more analysis needs to be done on the possible use of clean rock and concrete rubble in constructing nearshore marine reef habitats. For example, the potential may exist for utilizing the rock and rubble to construct reefs as mitigation for the short term sediment loading

impacts on the nearshore environment. Such use may reduce the upland waste disposal problems. The feasibility of using the rock and rubble for other potential restoration projects in the outer Strait of Juan de Fuca also needs to be further explored. Nearshore reef construction has been identified as a restoration project alternative for the Tenyo Maru oil spill.

Please note that legal agreements will need to be executed with the DNR for placement of any materials onto state uplands or aquatic lands and/or the disposal of any materials on an approved Puget Sound Marine disposal site. Contact the Resource Planning and Asset Management Division (206-902-1600) or the Aquatic Resources Division at 206-902-1100, respectively, for further information.

Sincerely,

Craig Partridge
Division Manager
Aquatic Resources Division
PO Box 47027
Olympia, WA 98504-7027

c: Stan Biles
Amy Bell

mkm3/bg/deis1com.ltr

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DEPARTMENT OF ECOLOGY
ENVIRONMENTAL REVIEW

State of Washington
DEPARTMENT OF FISH AND WILDLIFE
Mailing Address: 600 Capitol Way N, Olympia, WA 98501-1091 - (206) 902-2200; TDD (206) 902-2207
Main Office Location: Natural Resources Building, 1111 Washington Street SE, Olympia, WA

December 16, 1994

Ms. Barbara Ritchie
Department of Ecology
Environmental Review Section
P.O. Box 47703
Olympia, Washington 98504-7703

Dear Ms. Ritchie:

RE: Elwha River Restoration Report, submitted pursuant to Public Law 102-495, January 1994

The Washington Department of Fish and Wildlife (WDFW) has reviewed the Draft Environmental Impact Statement on Restoration of the Elwha River Ecosystem and Native Anadromous Fisheries and submits the following comments for state response.

WDFW agrees with the conclusions reached by the Department of Interior (DOI) in this report for full restoration of anadromous fish and wildlife in the Elwha River basin. We believe complete restoration of the ecosystem and related fish and wildlife resources cannot be accomplished without removal of both Elwha and Glines dams.

Restoration methods, in particular, the sediment management alternatives, are also important. DOI has thoroughly analyzed the alternatives and provided extensive background material to discuss advantages and disadvantages of each scenario. In the interest of achieving total restoration of the Elwha River ecosystem, complete removal of reservoir sediments would be the preferred option. We recognize the constraints, however, and concur that scenarios 5, 6, and 7 (or combinations thereof) appear to provide the most desirable results with minimal impacts on downstream resources and should be investigated further.

The discussion on Disposition of Project Lands describes several land use options: natural resource, economic development, mixed use, residential and conservation (refuge). We bope the majority of the project lands will remain in a natural or semi-natural state to preserve the biological integrity of the entire river corridor and to compensate for wildlife resources lost for the 60-90 years since the dams were constructed. We recommend that any economic, residential, or mixed use be minimized and confined to already disturbed areas. The criteria used to determine which lands are preserved in a natural state should not be restricted to steep slopes, but also include the low gradient areas.

We appreciate the opportunity to comment on this report and hope our comments will be helpful in developing the final EIS.

Sincerely,

Chris Drivdahl

Chris Drivdahl
Assistant Director
Habitat Program

CD:pd

cc: John Conklin
Dave Gufler
USFWS
Elwha Tribe

Special Interest Group Comment Letters

American Rivers-C451
American Whitewater Affiliation-C576; socioeconomics
Appalachian Mountain Club-C289
Clallam Bay/Sekiu Chamber of Commerce-C463; NEPA process/ legal, socioeconomics Clover Creek Council-C179
Columbia Gorge Audubon Society-C486
Common Sense Resource League - C604
Dry Creek Grange #646-C596; socioeconomics, fisheries, flooding, water quality and quantity, NEPA process/legal
Federation of Fly Fishers-C182; fisheries
Friends of the Cowlitz-C314
Friends of the Earth-C542; socioeconomics
Friends of the San Juans-C49
Greater Ecosystem Alliance-C501
International Rivers Network-C514
Lighthawk-C499
Mazamas-C610; socioeconomics
The Mountaineers-C171
National Parks and Conservation Association-C553
North Peninsula Home Builders and BuildingIndustry Association of Washington-C449; fisheries, socioeconomics, wildlife and species of special concern, power generation, water quality and quantity, NEPA process/legal
Okanogan County Citizens Coalition-C552; fisheries, power generation,wildlife and species of special concern, recreation, flooding, water quantity, socioeconomics
Olympic Park Associates-C612; socioeconomics, ecosystem management, alternatives, sediment management, fisheries, living marine resources, wildlife and species of special concern, wetlands and vegetation, cultural resources, flooding
Olympic Rivers Council-C271; socioeconomics, recreation
Oregon Natural Resources Council-C490
Pacific Fishery Management Council-C320
Pilchuck Audubon Society-C420
Rescue Elwha Area Lakes-C333; fisheries, power generation,socioeconomics, ecosystem,sediment management, recreation, NEPA process/legal
Rivers Council of Washington-C464
Save Our Wild Salmon Coalition-C559
Seattle Audubon Society-C589
Trout Unlimited-C475
Trout Unlimited - Chapter #383-C216
Trout Unlimited - Whatcom County Chapter #178-C286
Washington Environmental Council-C421
Washington State Grange - C559
Washington Wilderness Coalition-C497
Western Ancient Forest Campaign-C430
The Wilderness Society-C391
Wilderness Watch-C3
Wise Use Movement-C521; NEPA process/legal



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November 1, 1994

Ms. Sarah Bransom
National Park Service
Western Team
12795 Alameda Parkway
Denver, CO 80225-0287

Dear Ms. Bransom:

The Northwest Chapter of Wilderness Watch strongly supports the National Park Service proposal to fully restore the ecosystem of the Elwah River by removing the existing dams.

Please pass our support along to the Secretary of the Interior, Bruce Babbitt, and tell him we appreciate his courage on this issue.

Sincerely,

Joseph F. Higgins
Chairman, Northwest Chapter

FRIENDS of the San Juans
box 1344, Friday Harbor, WA 98250

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DSC-TWE
NOV 18 1994
C49-olym-404-06

November 10, 1994

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, Colorado 80225-0287

Dear Ms. Bransom,

Friends of the San Juans is a non-profit organization with 750 members whose purpose is to protect the environment of the San Juan Islands and surrounding area. We support long-range planning for both land use and marine resources and have been active in the process of creating the Northwest Straits National Marine Sanctuary.

The San Juan Islands are located directly across the Strait of Juan de Fuca from the Elwha River Watershed. We strongly encourage the removal of the dams as a means of restoring salmon habitat.

The San Juan Islands are the fastest growing area in the State of Washington and our organization has serious concerns about maintaining the relatively unspoiled natural environment here. Dwindling fish stocks have had a negative impact not only on our local commercial fishing fleet and sport fisheries, but have raised concerns about the availablility of food for our resident and transient orca whale population.

In the new publication "State of the Northwest" by John C. Ryan of Northwest Environment Watch, page 62, he states:

"Healthy salmon runs - and the healthy ecosystems they reflect - have become rare in much of the Northwest. A recent study of salmon in California, Idaho, Oregon and Washington concluded that in only 6 percent of their collective range are most salmon stocks in good condition. In 38 percent of this range all salmon are extinct, and in 56 precent most stocks are imperiled or extinct. At least 106 major salmon stocks are extinct in these states, and 200 others face the risk of extinction."

The opportunity to restore these ten salmon runs to the Strait of Juan de Fuca is too great to pass up. We must move ahead with plans to remove the dams, and give new life to the region. This action will have positive environmental and economic impacts.

We support the preferred alternative in the DEIS, to remove the dams. Thank you.

Sincerely,

Nancy DeVaux
Executive Director

cc: The Honorable Patty Murray
The Honorable Norm Dicks



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THE MOUNTAINEERS

Founded in 1906 to explore, Study, Preserve, and Enjoy the Natural Beauty of the Outdoors

December 2, 1994

Ms. Sarah Brinsom
NPS, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0787

Re: Elwha Dams

Dear Ms. Brinsom:

The Mountaineers, elong with most other recreation and environmental organizations in the Northwest, has followed the environmental analysis on the Elwha River ecosystem with great interest. The Mountaineers strongly supported the legislation which authorized removal of the Elwha dams.

The Draft EIS on the Elwha River Ecosystem Restoration amply documents the need to remove both dams on the Elwha to restore the fish runs and to restore the naturel Elwha River ecosystem. The Mountaineers strongly supports the National Perk Service in its Preferred Alternative of removing both dams. We urge the Park Service to move ahead rapidly on its Draft EIS on implementation strategy.

Thank you for the opportunity to make these comments.

Sincerely,

THE MOUNTAINEERS

Craig Rowley

Craig Rowley, President

(206) 284-6310
300 Third Ave. West
Seattle, WA 98119
Fax (206) 284-4977

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CLOVER CREEK COUNCIL

living in harmony with nature

15206-B Fern St S.W. Tacoma, WA 98498 24 hr phone: 596-8222

4 December 1994

Sarah Bransom
National Parks Service
Elwha River Project
Box 25287
Denver, CO 80225-0287

RE: Draft EIS, Elwha River

Dear Ms. Bransom,

Salmon ere a criticel element in the Washington State Economy. I understand removal of the dams is the preferred alternative in the draft EIS.

We support this alternetive. Please continue to move forward and restore the Elwha to support the long-term restoration of our state's salmon industry.

Our organization is striving to restore a smell stream in Pierce County (Clover Creek). We are looking to the Perks Service to do their job at restoring salmon too.

Sincerely,

Al Schmeuder

Al Schmeuder, facilitator

[cc8-dec0401.94]

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FEDERATION OF FLY FISHERS
Conserving — Restoring — Educating Through Fly Fishing

Steelhead Committee
16430 72nd West
Edmonds, WA 98026

December 2, 1994

Sarah Branson
National Parks Service
Elwha River Project
PO Box 25287
Denver, Colorado 80225-0287

Re: Elwha River Draft EIS

Dear Ms. Branson:

I an writing on behalf of the Steelhead Committee of the Federation of Fly Fishers, an international conservation organization, to comment on the draft Environmental Impact Statement for restoring the Elwha River. The Steelhead Committee supports strongly the preferred alternative of removing the dams. Dam removal is the only way to restore the Elwha ecosystem and its salmon and trout runs.

The Federation urges that restoration of Elwha anadromous salmon and trout runs be based upon recolonization of the watershed from natural reproduction of the existing remnant salmon and trout Elwha populations. In this contert, the Federation notes that in recent years smolt traps operated above the dams have captured steelhead smolts inferring the eristence of land-lock native steelhead populations in the upper Elwha. The ability of these stocks to re-establish steelhead runs in the upper watershed should not be compromised or jeopardized with artificial supplementation programs.

If natural reproduction fails to recolonize the watershed in a reasonable period, perhaps 20 years, or if no native remnant populations exist, the Federation would support small scale artificial supplementation programs provided those programs are restricted severely to native or near native stocks--such as Beardslee and Crescenti trout stocks from Lake Crescent which appear to be land-locked populations originally native to the Elwha. Further, any supplementation programs must have clear objectives and definitive sunset clauses for early phase out and elimination.

Restoring the Elwha is the best opportunity to restore anadromous salmon and trout runs anywhere in the Northwest. Healthy, wild runs will provide unmatched recreational and economic benefits to the citizens of the region and fulfill the Park Service's mandate for management of National Parks for the benefit of the creatures native to the Park.

Please move forward to implement dam removal.

Sincerely,

Pete Soverel
Chairman

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DEC 13 1994
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8 Dec 1994

Sara Bransom
National Parks Service, Elwha River Project
Denver Service Center, P.O. Box 25287
Denver, CO 80225-0287

Draft Environmental Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

I strongly support the recommendation to remove both dams on the Elwha River. The exists no other opportunity in the nation to create such a large benefit to endangered fisheries with as little cost to human activity. Hundreds of miles of pristine salmon and steelhead spawning and rearing habitat can be restored to historical condition with little more than simply removing the dams being required.

I have discussed this with our Senator, Slade Gorton, and realize there are significant issues to be addressed. Immediate job concerns etc can be alleviated by hiring locally to perform the labor. Issues such as electrical power can be solved. The Elwha dams provide little benefit compared to the value of the spawning habitat we have lost.

The National Park Service has a unique opportunity to gain the one of the largest wild salmonid fisheries in the 48 states. Experience following Mt St Helens shows the rivers have remarkable abilities to overcome siltation etc and continue fish production. Costs to remove the dams could be reduced by enormous factors if some of the proposed "Restoration" is deleted, allowing nature to do the job. An added benefit would be gained from the chance to study how the process operates as has been done with the ongoing research after the volcanic eruption and subsequent events on the Toutle, Cowlitz and other streams and lakes in that area.

In closing, I request that you press for removal of the dams. It can be done much more economically than the current proposals indicate. The only penalty is that return to a natural state will take more time than if we spend enormous sums to do all of the restoration by contract. Trout Unlimited and other conservation groups in this area are willing to contribute volunteer efforts where feasible to meet some of the needs also.

Sincerely,

Roger Schulz, President Trout Unlimited Ch.383
1735 Kekamek
Poulsbo, WA 98370

OLYMPIC
RIVERS
COUNCIL
P.O. Box 220 Hoodsport, WA. 98548-9998

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December 2, 1994

Sarah Bransom
National Park Service
Western Team
P.O. Box 25287
Denver, CO 80225-0287

RE: COMMENTS ON THE DEIS FOR THE ELWHA RIVER ECOSYSTEM RESTORATION

We enthusiastically support your "proposed action" to remove both Elwha River dams. To do anything short of removing both dams at this point is senseless.



In 1992, a diverse group of affected parties, including Daishowa, the James River Company, recreationists, the city of Port Angeles, fishing and environmental interests, and the lower Elwha Tribe, reached consensus (yes,--consensus!) in drafting the Elwha Restoration Act. The purpose of the Act is to restore the Elwha River ecosystem and its native anadromous fish. The Elwha Report, and now your DEIS, confirm that the only way to restore the Elwha is to remove both the Elwha and Glines Canyon dams--and that doing so IS feasible and cost-effective. **–SO LET'S DO IT!!**

It angers and saddens us that the "win-win" of this consensus process and the good sense of removing the dams could be jeopardized (as the media suggests) by changes in the political climate. Moving forward to remove the dams is becoming more important every day--every day we are not progressing towards restoration of the Elwha, is a day the fish are losing precious ground! What an opportunity we have to restore the Elwha! Let's not "blow it" for the sake of the fish and wildlife and generations to come because of politics!

It seems like the only major issue remaining--since we now know that removal of the dams is feasible--is MONEY. Our members are convinced that removing the dams is a <u>great</u> value. The Elwha Report concludes that "the costs to fully restore the Elwha River ecosystem and native anadromous fisheries are generally on a par with salmon restoration activities in the region."[1]

Your Table 5 on DEIS page 73 was useful in comparing the energy costs of the alternatives. This type of comparison could be quite useful if carried a step further: in comparing the short- and long-term overall costs of the alternatives, including the "no action" alternative. We would all be awed at the expenses of current operation (of the dams, of fisheries management, of spit maintenance, etc.) and of the near-future expenses of dam removal and/or sediment removal when the dams are silted in. <u>To remove the dams NOW, while the fish still have a fighting chance, is TRUE VALUE!</u>

One less important point we feel obligated to make: Throughout this process, we have commented to FERC and to NPS that whitewater boating is a largely misunderstood sport on the Peninsula. Your DEIS refers many times to "whitewater RAFTERS."[2] Again, may we suggest a more correct word: "whitewater BOATERS," which includes kayakers and canoeists, as well as rafters. Kayakers and canoeists take advantage of the upper runs on the Elwha (Grand Canyon, Rica Canyon) and the lower run (from Elwha Dam to the surf).



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[1] The Elwha Report, January, 1994, page 134.

[2] DEIS, pages 69, 70, and others.

OLYMPIC
RIVERS
COUNCIL
P.O. Box 220 Hoodsport, WA. 98548-9998

We are enclosing a copy of Gary Korb's "Paddler's Guide to the Olympic Peninsula"[3], to help your understanding of whitewater resources on the Peninsula and on the Elwha in particular. After reviewing this guidebook, you'll find that statements like "whitewater rafters would have to travel over 75 miles to find comparable stretches of river"[4] should be changed or deleted.

The DEIS is a very nice (perhaps TOO nice?), straightforward document. We agree wholeheartedly with your recommendation to remove both the Elwha and Glines Canyon dams . . . —and QUICKLY!

--in support of a free-flowing Elwha,

Carol Volk, D.V.M.
Chair, Steering Committee

4930 Geiger Road
Port Orchard, WA 98366

copies:
Congressman Norm Dicks
Senators Patty Murray and Slade Gorton
ORC Steering Committee members

[3] Second edition, copyright 1992. The previous kayaker/salmon cartoon is from Korb's guidebook, page 187.

[4] DEIS, page 69.

Whatcom County Chapter #178
P.O.Box 451
Bellingham, WA. 98227

Received
DSC-TWE
DEC 16 1994

December 10, 1994

Sara Bransom
National Parks Service
c/o Elwha River project
P.O.Box 25287
Denver, CO. 80225-0287

Re: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom,

I am writing to comment on the draft environmental impact statement for the Elwha River ecosystem restoration. After reviewing the potential of restoration for this once great river, I am very excited about the results of this study.

This project is very important, not only for the Olympic Peninsula, but for the entire Pacific Northwest. This project can provide tremendous economic benefits for the Olympic Peninsula and surrounding areas, an area which has been devastated by the loss of timber jobs. This offers your department an incredible opportunity to not only ease this burden, but to bring back a resource that has historically been enjoyed by the residents of this area. It is also important from the standpoint of government following through on information it has been presented.

I strongly support the Secretary's recommendation to remove both dams, and to restore the ecosystem in it's entirety. I urge you to support this project, and in time, a great river and it's resource.

Sincerely,

Red Goodwin, President
Whatcom County Chapter #178

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NORMAN SIMS
143 FLAT HILLS ROAD • AMHERST, MA 01002 • (413) 253-7922
FAX: (413) 253-2636 • E-MAIL: SIMS@JOURN.UMASS.EDU

Dec. 12, 1994

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

I am on the board of directors of the Appalachian Mountain Club, a 65,000-member recreation and conservation club in New England, and the board of directors of New England FLOW, a whitewater paddling coalition.

I'm writing in support of removing the dams on the Elwha River. I support removing the dams from the river system to restore the natural ecosystem and the salmon runs, as required by federal law.

The removal of the Elwha River dam has nation-wide support from whitewater paddlers, fishers, Native Americans, environmentalists, business owners, and even the dam owners.

As a whitewater boater, I have to say to you that restoring the salmon run on the river is the most important thing you can do. What we have done to the salmon is shameful. Here's a chance to make small restoration of a once-great run. It's time to do it.

Not only is restoring the Elwha River system a smart move, in terms of saving hundreds of jobs, keeping promises to the Native Americans, and preserving the salmon, but it would be a smart move on other rivers. The salmon used to run thousands of miles into Idaho. They should do so again.

Yours,

Norman Sims

Friends of the Cowlitz
P.O. Box 721
Toledo, WA 98591
(206)864-6700
FAX (206)864-6701

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DEC 19 1994
C314-olym-404-06

December 14, 1994

Sarah Branson
National Parks Service
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Re: Elwha River

Dear Ms. Branson:

We are writing to comment on the draft Environmental Impact Statement for restoring the Elwha River. We strongly support the preferred alternative of removing the dams. This is the only way to fully restore the Elwha River ecosystem and its salmon runs

Restoring the Elwha is step in the right direction to restoring our depleted salmon runs in the Northwest Enough time, studies and efforts has been spent to date with little results. This is the single best opportunity to restore salmon runs the Olympic Peninsula and possibly the Northwest, and it would provide tremendous economic benefits for the Olympic Peninsula area. Please move forward to implement this important project.

Sincerely,

Bob Reid, President
FRIENDS OF THE COWLITZ

cc. Linda Smith
Betty Sue Morris
Neil Amondson
Jolene Unsoeld
Bill Brumsickle
Jim Springer
Patti Murry
Dave Chappell
Slade Gorton

PACIFIC FISHERY MANAGEMENT COUNCIL

CHAIRMAN
Frank R. Warrens

2130 SW Fifth Avenue, Suite 224
Portland, Oregon 97201
Telephone: (503) 326-6352

EXECUTIVE DIRECTOR
Lawrence D. Six

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December 15, 1994

Ms. Sarah Bransom
National Park Service
Western Team
PO Box 25287
Denver, CO 80225-0287

SUBJECT: Draft Environmeotal Impact Statement, Elwha River Ecosystem Restoration

Dear Ms. Bransom:

The Pacific Fishery Management Council was created by the Magnuson Fishery Conservation and Management Act (MFCMA) in 1976 with the primary role of developing, monitoring and revising management plaos for fisheries cooducted within federal waters off Washington, Oregon and California. Subsequent congressional amendments to the MFCMA in 1986 and 1990 added emphasis to the Council's role in fishery habitat protection, restoration and enhancement.

In view of the fishery habitat concerns specified in the MFCMA, the Council's Habitat Steering Group has reviewed the Department of the Interior's (DOI) Draft Environmental Impact Statement (DEIS) for the Elwha River ecosystem restoration. Based on that review, the Council's comments on the DEIS follow.

The Council notes that considerable effort weot into the preparation of the Elwha River ecosystem restoration DEIS, iocluding incorporation of information from the Federal Energy Regulatory Commission's DEIS for Elwha (Number 2683) and Glines Canyon (Number 588) dams, and the "Elwha Report" (Report to Congress). The level of analysis provided by DOI and the cooperating ageocies is exceptional.

The Council strongly agrees with the conclusions reached by the DOI in the DEIS for full restoration of anadromous fisheries in the Elwha River system. Of the five alternatives examined, only the removal of both Elwha and Glines Canyon dams, associated reservoirs, and appurteoant facilities can achieve the goal of fully restoring anadromous salmonids to the basin. The Couocil notes that the Elwha River was historically one of the most productive producers of anadromous salmonids on the Olympic Peninsula, supporting runs of ten different stocks. Construction of two dams without fish passage facilities has restricted fish access to only the lower 4.9 miles of the Elwha River. Since construction of the dams, loss of gravel recruitment, woody debris and alterations io temperature regimes below the dams have degraded the existing habitat conditions to the point that the Elwha River supports ooly small runs of primarily hatchery supplemented coho, summer/fall chinook salmon and steelhead. Otber historically abundant species such as sockeye, pink, chum, spring chinook salmon and summer steelhead are now either extirpated from the basin or potential candidates for listing under the Endangered

Species Act. The Council notes that habitat conditions above the two dams are rated as excellent and the two reservoirs inundate additional important habitat. The majority of the Elwha River drainage (80 percent) is located within the boundaries of Olympic National Park and is in a pristine condition. Once accessible, these habitats will be colonized rapidly. Restoration plans for fish stocks call for a change from current hatchery supplementation to primarily wild stock management.

The outlook for salmon stocks throughout the Pacific Northwest currently is bleak. Recreational and commercial fisheries have been curtailed dramatically in many areas, resulting in huge economic losses. Many stocks are being considered for listing under the Endangered Species Act. Restoration of these stocks will not be easy. We have lost many formerly productive habitats to the effects of urbanization, logging, hydroelectric developments, mining and agricultural activities. Rebuildiog and protecting in perpetuity the productive capacity of such habitats will be a long and costly process. The restoration of the Elwha River represents a unique opportunity to restore wild salmon stocks on a scale unparalleled on the West Coast. When compared to the costs of restoring other river systems that have been altered by land management practices, the restoration of the Elwha River will prove to be highly cost effective. Additionally, because of the ownership patterns within the drainage, this investment will not be threatened by future development activities.

In closing, the Council supports the cooclusions reached in the DEIS. Restoration of the Elwha River clearly represents one of the best opportunities to dramatically increase wild salmon production in the Pacific Northwest.

Siocerely,

John Coon

for Lawrence D. Six
Executive Director

MM:sjk
c: Habitat Committee
Couocil members

Rescue Elwha Area Lakes

November 30, 1994

Received
DSC-TWE
DEC 20 1994
L333 OLYM 404-06

Dr. Brian Winter - Interagency Team Leader
Olympic National Park
600 E Park
Port Angeles, WA 98362

Dear Dr. Winter,

RE: Environmental Impact Statement to Justify Dam Removal

It is our opinion that the EIS fails to meet the requirements of PL 102-495 (The Elwha Restoration Act) because:

1- "FULL RESTORATION"

The act is about the restoration of all runs of anadromous fish to the Elwha. These fish spend, on average, approximately 80% of their life in salt water. The evidence is clear that the primary problem with depletion of these fish runs is in salt water. One evidence of this is the statistic shown in your own Elwha Report, which admits a return of less than one tenth of one percent of salmon spawned in the hatchery and spawning channel at the mouth of the Elwha river. (Not effected by the dams).

Clearly, no conclusions can be made as to the feasibility of restoring these runs without studies of ocean conditions and taking of fish in the ocean. Statements to the effect that "300,000 fish will return to the river" are not only pure speculation, but disagree with the maximum spawning capacities of the river for the various species that are shown in the FERC report. You disagree with your own EIS!

The act calls for a "study" - not for speculation.

Certainly, it cannot be necessary to remove the dams for "Full Restoration" if "Full Restoration" cannot be achieved even with the dams removed.

2- USE OF THE FERC REPORT AS YOUR EIS.

"FULL RESTORATION" was never considered by FERC in the compilation of their report. It was not the object of James River Corp's dam relicense application and was never considered in the design of proposed fish passages. Comparisons and conclusions based on these now antiquated designs are not valid for a study for "FULL RESTORATION" of the Elwha fishery. You have defined "FULL RESTORATION" as including restoration of the pink and chum salmon runs. Your report should then include a feasibility study of fish passages for chum and pink salmon. It does not.

CONSIDERATION OF ALTERNATIVES TO DAM REMOVAL

The law requires you to consider alternatives to dam removal. Without studies of a fish passage/transport system that accommodates chum and pink salmon, you have simply not considered the alternatives.

On page ii, you state "None of the 10 runs has a good or excellent chance of restoration if fish passage measures are installed". You provide no proof or evidence to support that statement. It flies in the face of factual results now being obtained by others.

Puget Power has a fish passage/enhancement program in place which is providing good runs of six species of salmon. It includes a good run of pinks and a few chums, without specifically trying to accommodate these fish. Yet, your group has not even contacted Puget Power fisheries department to obtain information about their system. Other power companies are having similar results, and I doubt you have contacted them either. Clearly, you started with a conclusion and ignored all information sources which might produce information which would not justify your conclusion.

SOCKEYE

This bias is most apparent in your statements about sockeye. Your report states that the chance of restoring sockeye is "poor to fair" even with the dams out. Puget Power has produced the largest run of Sockeye ever recorded on the Baker River, transporting the fish around two power dams. By your own admission, Sockeye need a lake to spawn. Yet you claim that "Full restoration" will take place by removing the lakes - except the sockeye.

OMISSIONS:

On page 29:

The statement: "Lake Aldwell would fill completely with sediment, the project (Elwha Dam) would lose its hydroelectric value and sediment would flow into the lower river"

No substantiation is presented for this statement. Nothing is shown to prove that filling of the lake would preclude use of the dam for hydro power. Furthermore, it is misleading to talk about an event that would not happen for hundreds of years without defining it as such.

SEA LIONS

You claim that threatened or endangered animals such as Stellar Sea Lions would benefit directly from an increase in available prey. Yet, you have publicly stated that California Sea Lions are not a factor in salmon depletion. No evidence is presented to support the idea that Stellar Sea Lions eat salmon, but California Sea Lions do not.

MITIGATION FOR LOST LAKES

Lakes Aldwell and Mills are essentially public parks. The owners have always allowed free public use and three generations of residents, along with tourists, have ussd these lakes for fishing, boating, kayaking, swimming and bird watching. Your EIS contains no mention of this loss or promise of mitigation. It seems to have been compiled with ths philosophy that local residents simply do not count.

NEPA

It is our opinion that the "work shops" you conducted in Port Angeles and it Seattle did not meet the requirements of NEPA for a "public meeting". You specificly excluded any opportunity for public comments. One-on-one conversations between public attendees and members of your group cannot be termed an opportunity for "public comment". Your denial of our request to participate turned your workshop into a seriss of semi-private conversations.

Furthermore, your people, in some cases gave out false information. One of them was heard to stats that Bonnsvills Power Administration now has a power surplus and is looking for customers to buy their surplus power. This is contrary to numerous statement by BPA and other power company officials. Many attendees complained that their questions and comments were either not rscorded or rewordsd to say something they did not say.

SCIENTIFIC STUDY

Congress has appropriated Six Million, Three Hundred Thousand dollars ($6,300,000) for use in making your study. Yet, your EIS contains hardly any information gensrated by your group. Rather, you have taken someone else's data, collected for another purpose and callsd it your Environmental Impact Statement. REAL recommends that you use the funds granted to you to do a real study of ths entire Elwha Fishery problem, including impacts of events in salt watsr (both present and future), and a feasibility study for a fish passage/transport/enhancement system that will accommodate all species, including chum, pink and sockeye.

After that you would be in a position to produce a legitimate Environmental Impact Statement of your own which actually addrssses the problem, and which satifies the requirements of the law.

Sincerely,

Buckley L. Admire — Buckley Admire, pres.

Donald C. Rudolph — Donald Rudolph, vics pres.

Marvin Chastain — Marvin Chastain, secy./trsas.

Arthur Dunker — Arthur Dunker, director

Joel Sisson — Joel Sisson, director

Received
DSC-TWE
DEC 21 1994
C391 04PM 404-06

THE WILDERNESS SOCIETY

PACIFIC NORTHWEST REGION

December 19, 1994

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

The Wilderness Society fully supports removal of the Elwha and Glines Canyon dams, as described in the Proposed Action alternative in the Draft Environmental Impact Statement for Elwha River Ecosystem Restoration.

We are particularly encouraged to see that removal of both dams has a good to excellent potential for restoring 9 of the 10 salmon species that historically inhabited the Elwha River (DEIS, p. 34). None of the other options approaches this level of salmon restoration potential. The ecological, economic, and cultural benefits of restoring the Elwha's legendary salmon runs clearly warrant the removal of both dams.

Sincerely,

Steve Whitney
Pacific Northwest Regional Director

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C 420 OLYM 404-0

December 19, 1994

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

Pilchuck Audubon Society, with its 1400 members in Snohomish County and Camano Island in Washington State, would like to strongly support the preferred alternative of the EIS--removal of both Elwha dams.

Discussion of Elwha dam removal has been extensive throughout the Pacific Northwest for a number of years. Considering the inability of this area to come to consensus on just about any natural resource issue, dam removal has unprecedented support.

To not remove the dams would mean years of litigation. The 1992 Elwha River Restoration Act mandated full restoration of the river and its magnificant salmon run. Only the preferred alternative would lead to this mandated goal.

Sincerely,

Dave Ward
President

AADW Washington State Division
Abendsen Life Seed Foundation
Adirondack Audubon Society
Agnew Lakes Protection Society
Air Trans
Americas Oceans Campaign
Association of Bainbridge Communities
Black Hills Audubon Society
Blue Mountain Audubon Society
Camano Island Homeowners' Society
Cascade Bicycle Club
Center for Wildlife Conservation
Cerro Gordo Town Forum
Citizens Against Woodstove Fumes
Citizens for Clean Air
Citizens for Clean Industry
Citizens for Sensible Development
Citizens to Save Puget Sound
Civic Action on Redmond's Environment
Clark County Natural Resources Council
Clean Air Coalition
Columbiana Intelligencer Journal
Consumers United for Food Safety
Cowlitz County Natural Resources Council
Chelan Hills Natural Area Association
EarthLove Seattle
East Lake Washington Audubon Society
Everett Garden Club
Evergreen Islands
Fleming Manor Association
Four Creeks Community Association
Friends of Chuckanut
Friends of the Columbia Gorge
Friends of Cypress Island
Friends of Discovery Park
Friends of the Methow
Friends of Northshore
Friends of the San Juans
Friends of Samish Mountains
Habitat Watch
Hood Canal Environmental Council
Issaquah Alps Trails Club
Izaak Walton League
Kitsap Audubon Society
Lower Columbia Basin Audubon Society
Marine Environmental Consortium
Methow Valley Citizens Council
Mt. Rainier National Park Associates
The Mountaineers
Nisqually Delta Association
No Oilport!
North Cascades Audubon Society
North Cascades Conservation Council

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WASHINGTON ENVIRONMENTAL COUNCIL

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December 19, 1994

Ms. Sarah Bransom
National Park Service
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom;

On behalf of the Washington Environmental Council (WEC), we are writing to comment on the draft Environmental Impact Statement for restoring the Elwha River. WEC strongly supports the preferred alternative which involves removal of the dams. This is the only feasible alternative to fully restore the Elwha River ecosystem and its wild salmon runs.

Restoring the Elwha is a wise investment - it is the single best opportunity to restore salmon anywhere in the Northwest. It would also provide tremendous economic benefits for the people of the Olympic Peninsula.

Please move forward to implement this important project.

Sincerely,

Dan Cantrell
Co-President

Sherilyn Wells
Co-President

cc: Washington State Congressional Delegation

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North Cowlitz Environmental Council
North Bonneville Garden Club
Northwest Fly Anglers
Northwest Steelhead and Salmon Council of Trout Unlimited
Oak Harbor Garden Club
Olympic Environmental Council
Olympic Park Associates
Olympic Peninsula Audubon Society
Organization to Preserve Agricultural Lands
Palouse Clearwater Environmental Institute
Palouse Preservation League
Pilchuck Preservation Society
Pound Roberts Horse Preservation Committee
PRO-Salmon
Protect the Peninsula's Future
The Pharmacists
Puget Soundkeepers
Rivers Council of Washington
Saratoga Cove Foundation
Save a Redwood Environment
Save Our Shores
Save the Trees
Seattle Audubon Society
Seattle Citizens for Quality Living
Seattle Shorelines Coalition
Sierra Club - Cascade Chapter
Sierra Club - Spokane Group
Skagit Alpine Club
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Washington Kayak Club
Washington Native Plant Society
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December 19, 1994

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

The Western Ancient Forest Campaign (WAFC) would like to lend its strong support to the preferred alternative of removing the Elwha dams. This alternative is the only one which can fully restore the Elwha River ecosystem and its once-incredibly rich salmon runs

As you are aware, discussion of Elwha dam removal has been extensive throughout Washington State and throughout the Pacific Northwest within the past several years. This proposal has incredibly widespread support in this era of polarization. It would be very counterproductive to take this positive sentiment and not support removal of these dams. Any other position would lead to more litigation and gridlock, as well as extinction of salmon runs, violation of tribal treaty rights--and the loss of jobs on the Olympic peninsula

WAFC is a network of grassroots activists in Washington State, Oregon and California, with our central office in Washington, D.C. We represent grassroots interests on forest ecosystem issues throughout the Pacific West We support the 1992 Elwha River Restoration Act which mandates full restoration of the Elwha and its salmon runs. Dam removal is the only way to achieve this mandate

Sincerely,

Bonnie Phillips-Howard
Western Field Representative

WESTERN
Ancient Forest
CAMPAIGN

Bonnie Phillips-Howard
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December 21, 1994

Mr. Bruce Babbitt, Secretary
United States Department of the Interior
Attention: Sarah Bransom
National Park Service, Weetern Team
12795 S. Alameda Parkway
P.O. Box 25287
Denver, CO 80225-0287

Re: Commente of North Peninsula Home Buildere and the Building Industry Aesociation of Waehington (including membere in potentially affected area) to Elwha River Ecosystem Reetoration DEIS

Dear Secretary Babbitt:

The North Peninsula Home Builders and the Building Industry Aeeociation of Washington, including local area members, have reviewed the above DEIS and have the following comments for your coneideration. Pleaee include theee comments, with responees, in any communicatione with the United Statee Congress on the subject.

Thie DEIS was prepared by DOI ae part of the Elwha Restoration Act decision-making procese and Report. Ite findinge are avowedly to be "consistent with Congreseional intent expressed in Public Law 102-495 . . ." and it incorporates Interior's prior "Elwha Report." (DEIS, p. 1.)

Accordingly, the following comments often focus on thoee deficiencies where Interior hae so far failed to fulfill expree Congressional directives in that Act. Further, the comments analyze the subetantive and procedural problems and deficiencies in the DEIS analysis as presented. Although the supportive documentation incorporated including the FERC DEIS (renamed "Draft Staff Report") and Interior's "Elwha Report" is voluminous, and sometimes contradictory, it is expreesly recognized that "Material in this draft EIS supereedes both the FERC EIS and Elwha Report . . ." (p. i.). Accordingly, the focue of theee comments is upon the DEIS where inconsietent with the earlier analyeie.

I. Overview.

Millions of dollars have been expended on reports, studies, and bureaucrats' salaries discussing the removal of the Elwha dams in the past decade (with more of the same proposed). Little or nothing has been accomplished by these expenditures for the Elwha River or for the fish and wildlife of our area. If the money expended on this process had, instead, been spent on fish, we could be well on the way today to restoration of Elwha runs.[1]

The effect of a federal threat of destruction hanging over the dams which both produce power and affect water supplies for the entire area has already impacted industry and business to an unquantified extent.

One important critical theme is that the DEIS Elwha analysis consistently understates problems of restoring natural fish habitat and overestates the probability of restoring each run through dam removal. Ocean (and estuary) survival problems are not accounted for. That removing dams is not a panacea is indicated by the fact that other dam-free streams including some in Olympic National Park have salmon runs so depressed that they have been proposed for ESA listing. The Pacific Fishery Management Council's most recent reports on coastal salmon runs have consistently noted ocean survival as a (the) key problem (see, e.g., the Council's 1994 Reports on Chinook cited below).

This should lead to much more critical analysis of these factors which decrease the likelihood that dam removal would restore runs. Further, the dismal history of many runs under stewardship of these federal agencies leads to doubt over expecting Interior/National Park Service (NPS) to undertake the proposed restoration. To repeat; runs largely under their jurisdiction and freshwater management have been proposed for Endangered Species listing. (American Fisheries Society Bulletin, Vol. 16, #2, pp. 4-31 (1991)).

The admitted negative impacts on salmonids of the dams' removal are also understated in the DEIS reflecting its support of a pre-ordained decision to destroy the dams.

Finally, but of great importance to us, all costs in this geographical area---direct costs of dam removal, costs of power replacement, and associated costs to assure water supplies and

[1] Not, of course, if Interior/NPS had control of the monies. It will be noted below both have had a dismal record in fish production, both in Olympic Park runs and with respect to West Coast Salmon.

avoid flood losses---appear to be intentionally understated in this DEIS. The publicity over proposed dam removal has cast a federal cloud over a region already impacted by other government resource policies. The proposal, with respect to power and water supplies is "no-growth"; no increases in water supply and none in power (only "replacement"). This failure to identify costs will be addressed first below.

II. Statutory Requirement That Costs be Identified Not Met.[2]

The DEIS and preceding decision documents were avowedly prepared to comply with the mandates of P.L. 102-495. Congress therein directed some specific determinations. Among those most important, whose omission is glaring is the fact that currently-projected direct costs are not quantified.

a. Costs of the proposed dam destruction are not given. The Act required ". . . The precise terms of acquisition of the Projects, with an analysis of the costs . . . and potential liabilities and benefits, if any . . ." (sec. 3 (c)(1)).

Not only does the present DEIS not present "precise . . . analysis of the costs. . .," but expressly disavows doing so:

> "FERC estimates removal costs for both dams at $76 million, though this figure does not include some of the related costs . . . . The Elwha Report predicts the total removal costs to be between $147 and $307 million, . . . [which] assumes a scenario in which all stored sediment is removed before the dams are removed (the Elwha Report does not recommend this as an option)"

(P. 75).

The "bill" for these costs will be presented only at a later date---admittedly after the decision to destroy the dams has been made based upon this faulty DEIS:

> Since the Elwha Report was published, further analysis has shown the dams could be removed and all studies and mitigation funded for less than the $147 million figure. This option will be explored and fully costed in the Implementation EIS.

(P. 77).

[2] Issues of timeliness are not included. Under the Act, Interior was supposed to have a final Report was to include all costs to specified Congressional committees "on or before January 31, 1994."

In other words, this DEIS admits that the earlier figuree given to Congrees are wrong, and there is no present figure for costs of removal.

b. **Additional costs, espsoially those of the bureaucracies are hidden.** It is hard to avoid the conclusion the inclusion of numbers from the earlier FERC documents in this DEIS is intentionally misleading, since the DEIS admite:

> FERC did not include many of the coets DOI believes would be part of any alternative, such as costs for studies, water quality protection, flood control measures, NEPA documentation, additional mitigation, sediment removal or management, or acquisition of the dams by DOI.

(P. 71.)

Since millions of dollars so far have been spent on studies, NEPA documentation, bureaucrats, etc., (mostly unreported in the DEIS)[3] one may well conclude that these costs will be enormous, in the event the agency goes forward with its selected alternative.

It becomes more obvious upon review of all documents that the bureaucrats responsible view the Proposed Action as a blank check to fund continuous study the costs of which are not fully quantified. (The Elwha Report referred to a "living laboratory," for studies into the next century, pp. 121-122.) This disregards the Congressional mandate that decision-making must be predicated on an analysis of all costs.

It ie also important to note there are subetantial "hidden bureaucracy costs" which are also unquantified. The number of agencies, federal, state and local, involved in the process goes on for pages (DEIS, pp. 90-91, Elwha Report, pp. 163-169). Each has spent monies, most from taxpayers, in the process so far (studies, reporte, meetings, etc.). Unquantified in the DEIS, those coete will continue; millions of dollars for bureaucrats and very few dollars for fish.

In the Elwha Report, $400,000 / $500,000 / year for 10 yeare were suggested as "federal coste . . . to document the ecosystem and fisheries resources pre- and poet-dams." See also "Living laboratory proposal report, pp. 121-122 and App. K for a wish list of etudies the consultante and agency bureaucrate propose. Ae

[3] We have made a FOIA request for the amounts expended, and any projectiona of what would be required. These comments will be supplemented, to include such figures.

noted above, these costs will be multiplied many times becauee of the numerous agencies involved.

c. **Comparative costs of alternatives not available.** It ie not apparent that the construction (destruction?) activity cost figures were derived from any responsible entity willing or able to undertake removal. Neither contractors nor government entities such as the Army Corps of Engineere were utilizsd to provide costs. The figures given rangs over 400 percsnt and do not include many known costs, as further described below.

This ie not only required data in any pre-decisional DEIS, but statutorily required as part of the "definite plan for removal (which) definite plan shall include . . . a detailed explanation of all coste of removal." (Act, Sec. 3 (c)(3)).

Compliance with this requirement ie expresely disavowed in the DEIS "a more thorough look at costs for the Proposed action ie located in the Elwha Report (pp. 138-141); (but) ths report doee not examine the costs of other alternatives (and) DOI does not agree the abeolute costs are valid." (All DEIS, p. 71.)

Since no alternatives or updated cost figures are presented in the DEIS, there is insufficient information on which to base a decision. We predict the direct coet will exceed the estimatee.

To repeat, Congress was explicit in requiring accurate, total coets this to be considered: "For each alternative coneidered, the secretary shall estimate total costs. . . " (Sec 3.(b)(3)).

III. **"Restoration of the Ecosystem and Fisheries" Miedefining the Problem.**

One fundamental misconcsption of the DEIS and analysis ie the mieinterpretation of the etatutory mandate. DOI has defined the "ecosystem and fisheries" to require a pre-dam (no dam) system including each species of fieh present before the dams were installed. Given this definition, there is only one alternative to choose (and the expenditure of millions of dollars and many years was not necessary to achieve it).

The Act, and Congress, did not mandate a no-dam decision, however. Alternatives to be considsred were to include restoration of the fisheriee with the dams (or one of them) intact. For one dramatic example, the "fisheriee" could bs "restored" within the terme of the act through passage facilities for one or two species and/or increased natural and hatchery production for two or three epeciee.

a. **Understatement of costs and impacts.** The prospect for reetoring runs by dam removal are overstated (and costs underetated), to support the conclusion that destruction of the Elwha and Glines Canyon dame is the only acceptable alternative. Ths DEIS even concludes "all runs for which native stock is readily available have 'excellent' chances for restoration . . . . (p. 50). That this latter conclusion is likely to be unfounded is ehown by NPS inability to rsstore many other similar salmon runs in the Olympic Park, on streams totally without dams. A similar failure; Interior has spent approximately $70 million of $90 million authorized to "restore" Klamath River Chinook. There is no apparsnt euccess. Those etocks have plummeted. (See Pacific Council Report, cited p. 8.)

There is reason to queetion probability of restoring thess runs through dam removal. This DEIS has dieregarded well known problems of runs of Northwest salmon and steslhead, which have led to suggestion that dozens of thess stocks be listed under the Endangersd Spscies Act (Amsrican Fieheries Society Bulletin, Vol. 16, #2, pp. 4-31 (1991)). Many of thse stocks ars on river systems or from areas with no dame or dam impacts.

Ths DEIS only in passing, alludes to non-stream probleme in its cryptic rsfersncse to the need for "prudent managemsnt of impacted fisheriss . . . [which is] not directly addressed by ths Elwha Restoration Act." (P. 48.) With rsspsct to coho, the DEIS admits the Proposed Action resulte in a "need to move from a hatchery-based fishery . . . to a natural stock fishery. Making thie change in management etrategy . . . may take several yeare." (P. 49.) This change may includs measures earlier alluded to "In some cases, a complete closure of fishsries is needed . . . ." The DEIS does not discuss further such measures. Interior has no authority to implsmsnt them. Thus, it is not specified how ths required dramatic cuts in catch of tribal, recrsational, and commercial fishsries will be implemented or how they are to be squared with assertions elsswhere in the DEIS of benefit to thess very fieheries.[4]

Nor is there any analysis or explanation how the nsw Elwha stocks will avoid ocean survival and other problems affecting similar stocks. One sxample of the slight-of-hand smployed is the dealing with predators--if thsy happsn to be species favored or protectsd. At p. 58, it is suggested as a "bsnsfit" that some (Stellar) ssa lions will eat more salmon. This prsdiction ie assumed to be without cost to ths Elwha runs.

[4] The Tribal economic data at page 71, Table 4, is not accurate; federal agencies alone provide lower Elwha tribal members more than the Washington average per capita income.

b. **The "FERC analysis relied on did not consider all-species restoration.** One other failing of this DEIS with respect to fisheriee is that it relies in largs part on a FERC analysis prepared for licensing of existing projects. That FERC staff proposal had limited the species on which enhancsment was focused to the most valuable of the spsciss (chinook, coho, steelhead). Though paseage of all spscies is certainly possible, such alternativse were not considered, given the FERC focus.

This DEIS makes no effort to correct ths deficisncy or eupplement the analysis. It may bs that passags design or enhancement should focus on selected species of highest value or most liksly to utilize the opsned habitat. Still, the alternatives must bs presented for coneidsration in this DEIS.

c. **Passage (or hatchery) alternatives for chum, pink and sockeye were not coneidsred.** In this DEIS, the question of passage for pink and chum is simply dispossd of by ths claim "a survey" of dams in the Pacific Northwest rsvealed no self-sustaining populations of pink or chum salmon above dams or reservoirs." For thie proposition, the DEIS cites a "personal communication of J. Meyer[5], Olympic National Park) (p. 38).

Chum are typically lower-rivsr spawnere, as admitted in the DEIS (p.38, describing historical spawning ". . . limited to the lower 16 miles") and so were not historically prssent in upper river arsas in which dams are often constructed. This is true to a leseer extent of pinks. Additionally, ths much lower economic value of chum and pinke has led to lsss emphasis in designing paseags facilities to accommodate their special needs.

To the extent the DEIS implies passage of such salmon as pinks, chum and sockeye is not feasible, it is demonstrably false. Sockeye are found above dams using paesage and even utilizing reservoirs for rearing, s.g., in Washington'e Skagit system (Baker Rivsr). Sockeye ars also successful in the Laks Washington system which they enter through passage facilities. These runs are ssveral Washington examples of successful sockeye passage.

Alaska or Canada could furnish additional sxamplss, together with models for passage, if the DEIS authors' predisposition didn't dictate their disregard. The successful creation of artificial--or supplemental--pink and sockeye passags in the Frassr River is well-known, to all in ths Northwsst, except the authors of this DEIS.

d. **The hatchery alternative is insufficiently explored.** The authors ssem constrained, for no apparent legal reason, from

[5] Elsewhere identified as a consultant.

considsration of artificisl production msthods such as hatcheries to restore ths fishsries. Givsn ths significant problems to run survivsl outside ths river systsm, such alternatives may be the only viabls alternative, st lsast for some species. Probably only hatchery runs will be able to produce harvestable surpluses for some species. This altsrnative should be explored; its cost is far less thsn that of ths Proposed Action. The statute says "restors ths native anadromous fisheries and wildlife" not rsstore "natural spawning" only.

Outsids of Alsska, most Pacific salmon stocks which contribute to ocesn and inside fishsriss ars s mix of hatchery and natural production. It may be a serious or svsn fatal error to rsly long-term on natural only. It is probably not cost-effectivs.

One rslsvant example was earlier noted: Interior's expenditures of millions on the Klamath River chinook have been largely unsvailing. The (California State) hatchery production is an increasing percentage of harvestabls Klamath chinook (see Pacific Fishery Management Council "Klamath River Fall Chinook Review Tesm Report." Dsc. 1994).

IV. Negative Wildlifs Impaots Not Considersd.

Wildlife restoration is spscifically mentioned in the Act as s directsd gosl (Ssc. 3(c)(2)). The showing in the DEIS and its foundation documsnts, is that impacts on endangered or threatened species occupying ths projsct area will unquestionably be negative. There is sn sttempt to suggsst to ths contrsry in the DEIS: "without csrsfully planned rsstrictions and svoidance measures, construction associated with removing the projects has the potential to sdversely affect federally listed species." If intended to imply that carsful msasurss will totally avoid adverse impscts on species present, this is not true. At least such measurss to avoid have not bsen identified in the DEIS, nor the costs included.

The two possible positive sffscts (on bsld sagls snd Steller ssa lions) are from incrsssed consumption of salmon. Ths killing of salmon by seals would be competitive both with efforts to restore runs, and with usss othsrwiss discussed; (sport, Indian and commercial harvest. (Eagle consumption is usually spawn-outs.) The suggestion in this DEIS that the (remotely-possible) increase in salmon populations would significsntly snhsncs Stellar sss lion or bald eagle populations is misleading.

As to the other two listed species, spotted owls and marbled murrelsts, the immediats and continuing effect from dam removal would be negative construction activitiss. Any long-term benefit would occur only after ths reservoir areas had rsgrown to old-

growth, an unlikely or speculativs benefit for two reasons. First, there is no guarantes of non-uss of the areas or forests. Further, this benefit is far rsmote in time (100 years).

V. Powsr Replacsment Costs Are Understated. Environmental Costs ars Displacsd and Not Considsred.

The DEIS figures for rsplacement costs of the power lost are already wrong, and prospsctively do not take into account cost increases already projected by BPA. Pressnt projsctions of BPA wholessle rate indicste annusl costs to replsce the lost powsr over $5.2 million by 1997 (approximately 25% more than projected in the DEIS).

Long-term, this understatemsnt of total power replacement costs is dramstic, sxceeding one hundrsd million dollars. These figures do not includs the incrsases in BPA costs through chsnges in operation (sspecially on the Columbia Rivsr) sdvocatsd in other forums by Interior. These increases are surely known to, snd must be included by, Interior analysis.

Additionally, ths power must be made up by generation somewhere, presumably with impacts beyond the financial. BPA's problems with dsstruction of fish runs in other parts of the Northwest in conjunction with power generation suggests this is only a problem movsd, not a problem solved. That is; losses to salmon by generating in other areas may excssd bsnsfits to salmon and will sursly decrease net benefits.

VI. Othsr Costs to Local Communitiss Are Similarly Undsrstated or Not Analyssd.

This propossl appsrently sdopts a "no growth" policy. Water supply will be replsced with no provision for expansion. Similsrly, powsr loss will bs replaced only at existing levels. The DEIS gives no consideration to the impacts on local economy through sdoption of s "no growth" policy. Expansion(s) of ths mill directly affsctsd, and other ares industry has alresdy besn dampsned by the threat hersin. Ths restriction of post-projsct water supplies to pressnt lsvsls hss a similsr effsct.

Some costs sre sdmittsd by the DEIS, but understated, e.g., it is sdmittsd that property taxes rsceivsd by Clsllam County. ". . . would be eliminated" (p. 75), but the analysis does not quantify eithsr the direct loss there discussed or other tax losses due to smployment and business lost, stc. The refsrence in the Elwhs Report is cryptic ". . . compsnsation by the Federal Govsrnment in-lisu of tax payments may offset this" (p. 45). This refers only to

the direct tax loes to Clallem County,[6] from the property tax on the projecte and not to othsr bueiness, etc., lossee. There is no commitment to euch in lieu payment suggested in the DEIS nor does the Act require it.

The DEIS optimistically suggeste theee losses will be more than balanced by "tax revenuee (which) would accrue over the longer term due to expansione in fishery, recreation and touriem" which are deecribed as "substantial" but, of course, unquantified (p. 75). No source, reputable or otherwiee ie cited for thie propoeition, with which moet residents and officials of the area dieegree. Increases in fish runs which could lead to fishery, recreation, and touriem increaee, could be better accompliehed through expendituree of far smaller dollar amounts directed at fish enhencement. This elternative ehould be enalyzed and costed.

VII. Other Major Costs to the Area; Guaranteeing Present Levels of Water Supply and Flooding.

The Act epecifically provides that:

> the definite plan . . . muet include all ectione reaeonably neceesary to maintain and protect exieting water quality for the City of Port Angeles, Dry Creek Water Association, and the industrial usere of Elwha River water . . . . The coete of such actions . . . ehall be borne by the Secretary. Funde may not be eppropriated for removal of the dams, unleee, at the same time, funds are appropriated for actions neceesery to protect existing water quality.

(Act, § 4 (b).

In the DEIS (pp. 31-32) eome ideas are offered to resolve theee admitted probleme--but no concrete alternatives are analyzed or coet analyeie included. Upon checking the reference to the Elwha Report (pp. 98-100), it ie clear the only propoeed weter quality protection measuree were identified as inadequate at the time of the Report: "It is importent to note that the City of Port Angeles and the mills heve expressed concerns thet theee alternativee may be inadequate." (Report, p. 99.) Further, the OMR&P costs of two of three major iteme were "not estimated" nor have the capital coets (admittedly over 35 million dollare) been updeted in this DEIS. The DEIS ie totally inadequate in setting out required water quelity measures end their costs. Even if implemented, they would not allow for expension and growth.

[6] The figure given is less than the County projected in its comments.

Finally, flooding after dam removal is given only cursory end underetated consideration: "The proposal could cause en increeee in local flooding." (P. 79.) No coets eseociated with the inevitable floods are estimated. Some neceesery mitigation meeeures are etated: "modification of existing leveee, conetruction of new levee, . . . dredging ae needsd . . . ." (P. 79.) Neither theee costs, nor the impacts on the reeources sought to be protected are set forth. Both leveee and dredging have adveree effects on fish.

VIII. Conclusion.

The DEIS is inadequate as measured against legal requiremente impoeed by federal law. When the epecific mandate of the Elwha Restoration Act ere coneidered, the deficienciee ere more apparent. The Secretery (or Congrese) ehould now coneider whether it is an eppropriete expenditure of public reeourcee to re-do the EIS to comply with legal requiremente. Even if financiel reeources were infinite, the fish resourcee should not have to wait another decede for implementation of reaeonable measures for their reetoration. It hae become painfully end expensively evident that it is likely that a mix of reetoration efforte (such as identified years ego through FERC licensing proceduree) has a greeter likelihood of timely rescuing these fieh runs. It ie e tregedy that time and money have been wasted without implementing such measures.

Very truly yours,

JAMES M. JOHNSON
Attorney at Law

JMJ:bj

American Rivers

Received
DSC-TMF
DEC 23 1994
C451 OLYM 404-06

December 20, 1994

Ms. Sarah Bransom
National Park Service
Western Team
12795 Alameda Parkway
Denver, Colorado 80225-0287

RE: Draft Environmental Impact Statement-Elwha River Ecosystem Restoration

Ms. Bransom:

American Rivers is an organization dedicated to preserving and protecting America's Rivers and associated natural resources and riverine heritage. The Northwest Regional Office houses the organization's Endangered Salmon Project. We are thus extremely interested in the findings of the above referenced Draft Environmental Impact Statement (DEIS) for Elwha River Ecosystem Restoration and offer the following comments:

American Rivers strongly agrees with the conclusions reached in the DEIS for full restoration of the Elwha River ecosystem and its anadromous fisheries resources. Of the five alternatives presented, only the removal of both Elwha and Glines Canyon Dams, associated reservoirs, powerhouses, and other structures can achieve the goal of full restoration.

The Elwha River was historically a highly productive system for ten different species of anadromous salmonids on the Olympic Peninsula. Construction of the two hydroelectric Projects without fish passage has restricted fish access to only the lower 4.9 miles of the Elwha River. Construction and consequent operation of the projects have degraded the existing habitat in the lower river to the point that the Elwha River supports only small runs of primarily hatchery augmented coho, fall chinook and steelhead. Other historically abundant species such as sockeye, pink, chum, summer chinook, and summer steelhead are now either extirpated from the basin, or potential candidates for listing under the Endangered Species Act. Habitat conditions above the projects are excellent;

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if accessible to the remaining stocks it would provide the spawning and rearing grounds essential for achieving the goal of full ecosystem restoration.

The restoration of the Elwha River represents a unique opportunity to recover wild salmonid stocks in the Pacific Northwest. When compared to the costs to rehabilitate other river systems that have been altered by various land management practices, the restoration of the Elwha system will undoubtedly prove to be cost effective. Since over eighty percent of the Elwha River drainage is located within the boundaries of Olympic National Park, the investment in the proposed restoration will be protected from any future development activities.

American Rivers appreciates the opportunity to review and provide comments on the DEIS for the Elwha River Ecosystem Restoration. We commend the efforts of the National Park Service, the Lower Elwha S'Klallam Tribe and the other cooperating resource agencies in developing the analysis.

In summary, we support the conclusions reached in the DEIS. We believe that the only alternative that provides the approach necessary to achieve full restoration of the Elwha River ecosystem is removal of the projects.

Sincerely,

Scott D. Brewer
Staff Ecologist
Endangered Salmon Project
American Rivers Northwest Regional Office

cc: Shawn Cantrell, Friends of the Earth
Joe Mentor

CHAMBER OF COMMERCE
Post Office Box 355
Clallam Bay, Washington 98326

Received
DSC-TWE
DEC 23 1994
C463 OLYM 404-06

December 16, 1994

Sarah Bransom, National Park Service, Western Team
12795 Alameda Parkway
Denver, Colorado 80225-0287

RE: REMOVAL OF ELWHA DAMS

Dear Ms. Bransom:

The Clallam Bay/Sekiu Chamber of Commerce is opposed to the removal of the Elwha Dams. Through research, a more economical approach could be found to allow the fish upstream. The dams bore an expensive installment, and would bare an even more costly removal.

If the dam were removed, not only cost becomes an issue; resulting siltation that would occur with the removal of the dam would kill a substantial amount of the Elwha River Salmon. The salmon run would not reach its present numbers for at least five (5) years. The decline in these Elwha runs, would create more restrictive salmon fishing seasons on the already severely impacted communities on the Strait of Juan de Fuca. The resulting impacts and costs of the dam removal, definitely does not equate with the slight gain in salmon spawning escapement. If the salmon spawning escapement is one of the major objectives, then we believe this could be better accomplished both in a shorter period of time, and more cost effectively, with the installation of fish ladders.

These dams are on the Historical List. Their removal may set a precedent for the removal of other "Historical" dams.

In addition, an on-going problem has been the lack of licensing from the federal government. Daishowa has been unable to obtain the necessary licensing for the past 30 years. A reasonable solution to this dilemma needs to be found.

Everyone involved, should work toward a more economical and feasible solution to these issues.

Thank you for your time and consideration in this matter.

Sincerely,

Newsom Baker, President
Clallam Bay/Sekiu Chamber of Commerce

NB:pw
cc: Clallam County Commissioners

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Conserving Northwest Rivers Since 1984

December 14, 1994

Received
DSC-TWE
DEC 23 1994
C464 OLYM 404-06

Sarah Bransom
National Park Service, Elwha River Project
PO Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

Rivers Council of Washington is the oldest river conservation organization in the Pacific Northwest. Since 1984, we have represented the public's interest in the preservation and restoration of our rivers and watersheds.

We would like to commend the National Park Service on the role it has played in the process of studying dam removal on the Elwha River in Washington state. The National Park Services' proposal to restore the ecosystem and the anadromous fisheries on the Elwha by removing both existing dams is a responsible precedent for natural resource management nationwide. However, we are deeply concerned by recent political trends and statements regarding the Elwha dams. Political winds should not affect intelligent decision making. Put simply, the National Park Service's proposed action and the U.S. Secretary of Interior's Preferred Option make good sense.

The ten runs of Elwha River salmon and trout must be given every opportunity to return to the 75 miles of habitat in the upper reaches of the river. Only the Preferred Option provides a "good to excellent" chance of achieving this goal. We must remind ourselves that this is not only a goal, but a mandate, as set forth in the Elwha River Ecosystem and Fisheries Restoration Act of 1992.

Dam removal makes good economic sense, and strong local support includes the dam operator, local businesses, fishers, whitewater boaters, Native American tribes and environmental groups. An economic boost to the region of as much as $111.15 million could be realized through direct employment and related services resulting from dam removal. In addition, an estimated $5 million annually would be created from new tribal, commercial and sport fishing opportunities.

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As far as the small amount of power loss from dam removal, there are alternative energy sources identified. This is not a serious problem for the region.

Our commitment to the Lower Elwha S'Klallam Tribe established in the Point No Point Treaty must be honored. For decades the U.S. government has been in violation of the intent of this treaty by allowing blockage of the upper reaches of the Elwha.

In the effort to avoid continued litigation, please take into account that restoration of the Elwha is part of a negotiated settlement. The courts are no place for us to "manage" our natural resources, but failure to follow through with the Preferred Option could lead to additional listings of endangered species.

All legal arguments aside, lack of action could also lead to the worst of all possible scenarios; the extinction of Elwha River salmon runs This is simply not acceptable at this time of critical decisions for our Northwest salmon stocks. Allowing even one more salmon run to slip away adds to the sad state of the resource. Allowing the magnificent Elwha River runs to slide into extinction would be a tragedy beyond measure.

We at the Rivers Council of Washington strongly encourage the complete implementation of the Preferred Option; the removal of both the Elwha dam and the Glines Canyon dam on the Elwha River.

Sincerely

Joy Huber
Executive Director

Brad McCarrell
Associate Director

cc

Bruce Babbitt, U.S. Secretary of Interior
The Honorable Patty Murray
The Honorable Slade Gorton
The Honorable Jennifer Dunn
The Honorable Norm Dicks
The Honorable Jim McDermott
Shawn Cantrell, Friends of the Earth

BILL ROBINSON
4600 SW Graham
Seattle, Washington 98136-1455

December 21, 1994
Received
DSCRT-E
DEC 23 1994
C 475 ORM 404-06

Ms. Sara Branson
National Park Service
Elwha River Project
Denver Service Center
PO Box 25287
Denver, Colorado 80225-0287

Dear Ms. Branson:

Trout Unlimited, the largest coldwater conservation/fisheries organization in the nation with over 70,000 members national and 4,500 in Washington State, fully supports the Secretary of the Interiors preferred alternative - total removal of both Glines Canyon and Elwha Dams. Our organization has always supported the full restoration of the Elwha River ecosystem and its anadromous fisheries. The complete removal of both dams and any support facilities will achieve this goal of full restoration.

The preferred alternative will be of tremendous benefit to not only the anadromous fisheries of the Elwha River, but will also provide invaluable data on dam removal techniques and problem solving answers to such problems as sediment transfer and water quality/quantity issues. The economic stimulus provided to the Clallam County area by implementation of the preferred alternative will greatly offset the economic depression which has impacted this area since the mid 1980's. High wage jobs resulting from the total removal of both dams will create an economic boost for several years to come.

The proposed action (alternative "A") to totally remove both Glines Canyon and Elwha dams and their facilities is the right action at the right time. Let us begin implementation of the Secretary of the Interiors preferred alternative which will return the Elwha River ecosystem and it's anadromous fisheries to a complete restoration as was envisioned under Public Law 102-495.

Yours in Conservation,

Bill Robinson
Trout Unlimited

BR:mek

COLUMBIA GORGE AUDUBON SOCIETY

Received
DSC-TWE
DEC 27 1994
C486 OLYM 404-06

December 21, 1994

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Re: Removal of Elwha Dams

Dear Ms. Bransom.

Please add Columbia Gorge Audubon Society and our 250 members to those in support of the preferred alternative of removing the dams.

Restoration of the salmon runs, as required by law, can only be achieved by dam removal.

As we understand, the preferred alternative has broad support from Native Americans, business groups, fishing interests and the dam owners.

The loss of the salmon, an inseparable part of our Northwest heritage, is tragic. Removal of these dams is a tremendous opportunity to start reversing this tragedy.

Thank you for the opportunity to comment.

Sincerely,

Dennis White
Conservation Chair, Washington

P.O. Box 512, Hood River, Oregon 97031

OREGON NATURAL RESOURCES COUNCIL

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Protecting Oregon's lands, waters and natural resources

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C490 OLYM 404-06

23 December 1994

Sarah Bransom
National Park Service
PO Box 25287
Denver, Colorado 80225-0287

Dear Ms. Bransom,

I am writing on behalf of Oregon Natural Resources Council to voice its strong support for the preferred alternative of removing the Elwha dams. Given the pristine salmon habitat that would be reopened and the impressive economic benefits of healthy fisheries, this alternative is a smart investment for the region both environmentally and economically. Because of this, dam removal enjoys broad support, including from the dam's owners.

It's time to stop doing damage and start repairing yesterday's mistakes. The Elwha can be one our first real success stories, offering the hope and inspiration as well as the biological and economic health that the Northwest needs.

We're counting on you to select the preferred alternative. Thank you for this opportunity to comment.

Sincerely,

Diane Valantine
Salmon and Rivers Program Leader

cc: Senator Mark Hatfield
Representative Jim Bunn
Senator Patty Murray
Senator Slade Gordon
Representative Norm Dicks

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Washington Wilderness Coalition

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DSC-[illegible]
DEC 27 1994
C499 olym 404-06

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25387
Denver CO 80225

20 December 1994

Dear Ms. Bransom:

I am writing to inform you of the position of the Washington Wilderness Coalition in regard to removal of the Elwha dams. We strongly support the preferred alternative of removing the dams. Elwha river salmon runs are historically one of the most productive in the Northwest. The dams on the river are obsolete- they should be taken down.

Critics have argued that this project is too expensive. We believe that it is not- when one weighs the economic value of the wild salmon fishery to the Pacific northwest- over 81 billion dollars per year, the cost is well worth it. The benefits to our economy will reverberate for years to come. This is the best opportunity we have to restore wild salmon runs in the Pacific Northwest.

Removing the dams is also the only legal option. Lets restore the fishery, obey the law and tribal treaty rights, and preserve jobs on the Olympic Peninsula.

Sincerely,

Laurie Smith
Conservation Director

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LightHawk

Received
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DEC 27 1994
C499 olym 404-06

December 21, 1994

Sarah Bransom
National Park Service, Elwha River Project
PO Box 25287
Denver, CO. 80225-0287

RE: ELWHA RIVER ENVIRONMENTAL IMPACT STATEMENT

Dear Ms. Bransom:

Whereas removal of the two out-dated Elwha River dams offers one of the best opportunities for salmon restoration in the northwest, and the Elwha River Restoration Act of 1992 has the strong support of all involved parties including fishermen, environmentalists, native American tribes, and the citizens of Port Angeles, Washington;

It is the considered opinion of LightHawk, a non-profit international environmental conservation organization, that the preferred alternative of full dam removal be implemented on the Elwha River.

Thank you for the opportunity to voice our concern and opinion.

Sincerely:

Les Welsh,
Northwest Regional Director

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For Wildness and Diversity in the Pacific Northwest

GREATER ECOSYSTEM ALLIANCE

December 21,1994

Sarah Bransom
National Park Service
Western Team
12795 Alameda Parkway
Denver, CO 80225-0287

DSC-TWE
DEC 27 1994
C501 OLYM 404-06

Dear Sarah,

With regard to the Elwha River Ecosystem Restoration draft EIS, the Greater Ecosystem Alliance, of approximately 1,500 members, would like to entreat the Department of Interior to choose the proposed action of removal of both Glines Canyon Dam and Elwha Dam as the best alternative. The proposed action is the only alternative which complies with the Congressional mandate, as expressed through the Elwha Restoration Act, of full restoration of the Elwha River Ecosystem and its native anadromous fisheries. The proposed action is also the only alternative which satisfactorily meets the DOI objectives of fully restoring all runs of Elwha River native anadromous fish and the Elwha River ecosystem.

Under the section entitled 'Meeting DOI Objectives,'(p. 13) the DOI states that "Very few runs of native anadromous salmon and trout would be restored to the Elwha unless both dams are removed." Restoring "very few runs" neither meets the Congressional mandate, nor the DOI's own objective. In fact, the EIS is loaded with similar statements and research which prove, beyond a shadow of a doubt, that the proposed action is the best alternative. In short, the Greater Ecosystem Alliance supports the DEIS as presented and looks forward to receiving the implementation EIS.

Sincerely,

for Mitch Friedman
Executive Director

(206) 671-9950 FAX: (206) 671-8429 P.O. Box 2813, Bellingham, WA 98227
Street Address: Suite 316, 1155 North State Street, Bellingham, WA 98225

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INTERNATIONAL RIVERS NETWORK

DEC 27 1994
C514 OLYM 404-06

Sarah Bransom
National Park Service, Elwha River Project
PO Box 25287
Denver CO 80225

December 21, 1994

Dear Ms Bransom

International Rivers Network strongly supports the plan to remove the dams on the Elwha River. It is the only way to meet the legal requirement to restore the Elwha River and its salmon runs.

In our work around the world we frequently come across destructive large dam projects which are inspired by the model of large dam building in the US. The removal of the Elwha Dams would provide an excellent example to the rest of the world of how the authorities in the US recognize the negative environmental effects of dams, and are seriously attempting to reverse this damage.

The issue of dam decommissioning — especially how it will be done and who will pay for it — is one which the international dam industry has long sought to avoid. Taking down the Elwha Dams could provide a model to the rest of the world of how to deal with ageing and environmentally damaging dams.

Yours sincerely

Patrick McCully
Campaigns Director

1847 Berkeley Way, Berkeley, California 94703 USA
Tel: (510) 848-1155 / Fax: (510) 848-1008 / E-mail: irn@igc.apc.org



Naturam Expellas Furca *Tamen Usque Recurret*

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DEC 27 1994
C521 0149(42)-06

WISE USE MOVEMENT

December 21, 1994

Sarah Bransom
National Park Service
P.D. Box 25287
Denver, CD 80225

Deer Ms. Bransom:

The Wise Use Movement strongly supports removing the two Elwhe River dams as described in the Elwha River Restoration draft EIS. Removal of these dams and restoration of the historic Elwha salmon runs is the best use of the river. The draft EIS correctly points out that dam removal is the only way to restore the 10 runs of Elwha salmon and steelhead.

Restoration of the Elwha River is an excellent opportunity to further the goals and purposes of the Wise Use Movement. These include promoting wise use of our public lands and resources es well as encouraging wise, anvironmentally protective reguletion of private lands.

The wise use of our public resources demend remover of the only obstacles to successlully rebuilding the Elwha River salmon runs – these two antiquated dams. The anvironmental, aconomic, social, and culturel benalits associeted with rastoration of the Elwha River acosystem necessitete thet the Elwha dams be removed.

Natural production of wild selmon end steelhaad runs is the best use for the over 75 miles of pristine spewning and rearing habitat in the Elwha protected within Olympic Netionel Park. Every single analysis of the Elwha over the past 7 years has concluded thet the river will support ebundent, sustaineble, harvestable runs of wild anadromous fish if the dams are removed.

Saveral legal raquirements also dicteta thet the Elwha dams be removed. The Elwha dam was built in direct violation of state law. The Glines Canyon dem is in direct violation of federal law. Both dams violate the United Stetes' legel obligations under multiple international treeties.

Do not waste eny more time or money re-examining whether to proceed with rastoring the Elwhe; let's move ahead now with implementation of the consensus egreement embodied in the 1992 Elwha Restoretion Act. It is time to remove the Elwha dams and restore the river's salmon runs. Any other course of action would be illegal, e misuse of texpayers' money, and further exacerbate the decimation of our public resources.

Sincerely,

David Drtman
President

cc: Senator Patty Murray
Senator Slede Gorton
Senetor Mark Hatfield
Representative Norm Dicke
Representative Jennifer Dunn
Representetive Jim McDermott

P.O. Box 17804, Seattle, WA 98107



Received
DSC-T
DEC 27 1994
C542 0149(44)-06

December 21, 1994

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

Friends of the Earth is writing to comment on the Elwha River Ecosystem Restoration Draft Environmental Impact Statement (DEIS). We strongly support the preferred alternative in the DEIS, removal of the Elwha and Glines Canyon dams, and we urge you to move forward with implementation as quickly as possible. Removal of both dams is the only alternative that would achieve the expressed goal of Congress for "the full restoration of the Elwha River ecosystem and native anadromous fisheries." *[The Elwha Act, section 4(a)(1)]*

Enacted in October 1992, the Elwha River Ecosystem and Fisheries Restoration Act (P.L. 102-495) seeks to resolve the complex regulatory, legal, and political battles surrounding the Elwha and Glines Canyon dams. Years of protracted debate and controversy engulfed the licensing proceedings for these two dams. Concern regarding the condition of the Elwha's fishery resources and the uncertain state of the area's economy combined to make the timely resolution of this debate extremely important.

The Elwha Act is a comprehensive negotiated solution to this long-running conflict. It is hallmark legislation. In a region where numerous resource issues are extremely polarized, the Elwha Act is an example of how differing interests have found a way to successfully work together on creative solutions. It addresses the legitimate concerns of all affected parties by providing for the restoration of the Elwha's natural ecosystem while also protecting the jobs, economy and water supply of the local community.

Friends of the Earth has been the lead conservation organization for over nine years in the effort to remove the Elwha River dams and restore the incredible salmon and steelhead runs that once flourished in the river. We became a formal intervenor in the FERC licensing proceeding for the Elwha dams in 1986. We were a party to the legal appeal in the U.S. Ninth Circuit Court of Appeals challenging FERC's legal jurisdiction to issue a new operating license for the Glines Canyon dam. We participated in the discussions leading up to passage of the 1992 Elwha Act. And we remain actively involved in the process of implementing the Elwha Act.

Although we have retained our ability to resume our administrative and court challenges, Friends of the Earth firmly believes that this issue can best be resolved through timely implementation of P.L. 102-495. The consequences of *not* doing so would be extremely

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Jane Perkins, President

harmful for all parties concerned and would have serious consequences for the environment and the economy. Friends of the Earth remains committed to working cooperatively with the unique, broad-based coalition of conservation organizations, business interests, labor unions and Native American Tribes to resolve this issue. It is in the best interests of the salmon, the Tribes, Olympic National Park, the local community, and the nation as a whole that the Interior Department remove the Elwha dams and the restore the river's ecosystem.

Restoring the Elwha River makes good economic sense. Removing the dams is a wise investment – it is the single best opportunity to restore salmon anywhere in the Northwest. The combination of pristine habitat protected within the park and the ability to remove the only obstacles to access that habitat add up to an excellent likelihood of success for rebuilding the Elwha River salmon runs.

It is in regards to the socioeconomics of dam removal that we offer suggestions for improving the DEIS. The economic benefits for the region from dam removal and fisheries restoration should be more fully analyzed and discussed. Under the preferred alternative, new employment opportunities and increased business income, as well as protection for existing jobs and businesses, would provide significant short and long term benefits on the Olympic Peninsula and throughout the region. These benefits should be evaluated in more detail. Specifically:

- Dam removal activities could provide over $100 million of new income to construction workers and businesses on the Olympic Peninsula. For example, under sediment management option #5, dam removal activities would create $90.4 million in new income for construction workers in the region, and projected related spending (equipment purchases and rental, etc.) would generate an additional $21.1 million for Clallam County businesses. *(Report by Meyer Resources Inc., May 1994)*

- Following dam removal, annual adult production of wild salmon and steelhead in the Elwha would average more than 200,000 additional fish above current production levels. *(FERC Draft Staff Report, Table 4-27)* This restored, sustainable, harvestable Elwha fishery would generate $5 million per year in new direct revenues for area businesses as well as create over 480 new permanent jobs on the Olympic Peninsula. *(Report by Meyer Resources Inc., August 1992)*

- The over 300 high-wage union jobs at Daishowa's Port Angeles mill would also benefit from dam removal. If the dams are taken down, under the Elwha Act the Daishowa mill is guaranteed access to a reliable alternative supply of electricity. If the dams aren't removed, Daishowa faces high uncertainty over its ability to license and operate the dams, and would likely have to close down its Port Angeles mill operations. *(Mill wants dams out, Peninsula Daily News, October 25, 1994)*

Dollar for dollar, removal of the Elwha dams offers the greatest return on an investment in ecosystem restoration for any watershed in the region. The final EIS should do a better job of articulating the economic benefits of the preferred alternative.

In addition, Friends of the Earth strongly encourages the Interior Department to explore ways to further reduce the total costs of this project while maintaining the central goals of restoring the Elwha ecosystem and protecting jobs and the water supply for the local community. We are pleased that further analysis has shown that the dams could be removed and all studies and mitigation funded for less than the $147 million figure identified in the Elwha Report. *(DEIS, page 75)* We urge you to pursue these and other cost-savings opportunities in carrying out full restoration of the Elwha.

Thank you for considering our views. We urge you to move swiftly in completing the final EIS, with dam removal as the preferred alternative, as well as providing funding to acquire and remove these dams.

Sincerely,



Shawn Cantrell
Director, Northwest Rivers Project

cc: Senator Slade Gorton
Senator Patty Murray
Senator Mark Hatfield
Representative Norm Dicks
Representative Jennifer Dunn
Representative Jim McDermott



Okanogan Resource Council
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Received
DSC-TWC
DEC 27 1994
C 552 0491 404-06

December 20, 1994

Dr. Brian Winter
Interagency Team Leader
Olympic National Park
600 E Park
Port Angeles, Wa 98362

Dr. Winter:

RE: Environmental Impact Statement to Justify Removal Of Elwha Dams

The Okanogan Resource Council (ORC) is a grass roots organization which supports multiple land use and resource management, restoration and preservation of private property rights, the Constitution of the United States and the Bill of Rights. ORC is a member of the Okanogan County Citizens Coalition which represents cattle, timber, orchards, agriculture, mining and recreation interests. ORC has been following the Elwha dams issue for many months. We have concluded that removal of the dams is not in the best interest of the region's fish and wildlife, its environment or its economy. We further believe that dam removal has no basis in sound science, good management practice or environmental excellence.

ORC feels that the EIS is seriously flawed. The paper contains almost no information generated by your organization despite the fact that Congress appropriated $6,300,000 for use in making your study. The EIS which you have presented was developed by another group for a different purpose and does not meet the requirements of PL 102-495 (The Elwha Restoration Act).

- The Act considers 'full restoration' of all runs of anadromous fish to the Elwha, although 'full restoration' is not defined. The decline of salmon returns in the 70's occurred in rivers both with and without dams. Since the system provided bumper crops of salmon for fifty years after the dams were installed, and since these fish spend approximately 80% of their life in salt water, it is clear that the primary cause lies in the ocean. Your own report admits to a return of less than one tenth of one percent of salmon spawned in the hatchery and spawning channel at the mouth of the river, an area unaffected by the dams. Without control of drift-net fishing and sea lion predators, salmon recovery will never be achieved. Therefore, what benefit will be gained by removal of the dams? Statements that "300,000 fish will return to the river" are pure unsubstantiated speculation *and* disagree with the spawning capacity of the river shown in the Federal Energy Regulatory Commission (FERC) report. Your EIS is inconsistent!
- 'Full restoration' was never considered by FERC in the compilation of their report. It was not the object of James River Corp's dam relicense application and was not considered in the design of fish passages. Comparisons and conclusions based on these antiquated designs are not valid. If you define 'full restoration' as including that of pink and chum salmon, why does your report not include a feasibility study?
- The law requires that you consider alternatives to dam removal. Without studies of a fish

transport/passage system to accommodate chum and pink varieties, you have not followed the law. On page ii, you state "None of the 10 runs has a good or excellent chance of restoration if fish passage measures are installed". This statement is unsubstantiated by proof or evidence and is contrary to results obtained by others. Puget Power has a fish passage/enhancement program in place which is providing good runs of six species of salmon. Other power companies are having similar results. It seems you are not interested in information that will not justify your unsupported predetermined conclusion. You state that 60% of the salmon are lost in the turbines. In fact, only 10% of the fish enter the turbines, so that 60% loss amounts to only 6% of the total. Your report states that the chance of restoring sockeye is "poor to fair" even with the dams out. Puget Power has produced the largest run of sockeye ever recorded on Baker River by transporting fish around two dams. Further, by your own admission, sockeye need a lake to spawn. Where are the lakes if the dams are removed?

- On page 29, you state: "Lake Aldwell would fill completely with sediment, the project would lose its hydroelectric value and sediment would flow into the lower river". No substantiation is given for this statement, and no time period for the event is even suggested. If the lake has not filled with sediment in the past 80 years, it is probable that hundreds of years would be required for it to happen. A further point, if the dams were removed, huge amounts of silt, sediment and debris would be washed into the lower river. The present pristine quality of the lower river would never be recovered!
- Lakes Aldwell and Mills are essentially public parks. Three generations of residents, as well as tourists, have used the lakes for fishing, boating, swimming and birdwatching. Since the owners have always allowed public access, the area provides outstanding recreation facilities which would be lost. The dams provide an excellent clean source of electrical power. Further, having been in existence for over 80 years, the dams are historically significant. Your EIS makes no mention of these losses and does not consider mitigation. Apparently, people don't count!

The lakes provide an excellent and beautiful environment for a variety of wildlife species too numerous to list. Aldwell Lake is a perfect habitat for the trumpeter swan, well protected from both natural and human predators. The swan population, which was considered endangered several years ago, has been increasing steadily, yet your proposal would totally eliminate their habitat. The region has been designated as spotted owl habitat, and as such any disruptive activity is forbidden. Would not the activity of dam removal and the massive upheaval of the entire river system be disruptive? Many other wildlife species have found an ideal habitat in the lakes and the existing river. Removal of the dams will generate a vast mud flat, with a fast flowing river in the middle. How many species will lose their homes and perhaps be added to the endangered list?

The dams are the only significant source of power in the northern peninsula. With their removal 85,000 people would be dependant on a single supply line from off the peninsula. What provisions are considered in case of serious failure of that line. Congress proposed that the BPA would provide power to the area at a special cheap rate. Who pays the estimated $17 million per year difference from regular costs? Also, if natural gas fueled turbines were used to generate the replacement electricity, 43,000 tons of carbon dioxide plus many other contaminants will be spewed into the air annually compared to none from the clean hydroelectric source. Flooding has been a problem in the past on the lower Elwha. Without the dams, what flood protection will there be? Has there been any study of the problem and possible solutions?

Mills Lake was originally 186 feet deep. Today, after 70 years of use it is still 145 feet deep. Considering the pressure exerted by that depth of water, it is unquestionably responsible for injection of significant amounts of water into the region's aquifers which support numerous wells. Whose water supply will be lost with the removal of the dam? How will it be replaced? What mitigation has been considered?

Other recommendations:

The cost of dam removal, estimated to be between $147 and $307 million, cannot be justified when the benefits of retaining the dams are considered. A small portion of that expense applied to fish ladders/transportation and other enhancement programs makes much more sense.

The dams should be relicensed with provisions for a fish passage/transport/enhancement system. The licensing period should be changed from 20 to 50 years to enable the dam owner to amortize the cost of installing fish passage system. (Dam owners have already spent $15 million attempting relicensing.)

Olympic National Park boundary should be changed so that FERC would again have jurisdiction over both dams. This could be accomplished without impacting "old growth" and would not necessarily reduce the total acreage of the park. It is almost surrounded by Olympic National Forest so land could be traded between ONF and ONP to facilitate the change.

These and other facts support our contention that the EIS is seriously flawed. It is recommended that you withdraw this EIS and use the funds appropriated by Congress to do an actual scientific study of the entire Elwha Fishery problem. That study should include investigation of the impacts of events in salt water and feasibility of a fish passage/transport/enhancement system. A parallel study of one of the undammed rivers would provide additional useful knowledge.

The Okanogan Resource Council requests notification of all actions and/or conclusions regarding this issue.

Sincerely,

Bonnie Lawrence

Bonnie Lawrence, Chairman
Okanogan Resource Council

John P. Andrist

John P. Andrist, Chairman
Okanogan County Citizens Coalition

The following member groups of the Okanogan County Citizens Coalition support these comments:

Agriculture Communities Alliance
Common Sense Resource League
Loomis-Similkameen Community Club
Methow Valley Resource Alliance
Methow Valley Backcountry Horsemen
Okanogan County Cattlemen Association
Okanogan County Farm Bureau
Okanogan County Pomona Grange
Okanogan Mining Association
Okanogan Valley Backcountry Horsemen
Okanogan Wildlife Council

cc: U.S. Senator Slade Gorton
U.S. Senator Patty Murray
Representative Doc Hastings
Representative Norm Dicks
Washington State 7th and 12th District Legislators
Okanogan County Commissioners
Clallam County Commissioners
Bruce Babbitt, Secretary, Department of the Interior
Marv Chastain, Secy/Treas REAL
Bruce Lovelin, Columbia River Alliance
Harlan Warner, Manager Okanogan County PUD#1

National Parks
and Conservation Association
Pacific Northwest Regional Office

Received
DSC-TWS
DEC 27 1994
C553 OLPM 414-06

December 14, 1994

Mr. Dave Morris
Superintendent
Olympic National Park
600 East Park Avenue
Port Angeles, WA 98362

Dear Mr. Morris,

This letter constitutes the comments of National Park and Conservation Association (NPCA) on the Draft Environmental Impact Statement Elwha River Ecosystem Restoration (DEIS).

NPCA fully endorses the proposed removal of the Elwha and Gline Canyon Dams upholding P.L. 102-495, the Elwha River Ecosystem and Fisheries Restoration Act enacted in 1992.

In the early 1900's two hydroelectric dams were built 4.9 miles from the mouth of the Elwha river and 8.5 miles upstream into what is now Olympic National Park. Built without any fish passage facilities, salmon and anadromous fish were unable to access 75 miles of pristine spawning habitat within Olympic National Park.

Removal of the dams would be a monumental opportunity to restore a once nationally renown river ecosystem and almost all of the salmon and anadromous fish. The Elwha River was once bome to five native species of pacific salmon, including over 250,000 adult pink salmon and giant 100 lb. Chinook salmon. Ten runs of salmon and trout, nourishing many terrestrial, aquatic and vegetative species were decimated by the dams. Nutrients, sediments and woody debris needed for critical spawning habitat were unable to pass over the dams. Species dependent on the adult salmon, their carcasses or salmon fry for critical food supply were reduced in numbers. Unnatural manipulation of water temperatures combined with a slower, more channeled river has negatively altered the morphology of the rivers ecosystem.

Both dams must be removed in order to restore the river ecosystem, as stated on Pg. 15 "No alternative but Dam Removal would restore the pre-dam species distribution, or provide terrestrial and aquatic life with tbe nutrients they need to fully use other features of the native

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habitat within the Olympic National Park." Current low numbers of anadromous fish would increase dramatically, reviving the entire ecosystem including those species dependent on the salmon migrations for critical food supplies. The DEIS states on Pg 17 "At least 9 of the 10 ten runs have a good or excellent chance of restoration, the river would be filled with various salmon or steelhead migrations throughout the year."

The DEIS states on Pg 5 "Spawning gravel and woody debris essential to successful downstream habitat is held back by the dams. The dams have further degraded the downstream habitat by manipulating lows, making the river less active and armoring the riverbed, inundating important tributaries, and increasing stream temperatures by spilling warm surface water from the reservoirs in late summer and fall."

Several negative impacts to the ecosystem would still exist if only one of the dams were removed and/or mitigation measures for fish passage installed. The river would continue to be unnaturally channeled, sediments would collect above the dams, nutrients from decaying carcasses would prevent nutrients from refueling the ecosystem.

The restoration project will also generate a major economic growth for the surrounding communities An estimated $90.4 million in new income and $2.1 million from project related spending will directly benefit the area. Commercial and recreational activities will gain an additional $5 million each year in business revenues. Economic benefits will aide local communities presently experiencing increased unemployment from declining timber and fishing harvests Restoration of salmon runs in tbe Elwha would have a positive economic impact on Washington's entire commercial fishing industry

Salmon are an integral part of the economy, culture, diet and spiritual areas of the Lower Elwha S'Klallam Tribe. The DEIS states on Pg. 7, "Loses caused by these projects are inconsistent with the treaty rights of area tribes and the management objectives of federal and state agencies " The severe decline of the anadromous fisheries negates the Tribe's treaty rights to fish the river. Restoration of the fisheries is necessary to uphold U.S. responsibilities to the S'Klallam Tribe.

The Gline Canyon dam located in the park fails to abide by the purposes of the goals set forth by the National Park. GAO confirmed that relicensing of the dam would be considered an act of trespassing.

The amount of energy produced is minimal compared to the economic and biological benefits of restoring the Elwha The combined amount of energy generated, less than one tenth of one percent of the power used in three NW states, would be replaced by BPA.

Replacement of lost power, increased economic benefits to the surrounding community, and restoration of the ecosystem indicate that this decision is a win win situation and should be implemented.

Sincerely,

Terri S. Pauly

Terri S. Pauly
Projects Director

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DEC 27 1994
CS76 ol4M 404-06

american whitewater affiliation

Richard J. Bowers
Conservation Program Director
8630 Fenton Street, Suite 910
Silver Spring, MD 20910
(301) 589-9453
Fax (301) 589-6121

December 22, 1994

Ms. Sarah Bransom
National Park Service
Western Tsam
12795 Alamsda Parkway
Denvsr, CO 80225-0287

RE: Elwha River Ecosystem Rsstoration Draft Environmsntal Impact Statement

Dear Ms. Bransom:

The American Whitewater Affiliation (AWA) appreciatss the opportunity to comment on the Elwha River Ecoeystem Restoration Draft Environmental Impact Statemsnt (DEIS).

The American Whitewater Affiliation (AWA) is a national organization with a membership of over 3800 individual whitewater boating enthusiasts and more than 100 local canos club affiliatee, representing approximately 30,000 whitewater paddlers. AWA was eetablished in 1957. Our miesion is to conserve and restore Amsrica's whitswatsr resources and to enhance opportunitise to enjoy thsm safely.

AWA has enjoyed a long history of involvsment with dam opsrations and their affects on river eystems. We ars one of the founding members of the National Hydropower Reform Coalition, which consists of over 25 national, regional and local river organizations now working with the Fsderal Energy Regulatory Commission (FERC) on the relicensing of non-fedsral hydroelsctric projscts.

AWA belisves that rsmoval of the Elwha and Glines Canyon dams is important both as: 1) a bsnefit to restoring ths Elwha, and 2) a much needed national policy regarding future dam removals.

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1) RESTORATION OF THE ELWHA

As described in the DEIS, Public Law 102-495, the Elwha Restoration Act was implemented "To restore Olympic National Park and the Elwha River ecosystem and fisheries in the state of Washington." The U.S. Department of the Interior (DOI) proposes to "fully restore the Elwha River ecosystem and native anadromous fisheries."

Ths only way to "fully" restore the Elwha ecosystem, is through removal of both projecte.

Anadromous Fisheries

Dramatic declines in aquatic epeciss is an indication that the ecological health of our nation's rivers is waning. In 1990 a study by The Nature Conservancy concluded that one third of all native freshwater fish spsciss and one fifth of all freshwater invertebratss in the U.S. were threatened. No where has thie decline been harder felt, or recognized, than in ths Pacific Northwest.

Among all development threats to natural rivers, hydropower dame rank at the very top. The natural flow of a river -- the volume of water and pattern of high and low flows -- is vital to a river's health. The flow regulates water temperatures, transports sedimsnts and organic nutrients, dilutes contaminants, and triggers fish bshaviore ranging from hunting to reproduction.

Without free-flowing passage and adsquate flows, the system begins to break down.

This is the case on the Elwha. Besides restricting natural river and sediment flow patterns, these two dams have changed water temperature and pre-project river lsvels. Ths non-existencs of fish passage has removed fully 9 of the 10 native speciss of ealmon and trout from eome 70 milee of the Elwha River and useable tributaries.

The combination of rsmoved species and reduced habitat makes it impossible to fully restore the Elwha'e fishery with less than total removal of both projects.

Recreation

Humans rely on rivers too. Rivsrs offer recreation and respits for wildsrnsss adventursrs and city dwellers alike. Scenic waterfalls, roaring rapids, and quiet, meandsring streams are at the heart of the nation'e most spectacular landscapes.

The Elwha represents one of these spsctacular river landscapes, and has besn recognized for its outstanding qualitiee again and

again.[1] While removal of these two dams will not produce a new whitewater run, it will expand and combine existing runs on one of the most beautiful river canyons in the nation.

The AWA Nationwide Whitewater Inventory[2] (attached) lists three separate whitewater segments on the Elwha, over 18 miles of class II - V rapids. The upper section, the "Grand Canyon of ths Elwha" which begine after an eight mile hike from Whiekey Bend was described as follows in A Paddler's Guide to the Olympic Peninsula:

> This run is so special it goes beyond words. The whitewater...the canyons...the wildlife...ths riverside camping...-- it's the Elwha![3]

The middle section, from Glinee Canyon Dam to Lake Aldwell, and the lower section below this lake are equally beautiful but less challenging whitewater resources. As mentioned in the DEIS, removal of both dams would add another 5.3 milee of river. Perhaps more importantly, a continuous 23 mile Elwha river could be enjoyed by all of thoee seeking a truly wilderness river experience.

The DEIS found that removing both dams on the Elwha "would also have positive impacts on eocioeconomic growth, renewed interest in cultural resources, recreation opportunities, and esthetics." However, the final EIS should more fully explore the potential economic growth for local communities if recreation uee (boating, fishing, hiking, sightseeing, etc.) is permanently protected and expanded by dam removal.

For instance, whitewater boating (a combination of private and commercial intereete but described only as "rafting" in the DEIS) is currently one of the fastest growing sports in the nation, and has experienced a 33% nationwide increase since 1988[4].

Whitewater recreation often offere etartling economic benefits,

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1 In 1938, Congress established the Olympic National Park. In 1976 the park was designated an International Biosphere Reserve, and in 1981 was named a World Heritage Site.

2 American Whitewater Affiliation, 1990, Nationwide Whitewater Inventory: A Geographic Information System for Whitewater Rivers in the United Statns. Pope Barrow, ed.

3 A Paddler's Guide to ths Olympic Peninsula. Gary Korb, 1992, page 31.

4 CANOE Magazine rsport, 1988.

and has provided a positive revenue for many states.[5]

2) NATIONAL POLICY ON DAM REMOVAL

Some dams cauee significant destruction of the ecosystem -- some are located on sspecially esneitive or outstanding rivers -- many produce such minimal power benefits[6] that dam removal is the only reasonable eolution. The Elwha fite into each of these categoriee.

The Elwha and Glines Canyon dams are not alone. Other dams, built around the same time ae theee two, are also candidates for removal because of age, safety concerne, and/or totally inefficient power production.[7] Many of these dams are ourrently seeking new licenses before the Federal Energy Regulatory Commission (FERC).[8] Dam removal on the Elwha could eet national policy on when and how to remove other un-needed or un-wanted dams on other rivere acroes the country.

In addition to environmental, safety and ensrgy conssrvation arguments for dam removal, private hydropower dams are facing the possibility of increased competition. Utilities will be seeking lower overhead, larger market ehare and more economical sources

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5 The Gauley River (WV) provides in excese of $30 million to the state for only six weskende of scheduled releaees in the fall. The Penobscot River (ME) generates $20 million annually, and the El Dorado County Board of Supervisors rsports that whitewater recreation on the South Fork American (CA) produced $30 million in revenue for the local economy in 1992.

6 Nationwide, hydroelectric power accounts for just 13% of the nation's energy generating capacity. The approximately 2,000 non-federal dams licensed by the Federal Energy Regulatory Commission (FERC) represent just over fifty percent of this hydro capacity, or 7% of the national power generation.

7 In 1993, FERC determined that dam removal must be etudied as one option for Waehington'e White Salmon River. In June, 1994, FERC announced that it would consider dam removal as one alternative to relicensing Edwards dam on Maine's Kennebec River. Also in June, FERC approved a settlement between state and federal agencies and the Coneumers Power Company; included in thie settlement was $750,000 for the removal of the Stronach Dam on Michigan's Pine River. This dam had stopped operation in 1952.

8 In 1993, 160 licensee affecting 237 dams on 105 rivers expired. These "Class of '93" licenses represent over ten percent of all FERC-licensed developments. Another 259 dam licenses will expire between 1994 and 2010.

of energy. This means that small marginally-economic dams, or older less efficient dams oould be abandoned in large numbers in the future.

No policy exists for how or when to remove these dams. The hydroelectric industry is the only energy industry without such a policy. Mining and timber production, as well as industrial developments (such as nuclear power plants and solid-waste landfills) must plan, financially and otherwise, for the full life of the activity--including retirement of the facility after its useful life.

More importantly, no policy exists which determines who must pay for dam removal. So far, once private developers are finished making a profit from a public river resource (sometimes after more than a century of use), they have no responsibility to remove their dams. Historically, past dam removals have fallen to state agencies,[9] or in the Elwha case, the DOI.

Under either scenario, the public pays.

CONCLUSION

We have learned something over the past century -- The water is renewable but the river is not! As a clean source of energy, hydropower is now understood to have an enormous environmental price-tag! And we have learned that once a dam is built, there is no effective way of fully restoring the river!

The Elwha represents our best opportunity to address many of these unanswered questions. The issue of who removes a dam? -- and more importantly, who pays? -- will not disappear if the Elwha dams remain on this outstanding river.

The AWA fully supports the removal of both Elwha and Glines Canyon Dams, the restoration of the historical fishery, and the increase of water-based, natural recreation and aesthetic opportunities within the Elwha watershed.

Thank you for this opportunity to comment on this DEIS.

Sincerely,

Richard J. Bowers
Conservation Program Director

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[9] The Michigan Dept. of Natural Resources has removed over a hundred small private dams.

Enclosure

cc: Chair Elizabeth Moler, FERC
Honorable Bruce Babbitt, DOI
Hydropower Reform Coalition
Brooke Drury, AWA-WA
Carol Volk, ORC

River Name	Segment(s)	Miles	Class	County
Elwha	Glines Canyon Dam to Gauge	4.6	III-IV	Clallam
Elwha	Elwha Dam to end of Elwha Dike Road	4.9	II	Clallam
Entiat	Lake Creek Campground to National Forest boundary	3.0	IV-V	
Entiat	Brief to McKenzie Canyon	11.2	II	Chelan
Entiat	Entiat River Road to 0.3 mi from Columbia River	14.5	II	Chelan
Finney Creek	Finney Creek Road Bridge to bridge at mouth	16.5	IV	Skagit
Foss	FR 68 Bridge to Highway 2 bridge	6.5	IV-V	King
Goodman Creek	Road beside creek to Soleduck River	1.3	III-V	Clallam
Grande Ronde	Troy (OR) to Snake River at Heller Bar	39.0	II-III	Asotin
Gray Wolf	Deer Park to Dungeness Forks Campground	9.5	IV-V	Clallam
Green	Cascade Creek to gauging station	11.7	III-IV	Cowlitz
Green	Below Tacoma Intake to Flaming Geyser State Park	16.0	III-IV	King
Green	Flaming Geyser State Park to 212 Way SE Bridge	2.6	II	King
Greenwater	FR 7030 Bridge to Highway 410 (town of Greenwater)	7.2	II	Pierce/King
Hamma Hamma	Road end 12 miles from Route 101 to 3.5 miles downstream	3.5	V-VI	Mason
Hamma Hamma	Bridge to falls (lower run)	5.0	III-IV	Mason
Hangman (Latah) Creek	3 mi below Rattler Run Creek to California Creek	10.0	IV	Spokan/Whitman
Hoh, S. Fork	Park boundary to Hoh Rainforest Lots	6.7	III	Jefferson
Hoko	Hoko Falls Run	6.3	II-V	Clallam
Humptulips, E. Fork	Narrows Run	5.0	III	Grays Harbor
Humptulips, E. Fork	South Boundery Road Bridge to Gorge (Falls Section)	5.7	III	Grays Harbor
Humptulips, E. Fork	Gorge Run downstream to Boise Bridge	6.4	III	Grays Harbor
Humptulips, W. Fork	Fish Trap Road (near Elk Creek) to Highway 109 bridge	45.2	II	Grays Harbor
Hyas Creek (S. F. Calawah trib.)	One quarter mile upstream of FR #29 bridge to S.F. Calawah	1.5	II-IV	Clallam
Icicle Creek	Big Slide Creek to Rat Creek	6.7	IV-VI	Chelan

River Name	Segment(s)	Miles	Class	County
Chiwawa	Huckleberry Campground (near Brush Creek) to Wenatchee R.	11.0	III	Chelan
Christmas Creek	Bridge to Hoh mainline bridge	4.0	II-V	Jefferson
Cispus	Adams Fork to FR 23 Bridge	5.9	V-VI	Lewis
Cispus	Route 23 Bridge/Doe Creek to Road 28 Bridge	9.5	III-V	Lewis
Cispus	Road 28 Bridge to Cowlitz River	17.2	III	Lewis
Cispus, N. Fork	FR 22 Bridge to North Fork Campground	2.7	IV-V	Lewis
Cle Elum	Scatter Creek to Salmon La Sac Creek	6.6	IV-V	Kittas
Cle Elum	Salmon La Sac Creek to Cle Elum Lake	4.0	II	Kittas
Cle Elum	Cle Elum Dam to confluance with Yakima River	7.3	II	Kittas
Clearwater	From 9.5 miles upstream to Clearwater Campground	9.5	III-IV	Jefferson
Clearwater	WC 144 Bridge 0.5 mi above Miller Creek to Indian Reservation	13.2	II	Pierce/Jefferson
Clearwater	Bridge to confluance with White River	4.0	III	Pierce
Clearwater	From 10.5 miles upstream to Clearwater Road	10.5	II	Jefferson
Cool	Waterfall to Cle Elum River	1.5	V	Kittas
Cowlitz	Cispus River to Riffle Lake	9.0	III	Lewis
Cowlitz	La Wis Wis Campground (US Route 12) to Bridge in Packwood	7.6	I-II	Lewis
Deer Creek	Bridge at Rick Creek to mouth (town of Oso)	11.0	IV	Snohomish/Skagit
Dosewallips	Below Dosewallips Falls to Elkhorn Campground (Elkhorn Canyon)	3.0	V-VI	Jefferson
Dosewallips	Below Dosewallips Falls to Elkhorn Campground (Canyon)	3.0	V-VI	Jefferson
Dosewallips	Elkhorn Campground to FR2620 (a.k.a. Six Mile) Bridge	5.2	IV-V	Jefferson
Dosewallips	FR 2620 (a.k.a. Six Mile) Bridge to Dosewallips State Park	6.5	III	Jefferson
Duckabush	2516 Bridge to Highway 101 at mouth	6.2	IV-V	Jefferson
Dungeness	Gold Creek to Forks Campground	3.0	III-IV	Clallam
Dungeness	Dungeness Forks Camp to hatchary	5.5	III	Clallam
Elwha	Grand Canyon	8.6	V	Clallam

Save Our Wild Salmon • Coalition •

Save Our Wild Salmon Coalition Offices:

Main Office: 1516 Melrose Avenue, Suite 200 Seattle, Washington 98122
(206) 622-2904 / (206) 622-2924 fax

Field Offices: 1511 North Eleventh Boise, Idaho 83702 / (208) 345-9067
921 Southwest Morrison, Suite 432 Portland, Oregon 97205 / (506) 497-0188

American Rivers
Antioch Uranq Systems Collective
Association of Northwest Steelheaders
Boulder-White Clouds Council
Clearwater Forest Watch
Coalition for Salmon and Steelhead Habitat
Coast Range Association
Defenders of Wildlife
Extension Sea Grant
Federation of Fly Fishers
Friends of the Earth
Idaho Conservation League
Idaho Rivers United
Idaho Steelhead and Salmon Unlimited
Idaho Wildlife Federation
Institute for Fisheries Resources
Long Live the Kings
The Mountaineers
Natural Resources Defense Council
North Cascades Conservation Council
Northwest Conservation Act Coalition
Northwest Environmental Defense Center
Northwest Resource Information Center
Northwest Sportfishing Industry Association
Oregon Natural Desert Association
Oregon Natural Resources Council
Oregon Trout
Pacific Coast Federation of Fishermen's Associations
Pacific Rivers Council
Rivers Council of Washington
Salmon For All, Inc.
Salmon For Washington
Sawtooth Wildlife Council
Sierra Club
Sierra Club Legal Defense Fund
The Wilderness Society
Trout Unlimited
Washington Kayak Club
Washington Trollers Association
Washington Wilderness Coalition
WaterWatch of Oregon
Western Ancient Forest Campaign





Received
DSC-TWE
DEC 27 1994
C559 OLYM 401-06

December 21, 1994

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225

RE: Elwha River Ecosystem Restoration Draft EIS

Dear Ms. Bransom:

The Save Our *Wild* Salmon Coalition strongly supports the preferred alternative of removing the two Elwha River dams as described in the draft Environmental Impact Statement (DEIS).

The 1992 Elwha River Ecosystem and Fisheries Restoration Act (P.L. 102-495) requires the full restoration of the Elwha ecosystem and its historic salmon runs. The DEIS correctly points out that the only way to achieve that legal mandate is through dam removal.

Previous studies and reports over several years by the National Marine Fisheries Service, the National Park Service, U.S. Fish and Wildlife Service, the Lower Elwha S'Klallam Tribe, the Federal Energy Regulatory Commission (FERC), and the General Accounting Office (GAO) all reached the same conclusion; dam removal is the only way to restore the 10 distinct runs of Elwha salmon and steelhead.

Restoring the Elwha makes good economic sense. Removing the dams is one of the best opportunities to restore salmon anywhere in the Northwest. The combination of pristine habitat protected within the park and the ability to remove the only obstacles to access that habitat add up to an excellent likelihood of success for rebuilding the Elwha River salmon runs.

Following dam removal and fisheries restoration, the Elwha River will produce millions of dollars *per year* in new revenues from increased tribal, commercial and sport fishing. FERC estimated that annual adult production for the Elwha following dam removal would average over 200,000 more fish than currently produced. *(Table 4-27, Draft Staff Report, March 1993, FERC)*

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Dam removal is an important step in upholding Native American treaty rights the federal government is legally responsible for defending. Federal Courts have affirmed that the 1855 treaty between the United States and the Lower Elwha S'Klallam Tribe protects the Tribe's right to fish the river; yet by blocking fish passage to most of the river, the dams have effectively negated this right central to the Elwha people's cultural, social and economic life.

In addition, the Federal Power Act prohibits licensing dams in a National Park. When the Glines Canyon dam's operating license expired in 1976, the dam became an illegal intrusion on Olympic National Park and therefore cannot receive a new license. In 1990 a legal opinion released by the General Accounting Office confirmed this point.

Restoring the Elwha River is a "Win-Win" solution. It is part of a negotiated settlement of a protracted legal controversy surrounding the dams. The 1992 Elwha Act is fully supported by commercial and recreational fishing groups, environmental organizations, Native American tribes, businesses, the dam owners and the pulp mill that uses power from the dams.

Failure to remove the dams will result in divisive litigation and possible extinction for Elwha River salmon runs, continued diminishment of Tribal treaty rights, further loss of fishing related jobs, and the potential closure of one of the largest employers on the Olympic Peninsula.

Please move swiftly in completing your final EIS and begin implementation of dam removal and salmon restoration.

Sincerely,

Michael Rossotto

Michael Rossotto
Executive Director

cc: Senator Slade Gorton
Senator Patty Murray
Senator Mark Hatfield
Representative Norm Dicks

Seattle Audubon Society

Washington Nonprofit Corporation

Received DCC-RW DEC 30 1994 C589-OLYM404-06

December 20, 1994

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

The Seattle Audubon Society is an organization of 5,000 members that is dedicated to the conservation and study of wildlife and their habitats, and the protection of environmental quality. The Society is an intervenor in the FERC licensing proceedings for the Elwha dams. We thank you for the opportunity to comment on the draft Environmental Impact Statement for Elwha River Ecosystem Restoration.

The information that has been developed for this EIS, and in previous proceedings before the FERC, shows that removal of the dams and restoration of the Elwha River ecosystem and Olympic National Park is both necessary and in the best interests of the Pacific Northwest and of the country. Removal of the dams is shown to be the only way to fully restore the ecosystem and the fish runs, as required by law.

This is the single best opportunity for restoring salmon in the entire region. The restoration effort will also give an economic boost to the Olympic Peninsula, both from short-term construction and from long-term fish production and tourism.

We support the preferred alternative for removal of the dams and restoration of the ecosystem. The Department should proceed to secure the funding to implement the removal and restoration.

Sincerely,

Seattle Audubon Society

8028 35th Avenue N.E. • Seattle, WA 98115 • 206-523-4483

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Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

Received DCC-TWE DEC 30 1994 C596 OLYM 404-06

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your comments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): DRY CREEK GRANGE # 646

MAILING ADDRESS: 519 Rose Street
Port Angeles, WA 98362

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

1. Legislation to re-license Lower Elwha and Glines Canyon Dams.
2. A true cost figure for removal of the dams.
3. A committe to lobby the Appropriation Committee to withhold funding for removal of the dams until all realistic mitigation alternatives are pursued
4. A report from the Clallam County Assessor detailing the financial loss to Clallam County if the dams are removed.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

1. Lake Mills and Lake Aldwell are needed for fire protection within the Olympic National Park and surrounding rural areas.
2. The Public Workshop concept was not designed for public input, leaving local residents feeling left out of the decision making policies for their future.
3. Removal of the Elwha River Dams will set a precedent for removal of other dams across the nation.

OTHER COMMENTS:

1. Continual enlargement of Government Properties erodes the tax base which leaves the burden on local tax payers.
2. The Draft Environmental Impact Statement Elwha River Ecosystem Restoration Report is a duplication of the September 1993 Elwha Report We

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

object to the expense of taxpayer money for this publication that does not offer significant new information.

3. The Elwha River is not the only river in the area having a shortage of salmon return.

4. Destroying one habitat (fish and birds) to possibly restore another habitat (salmon).

5. Sediment released from behind the dams will build up the river bed and cause changes in the flow of the river which could result in flooding.

6. An additional study concerning the practibility of fish ladders to restore the salmon run.

7. Local cost sharing was not discussed in the EIS draft. Has this issue been abandoned?

WASHINGTON STATE GRANGE
924 Capitol Way S #300 • PO Box 1186 • Olympia WA 98507-1186 • (206) 943-9911 • FAX 357-3548

Received
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DEC 30 1994
C599 OLYM 404-06

December 22, 1994

Sarah Bransom
National Park Service
Western Team
PO Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

SUPPORTING RETENTION OF THE GLINES CANYON AND ELWHA DAMS

On behalf of the more than 62,000 members of the Washington State Grange, I strongly urge you to reconsider the National Park Service proposal to remove both the Glines Canyon and Elwha Dams. This issue is one of great importance to the Washington State Grange, meriting a special resolution at our 1994 convention, specifically opposing the removal of the dams.

One of our members, Tom Santos from Sequim, Wash., has been closely following this issue since it first came under consideratioo. In a reader comment to the *Peninsula Daily News* on May 14, 1991, Santos argues that rather than removing these valuable dams, many fish runs could be reestablished in the river by installing fish ladders and Eicher screens to help spawning fish travelling upstream and protect smolt returning downstream. According to Santos, the absence of dams on the Dungeness River and other significant rivers in the area has not protected them from declining salmon runs.

The issues surrounding the declining salmon runs in our state have commonly been referred to as "the four H's:" Habitat, Harvest, Hatcheries, and Hydro. Problems such as overfishing both iostream and in the ocean, lack of control over the California Sea Lions, the effects of El Niño, and the weakening of native fish strains through interbreeding with hatchery fish all have a significant impact upon the decline of our strong native anadromous fish runs. The decline cannot be blamed solely on our dams.

According to the your draft environmental impact statement, some runs of salmon could be partially restored through the installation of fish ladders and screens on the dams. Other runs of salmon and trout are said to have poor or unknown chances of restoration even if the dams are upgraded with fish passage measures because of expected passage losses and poor habitat quality between and below the dams. Removal of even one of the dams, the study claims, would produce a greater chance of restoration, although none of the alternatives discussed in the report can guarantee a return to the days of abundant salmon runs on the Elwha River.

Because of the uncertainty of restoring these native runs solely by removal of the dams, we must consider also the effects of such an undertaking on the lands and people of the Elwha River area. Wildlife in the area, including the spotted owl and the trumpeter swan, have adapted to the new ecosystem created by these dams and the wetlands surrounding them. The drafters of your environmental impact statement admit that if both dams are removed within one or two years and sediment is allowed to wash out naturally, water could become turbid enough to kill large

numbers of fish, their eggs and other aquatic life. Other alternative means of dam removal produce similar results. Furthermore, the report also cautions that "without carefully planned restrictions and avoidance measures, construction associated with removing the projects has the potential to adversely affect federally listed species."

For more than 80 years, the dams have been a part of the local economy. Because the dams run the North Olympic Peninsula's only electricity-producing power plant, many fear removal could mean fewer kilowatts available in times of increasing demands and projected power shortages.

The dams have created beautiful recreation areas around Lake Aldwell and Lake Mills. The dams themselves are historically significant as examples of early hydroelectric systems. Removal of these dams would result not only in a loss of these important historical structures, but in the flooding of areas downstream, which could destroy the Elwha Ranger Station Historic District, the Elwha River Bridge, and possibly other historic sites.

According to your report, the population of Clallam County is expected to grow to nearly 60,000 by the year 2000. Much of this growth is expected to come from retirees and those employed by the recreation and tourism industries. With the loss of recreation areas created by Lake Aldwell and Lake Mills and with the possible destruction of several historic sites in Clallam County, these industries could suffer.

Finally, we come to the price tag on this project. Already, it has been estimated that $15 million has been paid by dam owners attempting to re-license their operations. Another $15 million reportedly has been spent to conduct the above-mentioned studies on the Elwha River. Finally, the Elwha Report estimates the full cost of removing both dams to fall somewhere between $147 and $307 million, depending on which section of the report you read. Installation of fish ladders and Eicher screens on existing dams would cost between $22 and $40 million.

U.S. Senator Slade Gorton, in a July 22 editorial in the *Seattle Post-Intelligencer*, says he does not believe Congress or the Clinton Administration will ever approve an expenditure of $200-300 million for Elwha Dam removal. He suggests instead Congress approve $25 million in funding for implementation of a Olympic Peninsula salmon enhancement program, including installation of fish ladders and improvements in habitat.

Approval of this smaller expenditure and a promise to make salmon-friendly improvements upon the Elwha and Glines Canyon dams would be a compromise everyone can appreciate.

Enclosed you will find copies of letters submitted to our legislative liaison, Janelle Keller, echoing the concerns expressed in this letter. Please take these letters into account as you consideration the impact your proposal will have upon the citizens of Washington State.

Thank you for your time and consideration of our views on this issue.

Fraternally,

Robert J. Clark
State Master

Enclosures

cc: Senator Slade Gorton
Senator Patty Murray

Received
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ANS_____BY_____

COMMON SENSE RESOURCE LEAGUE
H. C. 71 Box 78A., Oroville, WA 98844
December 3, 1994

Janelle M. Keller
Legislative Liaison
Washington State Grange
P. O. Box 1186
Olympia, WA 98507-1186

Dear Ms. Keller:

Re: Elwha Dam proposal

The Common Sense Resource League formed about three years ago in response to the need for being better informed on current issues - especially those related to natural resources.

Members of the League became interested in the proposed removal of the Elwha and Glines Canyon Dams and have researched and studied the issue for some time.

CSRL has concluded that removal of these dams would not result in the desirable effects that the Department of Interior has set out to accomplish. The hoped-for restoration of the Elwha River ecosystem and the native anadromous fish through dam removal cannot be predicted nor guaranteed beforehand. The absence of dams on other rivers in the area has not prevented a decline in salmon populations there. Will the Department of Interior consider REPLACING the dams, if the removal has not accomplished the degree of restoration expected?

Irreparable harm to the ecological balance of the area is a very real possibility as a result of the removal. Wildlife habitat, the economy of the area, the loss of electrical generation and flood control are matters which should weigh heavily against dam removal.

The estimated cost of dam removal, said to be between $147 and $307 million is not justifiable in light of the benefits of leaving the dams in place.

The membership of the Common Sense Resource STRONGLY REQUEST THAT OTHER ALTERNATIVES BE CONSIDERED. An expenditure of $25 million for fish ladders and other enhancement programs makes more sense.

Sincerely yours,

COMMON SENSE RESOURCE LEAGUE

Richard Dart
Richard Dart
President

cc: Pomona Grange Attn: Bob Joy

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JAN 3 1995
C-610 OLYM 409-06



CONSERVATION
COMMITTEE

December 19, 1994

National Park Service
DSC-TWE-Planning
12795 Alameda Parkway
Denver, Colorado 80255-0287

Subject: DEIS Elwha River Ecosystem Restoration

Attn: Sarah Bransom

Dear Ms. Bransom:

INTRODUCTION

We as Mazamas, a Portland based outdoor recreation-oriented club of 3000 members, have long used the Olympic National Park, the preceding National Forest and the pubic domain even before that for many of our outdoor activities. Every year we have club sponsored climbs of Mt. Anderson, and Mt. Olympus, two major peaks of the Park near the headwaters of the Elwha River. From time to time, we conduct backpacking expeditions in various parts of the Park including the Elwha River Drainage. Club members also make many private expeditions through out the Park every year. Over 100 years ago founding members of the Club were involved in some of the early explorations of the Olympic Mountains. Some of these early outings to the high country utilized segments of the old Elwha River Trail through Smoky Bottom which is now under Lake Mills.

We are interested in seeing a scenic, healthy Olympic National Park where the full ecological process can take place across all the Park. The Park has been declared a World Heritage Park and a World Biological Reserve and all should be done to enhance these classifications.

PROPOSED ACTION

We have reviewed the DEIS and find that it contains, as the Proposed Action, the very exciting alternative that return the river to its natural state by removing both dams. And given the every deepening problems with anadromous fish runs, both hatchery and wild, in the Pacific Northwest, the restoration of all the Elwha River wild runs of fish is in the public good. Most of the drainage is in pristine natural condition being inside the Park.

Nine-O-Nine Northwest Nineteenth Avenue - Portland, Oregon 97209 - Telephone (503) 227-2345

MAZAMAS were organized on the summit of Mt. Hood in 1894 - The purposes of the club are to explore mountains, to disseminate authoritative and scientific information concerning them, and to encourage the preservation of forests and other features of mountain scenery in their natural beauty. Anyone who has climbed to the summit of a mountain on which there is a living glacier is eligible for membership. The word "Mazama" is derived from the name of a mountain goat.

Conversely much of the natural rivers habitat of the Northwest outside the Park has been heavily damaged by logging and the accompanying roads. This Proposed Action also support and recognizes treaty rights of several federally recognized Indian tribes in the area which have been severally impacted for the last 80 years since the first dam was built. We urge the Secretary of the Interior to continue to support the Proposed Action, making it the Final Preferred Alternative.

The dam removal project would provide a great opportunity for research in restoring fish runs. Some of the lessons learned in the Toutle and Cowlitz Rivers dealing with the large volume of volcanic debris from the eruption of Mount St Helens in 1980 might be applicable in dealing with the sediment behind the two Elwha River dams. These two rivers, the Toutle and Cowlitz had and still have runs of anadromous fish.

This two dam removal alternative also offers the opportunity to restore the areas now occupied by Lake Mills within the Park and Lake Aldwell downstream to a natural state over time. To begin with, the Lake Mills area will not look like the adjacent park lands but over time, it will take its place as park land and good wildlife habitat. The restored river channel will offer additional spawning areas for fish. Again restoration of the reservoir areas will offer many research opportunities.

Removal of both dams offers the best opportunity for restoring 9 of the 10 historic natural runs of salmon, steelhead and trout that were in the Elwha River System. It also offers the highest numbers of wild fish in the upper reaches and the most return of anadromous biomass to the upper river. In addition to the direct feeding on the fish carcasses by several species of birds and animals, invertebrates and plants that contribute to the total ecology of the drainage benefit from this additional biomass.

ECONOMICS

There is a major up-front cost to removing both dams but that is a very good investment for the long term, as year around, self sustaining wild fish runs will be reestablished. These runs will help support a year around sports and commercial fishery and will result in a much higher economic return to the direct area and local American Indian tribes compared to the value of power lost. The positive economic affect will also be felt over the wider region.

Positive efforts will be required to fund this complete removal of both dams. We do not want to settle for a partial solution. We will work on helping to obtain necessary funding from Congress.

Elwha River Dams
Mazamas, December 19, 1994
Page 3

We feel that the owners of these dams have at least a moral obligation to help in this restoration effort for the economic gain they have enjoyed by utilizing the publics waters over past 80 years. Possible they could donate the dams and adjoining lands. They would realize a tax deduction and express a thank you to the public for this economic gain.

We are disappointed that the economic analysis is incomplete at this time, and we shall be looking foreword to the fully costed analysis in the implementation EIS as mentioned at the bottom of Page 75. The analysis needs to include the benefits of the improved fish runs locally and in the region as well as long range recreational values. The 1991 FERC EIS appears to have overlooked some of these values

Please keep us informed on the progress of this project and the final decision. Also send us a copy of the FEIS, Implementation EIS and ROD when they are published.

Yours truly,

Janet Johnson

Janet Johnson
Chair, Conservation Committee

CC: Senator M. O. Hatfield
Representative E. Furse

Received
DSC-TWE
JAN 04 1994
C612-aym-404-06

Olympic Park Associates
13245 40th N.E.
Seattle, WA 98125-4617

December 22, 1994

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

Re: Elwha River Ecosystem Restoration
Draft Environmental Impact Statement (DEIS)

Dear Ms. Bransom:

I am writing on behalf of the Olympic Park Associates to provide comments on the Elwha River Ecosystem Restoration Draft Environmental Impact Statement (DEIS). Olympic Park Associates is a non-profit organization founded in 1948 to preserve the integrity and wilderness of the Olympic National Park. OPA also is an intervenor in the FERC licensing proceeding and a party to the legal challenge to FERC's jurisdiction over the project.

OPA long has been interested in removing the Elwha River dams and restoring the Elwha River ecosystem in its entirety. Consequently, we strongly support the preferred altemative described in the DEIS.

With the foregoing in mind, we offer the following specific comments on the DEIS:

PURPOSE AND NEED

OPA fully supports conclusion of the Department of the Interior (DOI) that dam removal is needed to return the Elwha River and its ecosystem to a natural, self-regulatory state. The purpose for doing so is to restore fish passage and habitat and to improve water temperature and nutrient resources.

DESCRIPTION OF THE ALTERNATIVES

OPA concurs that removing both Elwha dams is the only alternative stated which meets the needs for the proposed action. Therefore, except for comparative purposes, OPA believes that other stated alternatives should be eliminated from further consideration.

Furthermore, we believe the preferred alternative should be refined to constrain the potential cost of dam removal and ecosystem restoration. In this regard, we believe the FEIS explicitly should eliminate sediment management options 1 and 2 from the Secretary's Elwha Report. These alternatives do not add significantly to the spectrum of alternative methods for sediment management. Conversely, consideration of these alternatives in subsequent EIS documents skews economic impact considerations to overstate project costs and to present erroneous cost-benefit analyses.

CUMULATIVE IMPACTS

Generally, we believe cumulative impact analyses included throughout the impacts chapter of the DEIS need improvement. The Council on Environmental Quality requires Federal agencies to consider the cumulative impacts of their proposed actions. 40 C.F.R. § 1508.25(c)(1991). The regulations define cumulative impacts as --

> The impact on the environment which results from the incremental impacts of the action when added to other past, present and reasonably foreseeable future actions regardless of what egency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

40 C.F.R. § 1508.7 (1991).

The cumulative impacts analysis should include consideration of actions which have similarities such as common timing or geography, or other bases upon which their environmental consequences can be eveluation together. See 40 C.F.R. § 1508.25.

In the case of the Elwha Restoration DEIS, cumulative impacts should be considered in two different ways. Alternatives which tend to have a positive impact on various resources should be considered together with other, similar actions which also have positive impacts on the resources in question. Conversely, alternatives which have negative impacts should be considered together with other actions which have adverse consequences for the resources in the question.

Cumulative Impacts on Sediment, River Morphology and Water Quality (DEIS at 32). -- The analysis of impacts of the no-action alternative on sediment, river morphology and water quality should be further clarified. In particular, the cumulative impacts of the dams, together with armoring of coastal marine cliffs and other coastal erosion measures, should be described in further detail.

Cumulative Impacts for Native Anadromous and Resident Fisheries (DEIS at page 40). -- The DOI should consider the impacts of restoration together with other actions which have an impact on fish resources. In the case of the Preferred Alternative, these include watershed restoration and other restoration and enhancement efforts undertaken by the National Forest Service, the Washington Department of Fish and Wildlife, the Puget Sound and coastal Indian tribes and others. Conversely, the DEIS should consider the cumulative impacts of the No Action alternative with other actions which reduce fish resources. These include activities such as logging, commercial and residential development and harvest. The cumulative impacts of the No Action alternative will be the continued decline of Olympic Peninsula salmon and steelhead resources.

Cumulative Impacts for Living Marine Resources (DEIS at page 52). -- Again, we believe the discussion is lacking. The analysis of direct impacts indicates that living marine resources suffer from the lack of sediment. Elsewhere, the document suggests that armoring of the marine cliffs east of the Elwha delta also has reduced the amount of sediment present on the coastline. The DEIS should consider the cumulative impacts on living marine resources of the No Action alternative and erosion control measures.

Cumulative Impacts for Vegetation Resources (DEIS at page 54) and Wildlife Resources (DEIS at page 56). -- The discussion regarding vegetation and wildlife fail to identify other similar activities, although the cumulative effects of taking no action, together with conversion of undeveloped land to residential and commercial uses, will result in adverse cumulative impacts to the local elk subpopulation.

Cumulative Impacts for Species of Special Concern (DEIS at page 58). -- This discussion says absolutely nothing about the cumulative impacts of *any* of the alternatives for species of special concern. There is nothing in the analysis to suggest that the project area contains suitable habitat for spotted owls or marbled murrelets. It is obvious, however, that increasing habitat use for salmon and steelhead will have a positive impact on bald eagle populations. Consequently, the DEIS should consider the cumulative impacts of ecosystem restoration and other bald eagle recovery actions on bald eagle populations.

Another consideration entirely lacking in this section of the DEIS is the cumulative impact of the various alternatives on threatened and endangered fish populations. As you are undoubtedly aware, numerous species of salmon and steelhead have been listed or proposed for listing under the Endangered Species Act. The cumulative impacts of dam removal and other recovery actions should be considered for threatened and endangered species of fish resources.

Cumulative Impacts of Cultural Resources (DEIS at page 63). -- The discussion describes other activities which have adversely affected cultural resources, particularly those of the Lower S'Klallam tribe, but fails to describe the cumulative impacts of these activities.

Cumulative Impacts on Recreation Resources (DEIS at page 69). -- The discussion here should be similar to the discussion under fish resources.

Cumulative Impacts on Flooding (DEIS at page 80). -- This rather brief discussion appears to be e comparison of the various alternatives. It says absolutely nothing about cumulative impacts. Furthermore, the discussion appears to be misplaced in the discussion of hazardous materials (which incidently does not include a cumulative impacts analysis).

Cumulative Impacts on Ecological Resources (DEIS at page 85). -- The DEIS fails to eddress the cumulative impacts of the No-Action Alternative except merely to assert that activities which edversely affect the Elwha River ecology all affect either the river flow, sediment loads, water quality of fisheries. Again, there is no discussion of cumulative impacts.

SOCIOECONOMIC IMPACTS

Socioeconomic Impacts (DEIS at page 72). -- The negative economic

consequences of the no-action alternative have been completely ignored. Specifically, these cumulative socioeconomic impacts of the no-action alternative include the cost of maintaining Ediz Hook. They also include on-going flood control efforts for the lower river.

Another omission from the discussion of socioeconomic impacts is significant. This concerns the consequences of taking no action. The scenario described in the DEIS under the No Action alternative assumes that the dams will continue in operation. This is not an assumption we support or even believe is likely. We strongly believe the DEIS should consider the consequences of taking no action in the event relicensing efforts are unsuccessful. This is consistent with the CEQ directive that, where a choice of "no ection" by the agency would result in predictable actions by others, this consequence of the "no action" alternative should be included in the analysis. See "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations", 46 Federal Register 18,037 (March 23, 1981). The results clearly would prove detrimental to the local economy. Daishowa of America would loose its access to a reliable power supply and its employees' jobs would be threatened. The economic impacts of mill closure would include indirect consequences as well. We believe this scenario is *et leest* as likely as continued operation under the No Action alternative, if not more so.

Conversely, we believe the positive economic consequences of removing the Elwha dams has been understated. The discussion should be expanded to include a discussion of the indirect economic impacts. These include indirect construction and other service jobs during dam removal. They also should include a discussion of the direct, indirect and cumulative impacts of increasing salmon and steelhead resources. Restoration and other fish enhancement activities will heve a positive economic impact on motel, restaurent, grocery, sporting goods and guiding services business. They also will have a positive impact generally on retail businesses and tax revenues. These impacts should be described in greater detail in the final EIS.

CONCLUSION

We strongly support implementation of the Preferred Alternative, as previously stated. For the sake of consistency, however, we believe the DEIS should achieve a higher standard, especially in the case of its treatment of cumulative impacts. We also believe the EIS should present e more realistic assessment of the consequences, particular socioeconomic, of taking no action. On balance, removing the Elwha dams will have an extremely positive impact on the environment. We

suggest that the impacts be more carefully stated in the DEIS.

We hope these comments have been helpful and that they will be considered in a positive manner. We urge you to revise the DEIS as noted above and to continue ahead with restoration activities without further delay.

Sincerely,

Joe Mentor Jr.
Board Member

cc: Senator Slade Gorton
Senator Patty Murray
Congressman Norman D. Dicks

Business Comment Letters

Daishowa America, Port Angeles-C392; water quality and quantity

Gehrke's Gink-C148; socioeconomics, fisheries

James River Corporation-C479; NEPA process/legal, socioeconomics

Northwest Sportfishing Industry Association-C546

Pacific Water Sports-C205

Curnew, James-C491

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DSC-TWE
DEC 05 1994
CU48-0044M-4406

Gehrke's Gink

FLY-MAKER'S WAX • FISH-FUZZ • XINK

Snake River - Hell's Canyon • Asotin, Washington 99402

George Gehrke
Gehrke's Gink
December 3, 1994

Sarah Bransom
National Park Service
Elwha River Project
P.O. Box 25287
Denver, CO 80225

Dear Mrs Bransom:

I cannot think of a finer option left available to you to create tens of thousands of jobs and in the same process, create a fiscal wealth for the State of Washington than seeing to it that the string of Elwha River Dams are removed as quickly as possible. Let me explain why you should make this a primary mental dedication for the people of the State of Washington, and the United States overall.

Washington's 'Outdoor Wildlife Inventories' are in sorry shape and getting worse with each passing day. You should be aware by that "Outdoor Recreational Dollars' that come from 'Outdoor Recreational Activities' of all sorts and in all forms is the number one Industry in the State of Washington and most Western State. Number One. It far outstrips the income of even agriculture, as hard as that seems. Outdoor recreation is big business. Bigger than imaginable. For instance, the value of wildlife species have beeen determined by our research efforts over the last twenty years are absolutely astounding. A Steelhead and/or migrating King Salmon is worth in excess of $275.00 to the State of Washington. An Elk is worth in excess of $24,000.00, a rabbit or pheasant is worth over $30 each and the numbers are even more remarkable when you come to find out that a Big Horn Sheep is worth nearly $50,000 to your State in Colorade or here . . . but overall, hunting and fishing alone create more jobs than any other industry for the Western Recreational States. The success ratio varies to the values received as in Elk Hunting. One Elk success ratio requires over three hunters fifteen years ago. Today, it's worse and it requires anywhere from four to five hunters to harvest One Elk. Those hunters have a substantial investment in hunting. From the guns they buy, the tires, the gas, the camping gear, the licenses, the groceries, the liquor, their clothes, their shells, the oil, vehicle repairs, horses, hay, knifes, saws, medical needs, restaurants, and the list goes on. Yes, one Elk or ONE SALMON are 'Job Makers' beyond your wildest dreams! This is why you must support the removal of the Elwha River Dams that are blocking jobs and blocking financial growth for the people of America and the Northwest.

Sarah, there isn't a man, woman, or child in your State that does not see, or receive direct or indirect financial aid and benefits from hunting and Fishing and/or recreational dollars. From the clothes on their backs to the food on their tables . . . Outdoor Recreation puts and keeps more people working than any one thing you can do for this area and America.

Given the time and space, I could explain it all in a highly factual and documented manner. But we will need to keep the gill nets out of the water system to really make it work. Gill-netters cannot be trusted and should be supervised at weirs by government officials. 'Old' methods should be used, not indiscriminate netting methods that damages rather than enhance our outdoor inventories. Think about that. Remove the dams and you'll see benefits that will make the GATT treaty seem like child's play. If you really care about jobs other than timbering, remove the dams. Reverse the process of destruction that came with the dams. Give something back to your us. A reply specific to this letter would be greatly appreciated.

Sincerely,

George Gehrke

509-243-4100
FAX 243-4644

World's #1 Dry Fly Dressing

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C 206-olym-you-06

Pacific Water Sports
16055 Pacific Highway South
Seattle, Wash. 98188
(206) 246-9385
FAX (206) 439-9040

Sarah Bransom
National Parks Service
Elwha River Project
PO Box 25287
Denver, CO 80225-0287

Dear Ms Bransom:

We'd like you to know that we support removal of both dams on the Elwha River. Not only is it the only reasonable chance of restoring the salmon runs and the ecosystem of the Elwha River, it is a recreational and business advantage.

Our business depends on natural ecosystems. We employ a dozen people year around and are one of many small businesses that suffer from the "improvements" made to our rivers. Compared to counting boats on an artificial lake, it is hard to see the recreational users of a free flowing river, but the fishermen, river runners and nature watchers usually outnumber the lake users that appear after a dam is built.

Please add me to your information mailing list at the above address.

And please do what you can to move forward with this historic opportunity to restore a river.

Sincerely,
Lee Moyer, Owner Lee A Moyer

Daishowa America Port Angeles MILL

Received
DSC-TWE
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December 20, 1994

VIA FEDERAL EXPRESS

Ms. Sarah Bransom
National Park Service - Western Team
PO BOX 25287
Denver, CO 80225-0287

12795 W. Alameda Pkwy.

Dear Ms. Bransom:

The following are Daishowa's comments on water supply issues associated with the Elwha River Ecosystem Restoration Draft Environmental Impact Statement (DEIS-1). Please note that we are not aware of any published work concerning water supply that goes beyond the Elwha Report. Therefore, the issues noted below are essentially the same as our earlier comments on the Elwha Report.

The success of Daishowa's pulp and papermaking operations at the Port Angeles Mill is dependent upon a reliable supply of high quality water. The existing Industrial Water Supply System has consistently met our needs in this area.

The DIES-1 references (page 31) four measures to mitigate the impacts of dam removal on our industrial water supply. The DEIS-1 also states that these measures are technically feasible and, if implemented, would fulfill the congressional directive of protecting the existing quality and availability of water. We take exception to this last statement. The four mitigation measures remain concepts only. We are not aware of any field data, or sound engineering analysis, that proves any of these concepts will actually meet our requirements.

The DEIS-1 also states (page 31) that improving, or adding, to the treatment facilities currently used by the mills could be another option to protect water quality. We agree that this concept has some potential, but question whether or not such a solution meets the letter of the law in the Elwha River Ecosystems and Fisheries Restoration Act. Further, this action would result in the disposal of additional river solids from the mills' current treatment systems This disposal may be in conflict with other environmental regulations.

Failure of the implemented mitigation measure to protect the edsting water quality and availability with absolute reliability, may have disastrous consequences for Daishowa's Port Angeles Mill. This is true even for brief excursions. The implementation EIS (EIS-2) must place confidence in success as the most important criteria in the selection of the preferred mitigation measure. The cost to implement should be a criteria only where the confidence in success is equal.

In analyzing the mitigation alternatives, the EIS-2 must assess the risk of failure associated with each measure. Risk assessment must be based on detailed studies of actual field data, and address conditions during and after the active dam removal process.

Sincerely yours,
Dean M. Reed
Engineering Manager

DA:Port Angeles Mill
DMREED/rjr

cc: Steve Taniguchi Thomas Suda Stan Hicks
Robert Hartley, The Rockey Company Orville Campbell
Mike Hafferty, Riddell, Williams Project File# 1676

POST OFFICE BOX 271 PORT ANGELES, WASHINGTON 98362 (206) 457 4474

JAMES RIVER CORPORATION
GROUNDWOOD SPECIALTIES
521 S.E. Chkalov Drive (98684)
P.O. Box 6099 Vancouver, WA 98668-6099

Received
DSC-TWE
DEC 23 1994
C479 ALSA 404-06

December 21, 1994

Sarah Bransom
National Park Service
Western Team
12795 Alameda Parkway
Denver, CO 80225-0287

Re: Comments on Elwha River Ecosystem Restoration DEIS

Dear Ms. Bransom:

Thank you for providing the James River Corporation with a copy of the Draft Environmental Impact Statement ("DEIS") on the Elwha River Ecosystem Restoration proposed action. As the owner and operator of the Elwha and Glines Canyon Projects that are the subject of the DEIS, James River is directly affected by the proposal. In these comments, James River supports the proposed action, including acquisition and decommissioning of the two projects, draining the reservoirs, and removing all or part of the dams, powerhouses, and auxiliary structures for purposes of achieving full ecosystem restoration. The DEIS and the proposed action confirm that it is not possible to achieve the complete restoration of the Elwha River ecosystem with the projects in place. Accordingly, to the extent the National Park Service ("NPS") proposal seeks to attain that goal, acquisition of the projects and eventual removal is appropriate.

The DEIS states that it incorporates by reference: 1) the FERC DEIS prepared in the Federal Power Act licensing proceedings for these two projects; and 2) the 1994 report to Congress on Elwha River restoration ("Elwha Report") required by Public Law 102-495, the Elwha River Ecosystem and Fisheries Restoration Act ("Elwha Act"). Because NPS is relying upon these documents, James River is hereby incorporating in this letter, and submitting for the record, its previous comments on both the FERC DEIS and the Elwha Report. See Exhibits 1 and 2.

In this letter, James River comments specifically on the discussion in the DEIS on project acquisition, alternatives for the proposed action, impacts of the proposed action, and cost. James River also is enclosing an errata sheet of technical revisions and recommended factual corrections. See Exhibit 3.

PROJECT ACQUISITION

James River encourages prompt action to acquire the projects in accordance with Public Law 102-495. Acquisition is the essential, initial step toward achieving Elwha River ecosystem restoration. The Elwha Act expressly contemplates the possible need to acquire the projects as a first step and prior to the finalization of plans on how to actually proceed with restoration. See Elwha Act, § 3(a) (acquisition authorized 60 days after submission of Elwha Report, subject to the appropriation of funds).

Once the projects are in federal ownership, increased flexibility will be available to pursue action to improve ecosystem restoration prospects leading up to an eventual decision as to the ultimate fate of these facilities and the best method to achieve NPS' goals. Under section 5(a) of the Elwha Act and as a result of the finding of the Elwha Report that dam removal is necessary, FERC is required to issue annual licenses for both projects under current terms and conditions until the projects are acquired. As discussed in the DEIS, there currently are no significant fisheries restoration and enhancement requirements applicable to the projects by license. Thus, until acquisition occurs no measures will be taken to promote ecosystem restoration. After acquisition, however, NPS could take a variety of immediate, interim steps to begin the restoration process. If necessary, such measures could provide needed time and flexibility to pursue the preferred action of dam removal or alternatives such as partial removal or other restoration techniques. For purposes of acquiring the projects, the requirements of the Elwha Act as to the acquisition payment for the projects ($29.5 million), project operation, replacement power, and all other applicable provisions continue to apply. The DEIS provides an adequate basis for proceeding with acquisition, and no additional decision-making documents or procedures are necessary.

ALTERNATIVES

James River agrees with the description of the No Action alternative on page 11 that the status quo would be maintained. As NPS states, in the No Action scenario, "the two dams, powerhouses, reservoirs and auxiliary structures would continue to exist as they are now, without fish passage or other mitigation." DEIS, at 11. As

discussed above, under section 5(a) of the Elwha Act, FERC is required to issue annual licenses continuously under existing terms and conditions for both projects until acquisition occurs. This will result in no fisheries mitigation or enhancement measures being imposed on the projects.

Because of the clear requirement in section 5(a) for continuous annual licenses without new terms or conditions, the discussion in the DEIS of the Dam Retention Alternative is not accurate under existing law. As presented in the DEIS, this alternative assumes the installation of fisheries enhancement measures similar to those described in the "Applicant's Proposal with Supplemental Measures" in the FERC DEIS. DEIS, at 11 - 12. Although James River agrees that its proposal to FERC in the licensing proceeding represents the best approach to fisheries enhancement with the projects in place, there is no legal authority under which those measures can currently be imposed with the projects in private ownership. Because it was the intent of Congress in the Elwha Act to proceed with acquisition if the Elwha Report concluded that dam removal was necessary, the prohibition on any new license terms or conditions in section 5(a) was added to provide greater incentives to obtain funds to put the projects into federal ownership. Once the projects have been acquired, NPS would be in a position to adopt the applicant's proposal as the basis for fisheries mitigation/ecosystem restoration with the projects in place. Otherwise, no authority exists to impose such requirements. The discussion of this alternative should be revised in the final EIS to reflect this legal requirement.[1]

IMPACTS

James River's principal comment on the Environmental Impacts discussion in the DEIS is based on the same point previously made that no additional mitigation measures can be imposed on the licensee under section 5(a) of the Elwha Act. This issue arises on pages 72 - 77 of the DEIS, where the increased costs to the Daishowa

[1] A similar analysis applies to the Removal of the Glines Canyon Dam and the Removal of Elwha Dam alternatives. Both of these assume the retention of one project with the addition of fisheries mitigation measures. Under these alternatives also, the project would have to be in federal ownership for such measures to be imposed.

mill of the installation of fisheries measures are discussed. For example, under the Dams Retention alternative, it is stated that $17 to 34 million would be added to the cost of the projects and the real cost of power to Daishowa would run to over $6 million per year. For the reasons discussed above, this analysis is based on the legally impermissible premise that these costs would be passed on to the project owner through fisheries mitigation measures. Section 5(a) prohibits any such terms and conditions from now being imposed on the projects. Thus, the DEIS must be revised to reframe these costs as expenses that would be incurred by the federal government after acquisition in a dam retention situation (for retention of either or both dams). Under no circumstances under current law can such requirements be mandated for James River or Daishowa. In addition, the assumptions upon which NPS bases these estimates are not explained, and it is not possible to address their accuracy without such information.

COST OF REMOVAL

Because a second EIS is to be prepared to discuss dam removal alternatives, the DEIS includes only a brief discussion of the costs of such action through reference to the Elwha Report estimate of $147 - 307 million. DEIS, at 75. The DEIS notes that further studies conducted since the Elwha Report indicate that dam removal can be accomplished for less than $147 million. It also notes that FERC has estimated removal costs for both dams at $76 million. James River agrees that a range of dam removal cost scenarios exist. Although the $29.5 million purchase price is fixed, dam removal costs can vary widely and should be assessed in the second phase of the NEPA process on this project.

CONCLUSION

James River believes the DEIS provides an adequate basis for proceeding with acquisition of the Elwha and Glines Canyon projects and the development of more detailed plans for removal under the second phase of the NEPA process. The final EIS must reflect revisions to the DEIS that are accurately based on the requirements of

section 5(a) of the Elwha Act, which prohibits the imposition of any new license terms and conditions for the projects.

Thank you for considering these comments. If you have any questions, please contact me or Orville Campbell (206/452-0663).

Very truly yours,

Robert J. Morgan

DCB:cdm

[00470-0104/DA943520.001] 12/21/94

Exhibit 2

JAMES RIVER CORPORATION
WAUNA MILL
Clatskanie, Oregon 97016 (503) 455-2221

August 6, 1993

Brian D. Winter, Ph.D.
Team Leader
Elwha Restoration Interagency Team
National Marine Fisheries Service
7600 Sand Point Way, N.E.
Seattle, WA 98115

Re: Comments on Draft Report to Congress - Restoration of Elwha River Ecosystem and Native Anadromous Fisheries

Dear Dr. Winter:

Thank you for providing the James River Paper Company, Inc. ("James River") with a copy of the draft report to Congress entitled Restoration of the Elwha River Ecosystem and Native Anadromous Fisheries ("Draft Report"). This report is being prepared in fulfillment of the Secretary of the Interior's responsibilities under sections 3 and 4 of the Elwha River Ecosystem and Fisheries Restoration Act of 1992. Pub. L. No. 102-495, 106 Stat. 3173 ("the Elwha Act"). It is our understanding that the copy provided to us for review and comment is a preliminary version of the Report and that James River will have a formal opportunity to comment when the document is released for public review. Consistent with that approach, the comments set forth in this letter are intended to assist the Secretary in preparing the Report for public review. James River's formal comments will be submitted during the public comment period.

James River's comments on the Draft Report are set forth in two sections. The first section provides general comments, and the second section sets forth our specific comments. Consistent with the requirement of section 3(d) of the Elwha Act that the Secretary develop the Draft Report in consultation with interested parties, James River looks forward to further assisting you and your staff in developing the public review Draft Report and the final report for submission to Congress.

[00470-0104/DA932160.014]

GENERAL COMMENTS

James River believes that the Elwha Restoration Interagency Team has done a good job in developing a Draft Report that comports with the Elwha Act. Our general comments are as follows:

Prospects of Ecosystem Restoration. In general terms, the Draft Report fulfills the requirements of the Elwha Act for an analysis of the prospects for full restoration of the Elwha River ecosystem and native anadromous fisheries. The Draft Report we have reviewed did not include a discussion on acquisition of the Projects, as also required by the Act.

James River is in general agreement with the conclusion of the Draft Report that full restoration of the Elwha River ecosystem cannot be accomplished with the Projects in place. In taking this position, however, James River does not necessarily agree with all of the technical discussions; biological assumptions, analyses, and conclusions; fishery stock assessments; or other environmental impact analyses contained in the Draft Report. Indeed, as the record in the FERC proceeding on these two Projects demonstrates, there are strong areas of disagreement between the Joint Fish and Wildlife Agencies and James River on fishery restoration issues in the licensing context. James River's support for the conclusion of this Report that Project removal is necessary to achieve full ecosystem restoration in no way represents a change in position on the issues previously addressed by the Company in the FERC licensing proceeding.

Terms of Acquisition. The issues of greatest importance to James River in implementation of the Elwha Act are those associated with acquisition of the Projects. Unfortunately, this issue is not discussed in the Draft Report, and it is our understanding that the pertinent sections are still being prepared. See Draft Report, at 47-48. James River requests that the draft discussion on Project acquisition be provided to us and Daishowa America, Ltd. for review and comment in draft form before the document is released for public review.

Definite Plan for Removal. The Draft Report states that an EIS will be prepared prior to any action to achieve Project removal. See Draft Report, at 3. It is James River's understanding that this EIS is a part of the "definite plan" for removal required by section 3(c)(2) of the Elwha Act. As

provided in section 3(c)(2), the definite plan must address the possibility of dam removal in a manner "consistent with applicable environmental laws." To be "consistent" with NEPA, the EIS on dam removal must include a full range of alternatives, including the "no action" alternative of not removing the Projects. Thus, even though the Secretary will conclude in this Report that full ecosystem restoration cannot be accomplished with the Projects in place, he retains the option after acquisition of the Projects to not remove the dams if such a result is called for under the NEPA analysis conducted as part of the "definite plan." The submission of this Report to Congress and acquisition of the Projects pursuant to sections 3(a) and (b) of the Act therefore does not preordain Project removal or amount to an irreversible or irretrievable commitment of resources under NEPA.

To eliminate any confusion over the procedures that will be followed to comply with NEPA in the future, James River recommends that the Draft Report contain a more detailed discussion of the role of the EIS at the dam removal stage. In particular, it is necessary to describe the dam removal EIS as an integral part of the section 3(c)(2) definite plan, beginning on page 47 of the Draft Report.

Discussion of Project History. The discussion in the Draft Report of the history of the Projects and, in particular, the Federal Power Act licensing procedures is of great concern to James River. To a significant extent, this discussion is biased, needlessly adversarial, inaccurate, and unnecessary to achieve the purposes of the Report under the Elwha Act. James River had hoped that, based upon the cooperative working relationship that has developed among all interested parties on this matter, the adversarial nature of the licensing process would have been left behind for purposes of developing this Report. Unfortunately, this is not the case for the current Draft Report. James River requests that all needlessly argumentative and inaccurate or disputed statements relative to the history of these Projects and the licensing process be deleted.

James River's concerns in this regard will be set forth in detail in our specific comments. In support of this general comment, however, the following examples are offered:

Page 1, paragraph 1 - The Draft Report states: "The Elwha Dam was constructed from 1910 to 1913 without State or

Federal permission and has never received a license to operate." This statement is incorrect, in that the State allowed the dam to be built in exchange for a fish hatchery and federal authorization was not reguired. In addition, the statement is misleading because it implies a federal license was reguired throughout the Project's life. In fact, the Project owner applied for a license as soon as one was reguired as a matter of law. Most importantly, this entire discussion is irrelevant to the purpose of the Report. It is sufficient to state that the Elwha Project was built from 1910 to 1913 without fish passage facilities, thereby blocking anadromous fishery migration.

Page 1, paragraph 1 - The Draft Report states: "Glines Canyon Dam was constructed from 1925 to 1927 and was licensed by the Federal Power Commission until 1976." This statement is incorrect. The Project has been "licensed" from 1926 to the present; the Project did not cease to be licensed in 1976. Since expiration of the initial license in 1976, annual licenses have been issued for the Project. The statement also is biased, because it suggests that the Project has been without authorization since 1976. Again, it is unnecessary to open this issue at this time. The purpose of the Report could be served by stating that the Project was built from 1925 - 1927, received a 50 year license in 1926, and has received annual licenses since then.

Page 1, paragraph 1 - The Draft Report states: "The privately-owned projects' combined average annual generation of 19 megawatts ("MW") of energy now serves a single paper mill in Port Angeles . . . ." The reference to serving a "single paper mill" has the effect of devaluing the importance of these Projects to the local and regional economy.[1] In fact, the Projects are of considerable importance to Port Angeles and Clallam County, even if the Mill is the only customer. Moreover, there is no need for the Report to suggest that the power produced by the Projects is not important. It is sufficient to state that all of the power

[1]The statement is also incorrect. The electricity generated by the "combined" projects has always served only the Mill. For a brief period, power from the Elwha Project supplied other consumers. Since 1920, all power from the Elwha Project, and the Glines Canyon Project once it came on line, has been used exclusively for the Mill.

produced by the Projects is supplied to Daishowa's Pulp and Paper Mill in Port Angeles.

Appendix B - The portrayal of the FERC licensing process set forth in Appendix B is one-sided and incomplete. For example, it fails to mention the numerous instances in which the National Park Service conceded that FERC relicensing jurisdiction exists over the Glines Canyon Project until it changed its position in 1986. In addition, no reference is made to many of James River's submissions to FERC, Congress, and GAO on technical issues or the jurisdiction dispute. Finally, there is no discussion of pleadings filed in the Ninth Circuit litigation by James River and other aligned parties (including local intervenors and amicus industry participants), or to rulings unfavorable to the Joint Fish and Wildlife Agencies (i.e., granting James River's motion to dismiss the Department of the Interior as a party). A review of the Appendix leads to the impression that there was no opposition to the challenge to the FERC order on relicensing jurisdiction. In fact, a variety of private and governmental entities supported the FERC decision in the Ninth Circuit litigation.

In addition to being incorrect and misleading, the common element in all of these statements and the Appendix is that they serve no purpose in this Report and could easily be deleted. If Appendix B is to be retained, James River reguests that it be updated for factual accuracy and to eliminate its unnecessary bias. Please advise us if the Interagency Team intends to include this Appendix in the Final Report, and we will provide you with our recommended revisions.

Importance of the Projects. As noted above, the Draft Report adopts the apparent approach of devaluing the importance of the Projects. This is unnecessary, inaccurate and unwise. It is unnecessary because Congress has already spoken to the value of the Projects and recognized their considerable importance and economic worth. It is inaccurate because the Projects are of great significance to the Port Angeles Mill, which in turn is essential to the employment and economic health of Port Angeles and Clallam County. It is unwise because it creates needless confusion regarding the established determination of Congress that the Projects have a value of $29.5 million. To support project acquisition in Congress, it would be helpful for the Report to provide a

discussion of the importance and considerable value of the Projects to the Mill and the region. At the very least, the Report should not imply that the Projects are of minimal utility or value at this time and not worth the carefully calculated value of $29.5 million determined by Congress.

SPECIFIC COMMENTS

James River's specific comments are set forth according to the page and paragraph in which the corresponding discussion is found in the Draft Report.

Page 1, paragraph 1 - As discussed above, this paragraph contains a number of inaccurate, biased, misleading and needlessly argumentative statements. James River recommends that it be revised as discussed in our General Comments section.

Page 1, paragraph 4 - The Draft Report states that the FERC process was drawn out due to, inter alia, "the inability to design fish and wildlife mitigation measures capable of meeting Federal, State, and tribal resource goals." This statement pre-judges the outcome of the FERC licensing process. James River believes that its proposed mitigation measures did in fact meet all applicable requirements. This statement could be rephrased to avoid this dispute by stating that the licensing process was controversial and involved disputed issues over the actions necessary to satisfy applicable requirements.

Page 3, paragraph 2 - It should be stated that the EIS on dam removal is considered to be part of the "definite plan" required by section 3(C)(2) of the Elwha Act.

Page 4, paragraph 1 - The Draft Report states: "Inferior construction and concrete were blamed" for the foundation failure of Elwha Dam in 1912. In fact, it was the failure to provide a secure foundation down to bedrock under the gravity dam that led to the blowout during initial filling of the reservoir. There is no evidence of failure of concrete structures. The original concrete monolith is still in place. The washout under the structure was plugged by filling the downstream portion of the reservoir and the river bottom adjacent to the dam.

Page 4, paragraph 2 - The discussion in this paragraph suggests that the Elwha Project fish hatchery deal with the State directly resulted in amendments to State law which eliminated the need for fishways and eventually lead to adverse impacts on numerous Northwest anadromous fisheries. This account is an overstatement, and it unnecessarily and inaccurately characterizes the Elwha Project as the source of widespread fishery problems in other areas. We request that the last two sentences be deleted.

Page 4, paragraph 4 - In addition to the facilities described in this paragraph, Crown Zellerbach retained ownership of the land on which the Projects were constructed, as well as ownership of a portion of the reservoir.

Page 4, paragraph 5 - This paragraph should be revised. It is true that the portion of total energy consumed on the North Olympic Peninsula which is supplied by the Projects has diminished over time. This is, of course, the inevitable result of the increased development and population growth which has occurred over the last 70 years. Moreover, with the exception of emergencies, all of the power generated by the Projects since 1920 has been utilized by the Mill. This quantity of energy has remained constant. Further, there have never been any agreements between the City of Port Angeles and Crown Zellerbach affecting the Elwha hydro power produced by the dams or consumed by Crown Zellerbach.

Page 6, paragraph 1 - The total Glines Canyon installed capacity is 16.0 MW not 13.1 MW.

Page 7, paragraph 3 - Woody debris is not blocked or stored in Lake Mills or Lake Aldwell. All such floating material is traditionally passed downstream through the project spillways during periods of high river flows.

Page 16, paragraphs 2 and 3 - This history should include a short discussion of the purpose and objectives of the 1920 Federal Power Act and how it relates to the licensing of the Projects. In addition, the paragraph includes adversarial statements that are neither necessary for this Report nor conducive to cooperative efforts among the parties. The first sentence implies that the project owner was negligent in not seeking a license for the Elwha Project until 1968. However, there was no requirement for a license until then. A similar implication is found in the second sentence. In the third

paragraph, it is stated that FERC issued a decision "claiming" jurisdiction over the Glines Canyon Project. FERC did not "claim" it had jurisdiction; it "determined" by final order that it had such jurisdiction. That determination was then challenged in court. To be balanced, the discussion of the litigation should state that James River, Daishowa, the National Hydropower Association, the Edison Electric Institute, and local government and industry groups all participated in the litigation in support of FERC's decision.

Page 21, paragraph 3 - River flow augmentation has never been limited by the "willingness of the project owner to decrease power production as a result of loss of head," as stated in the Draft Report. In the past several years, James River has drafted Lake Mills to supplement river flows in support of the Elwha fishery. The entire drawdown program has been under the control of the Washington Department of Fisheries, the Olympic National Park, and the Lower Elwha S'Klallam Tribe. Moreover, in 1987 it was the agencies who set the drawdown limit at 10 feet, not the project owner. In recent years, Lake Mills has been drawn down as much as 18 feet, again under the direction of the agencies, not the project owner.

Page 49, paragraph 2 - Clallam County PUD water is supplied by the City of Port Angeles from their Ranney Collector rather than the industrial waterline intake.

Pages 19, 100, 101, Discussion of James River Land Ownership - The Draft Report raises two issues in connection with James River's land ownership within the Elwha River watershed. The first issue concerns the amount of land claimed by James River as being part of the Glines Canyon Project. The Draft Report states on page 100 that James River has identified 40 acres as part of the Project, while the Company retains title to 160 acres within the Olympic National Park in the Project area. James River does not know the source for the 40 acre figure. The correct amount of land is 160 acres.

The second issue concerns James River's ownership of 77 acres associated with the McDonald gage. James River does not believe that acquisition of these lands is necessary or desirable to fulfill the purposes of the Elwha Act. In addition, James River desires to retain ownership of this tract. Moreover, the Elwha Act does not provide for their

acquisition. Sections 3(a) and (b) address the Secretary's acquisition authority. That authority is limited to the "Projects," which term is defined in section 2(j) to mean the project works and "appurtenant lands." This 77 acre parcel does not consist of appurtenant lands, and it is therefore beyond the scope of this Report to. See sections 3(c)(1), (3).

Page 106, paragraph 3 - James River requests the opportunity to review and comment on the regional power supply discussion, which apparently is still in preparation, while it is in draft form.

Thank you again for providing James River with the opportunity to submit these comments. We look forward to continuing our working relationship with you and your staff on this issue. If you have any questions about these comments, please contact me (503/455-2221) or Orville Campbell (206) 452-0663, or Guy R. Martin or Donald C. Baur of Perkins Coie (202) 628-6600.

Very truly yours,

Robert W. Morgan

cc: Maureen Finnerty
Guy R. Martin
Donald C. Baur
Orville W. Campbell
Robert E. Hartley

Exhibit 3

TECHNICAL REVISIONS TO DEIS

The following is a list of additional errors and omissions which we have identified in the subject document:

Page 1, 2nd Paragraph: The Crown Zellerbach Corporation filed the application for relicensing the Glines Canyon Dam in 1973; not 1975 as stated.

Page 9, 2nd Paragraph: The total installed power generating capacity of the Elwha Dam is 12.6 megawatts (MW); not 14.8 MW as stated. Maximum output is about 13 MW.

Page 78, 1st Paragraph; Last Sentence: FERC has required Emergency Action Plans (EAPs) for both projects since the 1970s. EAPs have been updated and tested annually as required by FERC's dam safety program. Deficiencies have been promptly corrected. During the early history of EAPs, FERC accepted all such plans "on an interim basis." For at least the past 10 years, the Elwha EAPs have been fully accepted.

Page 91, List of Recipients: Organizations and Business: The James River Corporation should be included in the alphabetical listing. Also, Perkins Coie's name has been misspelled.

[00470-0104/DA943520.001]

NORTHWEST SPORTFISHING INDUSTRY ASSOCIATION
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December 22, 1994

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Sarah Bransom
National Park Service
PO Box 25287
Denver, CO 80225-0287

RE: Elwha River Ecosystem Restoration Draft EIS

Dear Ms Bransom:

On behalf of the membership of the Northwest Sportfishing Industry Association, and the Pacific Coast Federation of Fishermen's Associations (PCFFA), We are writing to you in strong support of the preferred alternative of removing the two Elwha River dams es described in the dreft Environmental Impact Statement. Dam removal is the only way to achieve the legel requirement of the 1992 Elwhe Act to fully restore the Elwhe River ecosystem and its historic salmon runs.

The ***Northwest Sportfishing Industry Association*** represents hundreds of businesses and thousands of jobs in the Pacific Northwest and beyond. From "worms to downriggers", from major retailers to "mom & pops", the men, women and businesses working with NSIA ere dependent on and dedicated to a healthy salmon resource. In Oregon and Washington alone, the sportfishing industry generates $3 billion to the overell health of the states' economies. By way of introduction, a partial list of our member businesses and organizations is enclosed with this communication.

The Pacific Coast Federation of Fishermen's Associations IS NSIA's counterpart in the commercial fishing industry, representing the thousand of men and women who make up the Pacific ocean commercial fishing fleet, and who generate hundred of millions of dollars annually to this region, es well as provide food on America's tables. PCFFA is the largest organization of commercial fishermen on the west coast, with member orgenizetions from San Diego to Alaska.

In addition to enhancing the condition of our imperiled and declining salmon populations, removing the Elwhe dams also mekes strong economic sense. The Elwha river system offers one of the best opportunities to restore salmon anywhere in the Northwest. A restored Elwha River fishery will generete millions of dollers per year in new

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income for all sectors of the Northwest fishing community and translates into hundreds of sorely needed jobs on the Olympic Peninsula. The year in, year out, **renewable economic gain** of a healthy fishery, will quickly return to the northwest the investment in dam removal.

We understand the 1992 Elwha Act is part of a negotiated settlement which has broad support among sport and commercial fishing interest, environmental organizations, Native American tribes and the dam owners. If we fail to follow through to implement this consensus approach, we face renewed gridlock and litigation over the Elwha which the region faced prior to the 1992 Elwha Act.

In the current era of scant dollars, and declining salmon resources, we must carefully invest the available dollars where the greatest "returns" can be realized. The members of the ***Northwest Sportfishing Industry Association*** and the ***Pacific Coast Federation of Fishermen's Associations*** remain convinced that the removal of the Elwhe dams precisely fit this criteria.

Please move swiftly in completing your final EIS as well as in providing funding to acquire and remove these dams. The salmon and the businesses dependent upon them thank you for your prompt attention and swift implementation.

Sincerely

NORTHWEST SPORTFISHING INDUSTRY ASSOCIATION

Liz Hamilton
Executive Director

PACIFIC COAST FEDERATION OF FISHERMEN'S ASSOCIATIONS

Glen Spain by AF
Northwest Regional Director

cc: Senator Slade Gorton
Senator Patty Murray
Senator Mark Hatfield
Senator Bob Packwood
Representative Norm Dicks

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Wilson, Bob and family-C143
Wilson, Harry-C493
Wilson, Ronald-C459
Winthrop, Judith L.-C190; wildlife and species of special concern
Witmer, David and Judith-C448
Wolf, Hazel A.-C200
Wood, Joseph-C613
Woodward, Thomas C.-C527
Wright, Colleen and Glickerman, David-C183
Wright, V. Crane-C213
Wulff, Tamara-C184
Yeoman, Mildred.-C172
Yochey-C581
Zahn, E.-C135
Zalesky, Laura L.-C113
Zalesky, Philip H.-C104
Zimmerman, Joseph G.-C404
Zynda, Bill and Lois-C17; socioeconomics

Received
[illegible]-TWE
OCT 30 1994
C1-olym-404-06

Trudy Bartosek
[redacted]

October 30, 1994

Sarah Bransom
National Park Service,
Elwha River Project
P. O. Box 25287
Denver, CO 80225-0298

Re: Removal of Elwha river dams

Dear Ms. Bransom:

The two dams on the Elwha river on the Olympic Peninsula in the state of Washington should be removed. They block access to some of the best remaining salmon spawning grounds.

The Elwha river can and should be restored to its former bountiful salmon runs. The Lower Elwha S'Klallam Tribes have historically depended on the harvest of salmon from the river. Their spirituality and culture are based on the salmon. By blocking the salmon runs we have destroyed their treaty rights to fish.

The upper dam on the Elwha is situated within the Olympic National Park and by law cannot be re-licensed. This is the best opportunity for the National Park Service to remove this thorn in its side.

Sincerely yours,

Trudy Bartosek

Trudy Bartosek

cc: Senators Murray and Gorton

Received
[illegible]
OCT 31 1994
C2-olym-404-06

10-31-94

516 No C
Tacoma WA 98403

Dear Sarah Bransom,

I applaud your DEIS. As the degradation of the river ecosystem of the Elwha only increases with time due to the 2 dams, the dams being by far the most significant factor in the health of the river and its life and vitality, it is essential that we remove the dams in as quick, safe & effective manner as possible. ~~The~~ report clearly demonstrates this need for dam removal. The salmon, the other wildlife, microfauna of the river, native Indian people and others who can sustainably live on fish harvests & plant species all will benefit from this measure.

We must do the most we can to restore the integrity, health, beauty, and vitality of the region. We must not compromise and give in to special interests like power companies, certain local residents, distant people & politicians who disagree and who want to benefit themselves without benefiting all

Since the upper Elwha is still "intact", we must act soon to ensure a recovery for the rest. The "alternatives" mentioned would not - any one of them - be an example of our best effort to do our job. Our job is to use and protect our world, earth, nature for the next generation, for the seventh generation. Removing those dams is a giant step in the direction we need to more. ~~The~~ DEIS of Oct 94 is on target. If in my further reading of it I come across any problematic details, I'll let you know.

Sincerely,
Nicole Sibell

The Pacific Northwest's Most Complete Residential / Resort Community

Received
DSC-TWE
NOV 07 1994
C4-olym-404-a6

[redacted]

3 November, 1994

Sarah Brausow
National Park Service, Visitor Team
12795 Alameda Parkway
Denver, Co. 80225-0287

Dear Ms. Brausow -

After studying the subject for five years, I believe both dams on the Elwha river should be removed.

I have read and listened to both sides of the issue, attended meetings in Port Angeles and Seattle, talked with local residents (including many "natives") researched the matter extensively and from all sources my "gut feeling" is very strongly reinforced by available material.

This will be a great opportunity to right a great wrong done to fish and all life in this region when the Elwha and Glines dams were built.

Sincerely, Richard G. Shea, D.V.M.

Received
DSC-TWE
OCT 28 1994
C5-olym-404-a6

Dave Cook

[redacted]

Dear Sarah Brausow

Please don't let the fact that this note is written on scratch paper distract from its content and intent.

Over the past few years I have led teenagers in summer backpacking trips throughout the Northwest with dismay and disappointment, I show them what has happened to a huge portion of our old growth forests (clearcutting). With equal sadness, we discuss the plight of the pacific salmon. Last summer in Juneau, a 10 minute stop at the hatchery turned into a 1 hr lesson on these magnificent salmon. These sometimes apathetic teenagers were moved by these fish!

I continue will continue to lead students and desperately want to offer positive ~~solut~~ actions to them. I would love to say that people from many different groups (Park Service, Puget Power, Native American Tribes, Fish and Wildlife and on and on) have worked together (Yes, they have listened to each other) to contribute to a grand experiment by bringing down the Dams on the Elwha and are trying to restore the most magnificent of the Olympics salmon. Please support actions to bring these structures down. Thank you

Dave Cook

Received
DSC-TWE
NOV 07 1994
C6-olym-404-06

November 2, 1994

Sarah Bransom
National Park Service
Western Team
12795 Alameda Parkway
Denver, Colorado 80225-0287

Dear Ms. Bransom,

I am writing to you concerning the Elwha River Ecosystem Restoration Draft Environmental Impact Statement. Though I have no changes to suggest, I fully support the proposed action lieted in the document. I also fully support the removal of both the Elwha Dam and the Glinee Canyon Dam. I believe that both dams and everything associated with them should be removed from the site. The placement of the dams deetroyed ecosystems and wrecked havoc in a beautiful, pristine area. It is about time that the resources were considered firet, not only for the interests of the Elwha S'Klallam Tribe, but also for the sake of the resources themselvee.

In conclusion, I urge the Department of the Interior and the National Park Service to remove both dams and restore the Elwha River to its original state or as close to it as poeeible.

Cordially,

Dale L. Pate

Dale L. Pate
[redacted]

Received
DSC-TWE
NOV 07 1994
C7-olym-404-a

November 4, 1994

Sarah Bransom
National Park Service--Western Team
PO Box 25287
Denver, CO 80225-0287

Dear Mrs. Bransom,

I am writing to express my support of your recommendation to remove the dams on the Elwha River in Washington State.

The Elwha Dams have decimated salmon and sea-going trout populations throughout this century. Their removal is the only way to restore anadramous fish populations and the surrounding ecosystems. Such action could also set a precedent for dam removal on other rivers in the northwest, such as on the Columbia. There are altogether far too many ancient dams which provide minimal benefits at great costs to the environment.

I hope the Park Service has the foresight and will to implement the dam removal alternative. I look forward to the day when salmon and trout can once again flourish in the Elwha watershed.

Sincerely,

Josh Marks

Josh Marks

DEAR MS. BRANSOM —

I HAVE JUST READ THE DRAFT ENVIRONMENTAL IMPACT STATEMENT, ELWHA RIVER ECOSYSTEM RESTORATION, AND I HAVE BEEN CONVINCED THAT COMPLETE REMOVAL OF BOTH DAMS AND RESTORATION OF THE NATURAL ECOSYSTEM IS NOT ONLY THE SOLE LOGICAL CHOICE, BUT A MORAL OBLIGATION. I SUPPORT AN EXPEDITED IMPLEMENTATION OF THE PROPOSED PLAN. LET US DO WHAT MUST BE DONE TO GET ON WITH IT.

SINCERELY,

PAOLO PECORA
MECH. ENGINEER
[redacted]

Received
DSC-TWE
NOV 0 5 1994
C8-Olym-404-06

Received
DSC-TWE
NOV 0 7 1994
C9-Olym-404-06

11/2/94

Greetings Sarah Bransom

I am writing you concerning the two dams on the Elwha river, Olympic National Park, World Heritage Park, World ecosystem. Perhaps nowhere else could more pristine watershed for salmon reproduction in the lower 48 states be found; thousands of miles of cool, shaded, ultra pure rainforest shaded streams and crystal clear winds blowing over thousands of miles of powder blue, steel Blue, green pacific ocean.

This national treasure of fish rearing streams are closed because of two old dams built along time ago to provide cheap power to a smelly polluting pulp mill in port Angles!

Our pro-timber senator Gordon says it can't be done the dams are there to stay. I say you Sarah can and must find a way to remove these dams.

pg 2

Our salmon industry was closed due to dangerously low levels of returning Salmon. We must find a way to right this wrong. Teddy Roosevelt who championed for the Olympic National Park was heard to say that nature could not be improved on and our efforts would only take away. Let the Elwha run free!

Sincerely
John, Pam, Joe & Bijou

[redacted]

Received
DSC-TWE
NOV 08 1994
C10-Olym-404-06

[redacted]

November 3, 1994

Sarah Bransom
National Park Service, Western Team
12795 Alameda Parkway
Denver, CO 80225-2210

Dear Madam:

Having reviewed your Draft Environmental Impact Statement we wish to express our support for your proposed alternative as the only chance to restore the native fish runs and environmental integrity of the Elwha River ecosystem.

Please place our names on your list of supporters. It's so nice to see a government agency proposing ecologically sound action. It's been a long time coming.

Thank you,

Sam Davidson
Sam Davidson

Peg Davidson
Peg Davidson

Received
DSC-TWE
NOV 08 1994
C11-olym-404-06

November 5, 1994

Sarah Bransom
National Park Service
Western Team
12795 Alameda Parkway
Denver, CO 80225-0287

Dear Colleague:

I wish to take this opportunity to make the following comments on the Draft EIS for the Elwha River Ecosystem Restoration. In the first place, I wish to commend the National Park Service for their continued efforts to achieve a resolution to this hydromodification problem that is in the public interest and clearly in the best interests of the ecology of this river system. The strategy in the DEIS is sound, and I now eagerly await the next steps involving detailed plans for the actual removal of the two dams.

My only regret is that this whole process is taking a very long time, with the envisioned culmination of the restoration project now slipping into the next century. If the opportunities present themselves, I trust the National Park Service will seek to accelerate the restoration time table.

Sincerely,

William S. Cooter, Ph.D.

[redacted]

[redacted]

Received
DSC-TWE
NOV 09 1994
C12-olym-404-06

November 6, 1994

Sara Bransom
National Park Service
Western Team
12795 Alameda Parkway
Denver, CO 80225-0287

Dear Ms Bransom,

I have received the draft Environmental Impact Statement of the Elwha River Restoration. I have carefully reviewed the study and I am voicing my strong belief that both dams must be removed.

From my reading of the study, the only way to fully restore the anadromous fisheries is removal of the dams. Furthermore, given the current deterioration of the Northwest Fish population, it is imperative that we take action on the Elwha. The removal of the dams, will also give us further information about the impact of dams on the entire ecosystem.

I urge you to please take this important and bold step. Sincerely,

Denise Hawk

[K

Received
DSC-TWE

NOV 09 1994
C13-Olym-404-06

November 4, 1994

Sarah Branson
National Park Service, Western Team
P O. Box 25287
Denver, CO 80225-0287

RE: Elwha Dam Removal

Dear Ms Branson:

I am writing to express my opinion on the various alternatives for restoring the Elwha River that were presented in the Draft Environmental Impact Statement. I support the National Park Service recommendations for removing both dams on the Elwha River. I support a phased approach to dismantling the Glines Canyon and Elwha dams for restoring the salmonid and steelhead stocks. I recognize there are water quality concerns with removing the sediment buildup behind both dams, but feel that the overall health of the Elwha River is more important. I support creation of aquaculture facilities for rearing anadromous fish and developing broodstocks indigenous to the Elwha River.

The process of removing the two dams and restoring historic fish populations will take time, but this is a good first step. Please consider my comments and add them to the public record on this matter.

Sincerely,

Doug Gresham

Doug Gresham

[redacted]

Jim & Edith Laurent

[redacted]

Sarah Branson
Natl. Park Service - Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

In considering proposed alternatives for dealing with the dams on the Elwha River, we strongly favor their removal as the only way to fully restore the river's ecosystem as required by law.

It was a short-sighted mistake to have ever dammed this beautiful free-flowing river in the first place and destroy its huge salmon runs.

Removal will create hundreds of jobs, and the restoration of the salmon runs will generate an estimated $5 million annually of new income for fishermen. Failure to remove the dams will likely lead to interminable litigation as well as complete extinction of the salmon runs and possible loss of several hundred jobs at the mill whose power is generated from the dams.

In the long run, removal of the dams, which is favored by all parties concerned, would be an excellent, far-sighted investment.

Sincerely,
James A Laurent
Edith L Laurent

Received
DSC-TWE

NOV 11 1994
C14-Olym-404-06

Received
DSC-TWE
NOV 12 1994
C16-olym-404-06

[redacted]

November 7, 1994

Sarah Bransom
National Park Service, Western Team
12795 Alameda Parkway
Denver, Colorado 80225-0287

Ms. Bransom:

First I have some questions. If the dams are removed from the Elwha River, costing taxpayers billions and billions of dollars, can you tell us the salmon will definitely return, whithout any doubt whatsoever? If your answer is "maybe" why are you spending so much taxpayer money, in view of the fact this country has such a huge budget deficit which is getting larger by the second?

I understand the mills have been promised "cheap" power to run their facilities. Who will be subsidizing that "cheap" power? The taxpayers in this area with higher electrical rates, no doubt.

I also understand a plan has been concocted many years ago by the National Park Service to make the entire peninsula one huge National Park with no human inhabitants only park rangers, animals and birds. True or false?

Enclosed you will find a full page ad by one of our citizens, published in our local paper. Notice particularly the paragraphs circled in red. Read very carefully. Are the inhabitants being taken for a "ride out of town" in the not too distant future?

Respectfully yours,

L J. Latvala

Received
DSC-TWE
NOV 1[illegible] 1994
C16-olym-404-06

[redacted]

Sarah Bransom
National Park Service, Western Team
12795 Alameda Parkway
Denver, Colorado 80225-0287

Dear Ms. Bransom,

When Al Swift represenented our district, I wrote to him several times about removing the dams on the Elwah River. Where was all of the opposition then? I am still in favor of removing them. However, the price tag seems beyond reason. I hope that will be revised. My suggestion, poke holes in the cement and let nature take it's course. It's my sence of humor which I hope brings a chuckle.

Sincerely,

June Manheimer

June Manheimer

Received
DSC-TWE
NOV 14 1994
C17-Olym-404-06

November 7, 1994

Sarah Bransom
National Park Service
12795 Alemeda Parkway
Denver, CO 80225-0287

Dear Sarah,

As property owners on the Elwha River bluff, close to where the Elwha enters the Strait of Juan de Fuca, we are not concerned so much about the effect of a "wild river" on our property as we are the effect on the pocket book of the taxpayers. It's s little like the expression I heard a while back, "It's not so much the green house effect that concerns me, as the White House effect!"

When you weigh the cost of removing the dams, loss of electric power, etc. agsinst the enhancement of the salmon runs and enviornment, we would rather see fish ladders and by-passes installed at the two dams at a much, much low cost, as a compromise.

I know you are a bureaucrat and possibly somewhat blinded, but at some point, we are all going to have to face the fact that unless the deficit and budgets get under control, there are some things we just cannot afford for a while...for the sake of ourselves and especially future generationa.

Thank you,

Bill and Lois Zynda
[redacted]

Nov. 11, 1994

Received
DSC-TWE
NOV 15 1994
C18-Olym-404-06

Dear Sarah ——

Re the EIS for the Elwha:

I've lived in the Pac. NW for almost 60 years, through all those heart-breaking years when the dams were built.

Please, please continue your efforts for the removal of the two dams. How sweet will be the sound of the first blast of dynamite . . .

Laura Lindstrom
[redacted]

TOOZE SHENKER DUDEN CREAMER FRANK & HUTCHISON
ATTORNEYS AT LAW
333 S.W. TAYLOR STREET
PORTLAND, OREGON 97204-2486
TELEPHONE (503) 223-5181
FACSIMILE (503) 223-5660

GREGORY L. BAIRD
ROBERT E.L. BONAPARTE**
NEALE E. CREAMER†
PAUL P. DUDEN
JEROME F. ELLIOTT**
STEPHEN R. FRANK
MICHAEL J. GENTRY
WILLIAM P. HUTCHISON, JR.
JUDITH A. LEBEN
ERIC J. NEIMAN*
TOD A. NORTHMAN
JOHN OSTRANDER*
ARDEN E. SHENKER
DAVID R. SIMON

LAMAR TOOZE
1898-1971
LAMAR TOOZE, JR.
1922-1985

ADMITTED IN OREGON
WASHINGTON*
CALIFORNIA†
NEW YORK**
WASHINGTON, D.C.**

Received
DSC-TWE
NOV 15 1994
C19-Olym-404-06

November 9, 1994

Sarah Bransom
National Park Service
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Branson:

Re: Elwha River Project

I would like to add my support to the National Park Services preferred alternative of removing the two Elwha River dams. This action should restore the salmon runs and lead to increased recreational use of the basin, all of which appears to be required by law. Please add my letter to your record on this matter.

Yours very truly,

Neale E. Creamer

NEC/rp

314\sec\miscella\branson.ltr(110994)

JOHN W. SCHUMACHER
[redacted]

Received
DSC-TWE
NOV 15 1994
C20-Olym-404-06

November 8, 1994

Ms. Sarah Bransom
National Park Service, Elwha River Project
P. O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

Please do what you can, when you can, to get rid of the Elwha Dam.

We need the river much more than the limited amount of electricity the dam produces.

Yours truly,

JOHN W. SCHUMACHER
mpsi

Received
DSC-TWE
NOV 16 1994
C21-olym-404-06

Sarah Branson
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO. 80225-0287

Dear Sarah,

We want to state our desire for the removal of the dams from the Elwha River.

Thank You,

Garry Warber, [redacted]

Brenda Warber, [redacted]

Lynn Warber, [redacted]

Received
DSC-TWE
NOV 16 1994
C22-olym-404-06

11/4/94

Bradley S. Miller
[redacted]

Sarah Branson
Nat'l Park Service

Dear Ms. Branson,

I am writing because I feel the opportunity to remove the Elwha River dams is an important one and that the challenge of restoring the valley 'post-dam' represents a unique and precedent-setting activity.

I have been involved professionally in several historic preservation projects involving buildings and engineering structures, the decision to dismantle these works is not one to take lightly. The case of the Elwha dams is very clear however, given the tremendous potential for the National Park and the fisheries resource. The work of the 'old-timers' doesn't always stand the scrutiny of the present.

I applaud and support your intentions to improve the Elwha watershed.

Sincerely, Brad Miller Architect

Received
DSC-TWE
NOV 16 1994
C23-olym-404-06

Dr. Julia Bent
[redacted]

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

November 9, 1994

Dear Ms. Bransom:

The Elwha River Restoration Act mandates full restoration of the river and its salmon runs. I am writing you today to register my support of the preferred alternative of removing both dams now on the Elwha river. Your draft EIS states that this is the only way to restore salmon and steelhead to the river.

I hope the NPS will follow the recommendations of its own EIS and proceed with the dismantling of these two dams.

Thank you for your consideration of this matter.

Sincerely yours,

Julia Bent

Julia Bent, D.V.M.

cc: Senator Patty Murray
Representative Norm Dicks

Received
DSC-TWE
NOV 16 1994
C24-olym-404-06

[redacted]

11/10/94

Dear Sarah

I grew up in Washington & claim what remains of its natural beauty.

I strongly support your DPS proposal to restore the Elwha ecosystem by removing both dams. Any short-term disadvantages would, in my opinion, be strongly outweighed by the many benefits of restoring the river to its natural state.

Thank you for the thorough work & careful thought reflected in the EIS draft you sent me. Good job!

Here's to restoring preserving the natural beauty of our region & honoring the sacred sites of our indigenous people!

Sincerely,

Linda S. Hahn

P.S. I spent my youth hiking Olympic Nat'l Park & would love to share the park with my children & grandchildren.

CAROLYN LATTEIER

1641 HASTINGS AVENUE WEST
PORT TOWNSEND, WASHINGTON
98368-9637

206-385-0058

Received
DSC-TWE
NOV 16 1994
C25-olym-404-06

November 9, 1994

Sarah Branson
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Branson:

I am writing in support of the preferred alternative or removing the dams on the Elwha River. It is the only way to fully restore the historic salmon runs and the ecological integrity of the river system.

The cumulative loss of our wild salmon runs is related generally to the degradation of habitat and specifically to the loss of fish passage.

Removing the dams will create hundreds of jobs, not only with the immediate construction work but in the long run, through the sports, commercial and tribal fishing that healthy runs on this important river will stimulate. This expensive undertaking will prove a wise investment in the long run.

Yours truly,

Carolyn Latteier

Prudential Securities

Jack P. Lauderbaugh
First Vice President-Investments
Noelle Schoos
Financial Advisor
408 291-2000
408 291-2020
800 523-5208
Fax 408 291-2043

Received
DSC-TWE
NOV 16 1994
C26-olym-404-06

11-8-94

Dear Mr Branson

We own property on Black Road and flooding is our main concern if the 2 dams are removed.

I hope this problem

150 Almaden Boulevard, Suite 500, San Jose, CA 95113

Prudential Securities

Jack P. Lauderbaugh
First Vice President-Investments
Noelle Schoos
Financial Advisor
408 291-2000
408 291-2020
800 523-5208
Fax 408 291-2043

will be high on
your agenda.

Sincerely
Jack Lauderbaugh
and
Laurie Besteman

150 Almaden Boulevard, Suite 500, San Jose, CA 95113

Received
DSC-TWE
NOV 16 1994
C27-olym-404-06

Sue Olson
[redacted]

November 9, 1994

Sarah Bransom
National Park Service, Elwha River Project
PO Box 25287
Denver, Colorado 80225-0287

Dear Ms. Bransom;

After having read the beautifully prepared Draft EIS for restoring the Elwha River I am writing to let you know my views.

I support the NPS alternative of removing both dams on the Elwha. This is the only way to fully restore the River as required by law. Removing both dams makes good economic sense as more jobs would be created. Removing both dams is the best way to assure survival of the salmon.

Please do what you can to assure that the proposed alternative of removing both dams from the Elwha is implemented.

Thank you for your consideration.

Sincerely,
Sue Olson
Sue Olson

cc: Senator Patty Murray
Representative Norm Dicks

Received
DSC-TWE
NOV 16 1994
C28-Olym-404-06

[redacted]

November 8, 1994

Sarah Bransom
National Park Service
Box 25287
Denver, CO 80225-0287

Re: DEIS Elwha River Project

Dear Ms. Bransom:

I wish to state at the outset that I support the alternative that calls for removing the dams. This project sets a precedent for the removal of dams in other parks that were built in another era. The benefits to the fishery is obvious, and has a lot of support. But there will be no benefit to the fishery until we do it, which will take courage. Fortunately this project has relatively little opposition. In my opinion the real excitement will be in seeing the fishery rebound at the same time that we are allowing the National Park to heal.

Sincerely,

Richard J. Brooks

Received
DSC-TWE
NOV 16 1994
C29-Olym-404-06

Rosemary Bridge

[redacted]

Nov. 6, 1994

To Sarah Bransom
National Park Service

I support the removal of the Elwha River Dams. Because the river and its tributaries above the dam are within the Olympic National Park and have never been disturbed by industry or homes, this stream has an excellent chance of again becoming prime salmon habitat.

If the dams remain we must also consider the possible loss of jobs at the mill as well at the paper recycling plant.

Sincerely,
Rosemary B. Bridge

[redacted]

10 November 1994

Received
DSC-TWE

NOV 16 1994
C30-olym-404-06

Ms. Sarah Bransom
National Park Service, Western Team
12795 Alameda Parkway
Denver, CO 89225-0287

Dear Ms. Bransom:

I would like to offer the following comments concerning the draft EIS for the Elwha River Ecosystem Restoration. In summary, I fully support the proposed action; that being the complete removal of both Glines Canyon and Elwha Dams and the full restoration of the Elwha River ecosystem.

As is clearly identified in the Impact Summary Chart, all options, save one, will continue to have a significant impact on the Elwha River. This alone is compelling enough to proceed with the proposed action of dam removal of both dams. But as we develop a vision of what this river will look like in 20 or 50 years, we clearly see that our actions today to restore what has been so dramatically altered by the hands of Man is a right and just course to take.

Looking beyond the obvious benefits to the restoration of anadromous fish and the resulting economic benefits to those harvesting those fish, a free-flowing Elwha will increase recreational opportunities. While a transition from reservoir-based recreation on Lake Aldwell to one that is river-based will occur over a multi-year period as soil stabilization and revegetation proceeds, the increased low-elevation, forested lands that will result, will provide a more diverse and expanded base for recreational pursuits, both for aquatic and upland interests. Equally important, a grievous trespass of Olympic National Park by the elimination of Lake Mills will result in re-establishing important low-elevation wildlife habitat and scenic beauty to this part of the park.

While the projected costs of implementing the proposed action is rather daunting, the cost of maintaining the status quo, or expending time, money, and effort in creating fish passages is even greater. The DEIS clearly shows that 'saving' money now by pursuing one of the other alternatives does not give us a return-on-investment due to the poor chances that salmon will respond to our actions, while other wildlife will continue to suffer in the process. Both short-term economic benefits to Clallam County will be realized for the "de-construction" of these dams, but also the improved salmon runs and other recreational pursuits that would result in dam removal will continue that pay-back for decades to come.

As we look beyond this DEIS towards the Implementation EIS, our vision must go beyond merely restoring a free-flowing Elwha River. We must ensure that the entire Elwha watershed is restored, so that the best habitat available will be created for fish and upland wildlife. The Implementation EIS should include a complete watershed analysis of the Elwha River drainage, both inside and outside of Olympic National Park, including Indian Creek and Little River drainages. In part, this analysis will provide baseline data of existing conditions for comparison purposes to document the stages of recovery as the years pass and to quantify the results of our decision in 20+ years. Additionally, we need to manage the Elwha River watershed as a complete unit, such that the diverse uses of these lands in this watershed do not conflict with restoration efforts. This may entail modifications to timber cutting prescriptions, residential and resort developments, roads, etc. To solely look at the affected lands inundated by the two reservoirs without taking into consideration external influences that affect restoration efforts on those lands is to invite failure from the outset.

I encourage you to proceed with the proposed action and finally remove the Hetch Hetchy of the Northwest, Glines Canyon and Elwha Dams. I would appreciate being placed on the mailing list for receipt of the Implementation EIS when it is released for comment and be apprised of scoping deadlines for that document. Thank you for taking my comments into consideration.

Sincerely,

Randall D Payne

Received
DSC-TWE

NOV 16 1994
C31-olym-404-06

[redacted]

November 7, 1994

Sarah Bransom
National Park Service, DSC-TWE-Planning
12795 Alameda Parkway
Denver, CO 80225-0287

Subject: Elwha River

Dear Ms. Bransom:

Appreciate the prompt response of your staff its my phone request for a copy of the DEIS Elwha River Ecosystem Restoration.

As a responder to the original FERC, I would appreciate a copy of the "Elwha Report" or if it is not available, the "Draft Staff Report" as discussed on page 1, 4 and 87. I am particularly interested in the various dam removal process and the removal/stabilization of the accumulated sand, gravel and cobbles.

I plan to respond to your DEIS this fall, supporting the Proposed Action, removal of both dams.

Yours truly

Bob Powne

Bob Powne

Received
DSC-TWE

NOV 16 1994

C32-Olym-404-06

11-11-94

Ms. Sarah Brensom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Brensom:

We live on the Olympic Peninsula and hike and backpack frequently in the Olympic Mountains. I would estimate that two out of every three trips we take are to destinations somewhere along the Elwha. It is exquisitely beautiful, as you must know. We fully support removing the dams to fully restore the Elwha River ecosystem and its ten runs of salmon and steelhead. We understand that the National Park Service's recent Draft Environmental Impact Statement indicates that removal of the dams is the only option which can accomplish this. We also generally support any such action which results in restoration or protection of natural areas, especially those in and around the Olympic Mountains, which has already been harshly impacted by a variety of human pursuits.

Thank you.

Sincerely,

Scott D. Foster

Mary Quisling Foster

Received
DSC-TWE

NOV 16 1994

C33-Olym-404-06

Thor Thompson
[redacted]

Serah Bransom
National Park Service, Elwha River Project
P.O Box 25287
Denver, CO 80225

November 11, 1994

Dear Ms. Bransom. RE: Elwha Dams

Please add this plea to others which would heve the salmon and steelhead runs return to the Elwhe river. If it would speed things up at all I remain on call to help remove these dams brick by brick or sherd by shard.

Thenk you and the Perk Service for the EIS proposing removal of these dams. In this you have my most vigorous support.

Yours,

Receiv
DSC-TWE
NOV 16 1994
C34-olym-404-06

JOLLEFERN M. COLE
[redacted]

November 10 1994

Ms. Sarah Branson
National Park Service, Elwha River Project
P.O. Box 25287
Denver Colorado 80225-0287

Dear Ms. Branson

I recently attended a meeting concerning the attempt to re-introduce salmon into our Salmon and Chimicum creeks system here in the Hadlock area on the Olympic Peninsula.

I was at first pleased to hear that after five years with much hard work there was a return of 200 adult salmon. Then a fisherman commented that he would take as many as a thousand in one day so did we really think in the long run this was going to save the salmon?

The Speaker's answer was that the Fisherman had a point, but what we had here was an aware group of people that cared very much about the salmon and were willing to try to do what they could.

I want to support the Elwah dam removal and the restoration of the river. As you can see from the above information you will have a large group of citizens willing to support the project with their time and money to giving our salmon a fighting chance to survive.

Sincerely Yours

Jollie Cole

cc: The Honorable Slade Gordon
The Honorable Patty Murray
The Honorable Norm Dicks

Received
DSC-TWE
NOV 16 1994
C35-olym-404-06

12 Nov. 1994

Dear Ms. Branson -

Thank you for forwarding the Elwha River DEIS. I am writing to express my support for the alternative of removing both dams and fully restoring native anadromous fisheries. With salmon runs on decline in most other areas of the Pacific Northwest, I think it vital that this ecosystem be restored so that it can support large numbers of fish, especially since most of the watershed is in the national park & hence there does exist some protection of riparian areas.

Thank you very much.

Yours sincerely
Dennis J. Kowalik

[redacted]

TOM BENDER
STRATEGIC PLANNING • SUSTAINABLE ARCHITECTURE
38755 REED ROAD • NEHALEM OR 97131 USA • 503-368-6294

Received
DSC-TWE
NOV 16 1994
C36-olym-404-06

11 November 1994

Sarah Bransom
NATIONAL PARK SERVICE
Western Team
12795 Alameda Parkway
Denver CO 80225

RE: ELWHA RIVER ECOSYSTEM RESTORATION DEIS

Dear Friends,

I want to congratulate you on an excellent DEIS and review of issues on the proposed Elwha River ecosystem restoration. I strongly support the recommended option for removal of both dams and restoration of theanadromous fisheries.

One small suggestion for the final report would be to include the economic value of the restored fisheries under the economic impact section where you comment on the cost of alternative replacement power. Also, the cost of replacement power might be lowered significantly by a cogeneration option at the mills rather than purchasing grid power.

Again, thanks for a well done job supporting an excellent proposal.

Sincerely yours,

Tom Bender

Received
DSC-TWE
NOV 17 1994
C37-olym-404-06

11-14-94

Dear Sarah,

I support the preferred alternative of removing the ~~led~~ He dams on the Elwha River. It's the only way to fully restore the Elwha River ecosystem as required by law. It's also a good investment because it will restore a valueble salmon run. Please have these dams removed. Thank you.

Sincerely,

Hank Nash

Hank Nash 871-5576
[redacted]

Received
DSC-TWE
NOV 17 1994
C38-olym-404-06

13 November 1994

[redacted]

Sarah Bransom
National Park Service

Dear Ms Bransom,

Removal of the Elwha dams seems to involve the following:

1) Destruction of two beautiful lakes, now being used extensively for fishing and recreation.

2) Elimination of a valuable source of hydroelectric power.

3) Deposition of millions of yards of sediment along the lower bed and mouth of the Elwha River, with unknown ecological results.

4) A possible restoration of a native salmon run, provided it is not destroyed by the above mentioned sediment.

All this at a cost of at least 200 million dollars (probably on the low side).

I am not sure that it would be wise to remove the dams even at zero cost, and I am sure that the Park Service can find a better use for several hundred million dollars. I urge that the Elwha dams be retained and relicensed.

Very truly yours,
Herb Hope

Herb Hope

Received
DSC-TWE
NOV 17 1994
C39-olym-404-06

Susan Friedmar

[redacted]

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Hello,

I am writing to you in support of dam removal on the Elwha River. To let the Elwha flow once again would restore the ecosystem (including the legendary salmon populations). I recently visited the Elwha River, and it saddened me to see the dams that I knew only give power to one paper mill - power that the company could easily do without by using more energy efficient methods. I have just started reading Mountain in the Clouds by Bruce Brown, and each page is testimonial for the removal of the dams. I am new to the Pacific Northwest, and slowly I am learning of its environmental concerns and seeing its natural beauty - what a wonderful place; let's try to keep it that way. Thank you for your time.

Sincerely,

Susan Friedmar
11/12/94

Howard A. Pellett
10417 NE 197th Street
Bothell, WA 98011
(206) 220-5631 wk(206) 486-8726 hm

Received
DSC-TWE
NOV 17 1994
C40-olym-404-06

November 14, 1994

Sarah Bransom
National Park Service, Elwha River Project
P. O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

I would like you to know that I support the preferred alternative of removing the Elwha River dams. I believe removal of the dams to be essential to restoration of the Elwha River salmon runs.

Everything I have read indicates that restoring the Elwha is a wise investment for the future which has the support of a broad coalition of environmentalists, fishermen, Native Americans and the general public.

Failure to remove the dams would lead to endless litigation, the extinction of salmon runs and the loss of nearly 400 jobs at the local mill. Removing the dams will create hundreds of good paying construction jobs for U. S. workers and will restore the Elwha River Salmon runs which will generate over $5,000,000 annually in income for commercial, tribal and recreational fisherman.

Thank you for considering my views.

Sincerely,

Howard A. Pellett

HAP:hp

c: Senator Patty Murray
Representative Norm Dicks

Received
DSC-TWE
NOV 17 1994
C41-olym-404-06

13 November, 1994

Ms. Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms Bransom:

I am a resident of Washington State and a frequent visitor to the Olympic National Park. I would like you to know that I fully support the complete removal of the Elwha River Dams. Their removal is necessary to restore the Park to its original condition, and to allow the full repopulation of the magnificent Elwha river with Salmon. There are only benefits, and no drawbacks, to this proposition. Please act with all haste to remove the Elwha River Dams Thank You.

Sincerely,

Randy Ternes

Randy Ternes
[redacted]

Received
DSC-TWE
NOV 17 1994
C42-OLYM-404-06

Novambsr 14, 1994

Sarah Bransom
National Park Sarvica, Wastern Taam
P. O. Box 25287
Danver, CO 80225-0287

Sanator Slada Gorton is wrong again. In hia passionate obsession to oppose all environmental conservation efforts, he is oppoeing the removal of tha two aging Elwha Rivar Dams.

I support ths National Park Sarvice's recommsndation to ramove both dams on the Elwha River as ths only way to fully restors the Elwha Rivar's acoayetem. Ths Elwha Rivar, through the Olympic National Park, waa at one time and has the potsntial to bs once again, an enormous rssourca for anadromous fishsrisa. Aa salmon fisherise in the Northwest continue to declins and ars on ths verga of sxtinction, ths rshabilitstion of ths Elwha ecoaystem by removing ths two dams is a nscsssity. Tha rsmoval of ths dams and the rsatoration of ths ecosystem would aleo provide a nesdsd food resource for wildlife within ths Olympic National Park.

If ths Senator rsally did cara about the salmon fisharies in the Pacific Northwsst, he would aupport ths dam rsmoval proposal instead of arguing it's significanca.

Sincerely,

Paul a Wakefield

Paul A. Waksfisld

[redacted]

11/11/94

Received
DSC-TWE
NOV 17 1994
C44-OLYM-404-06

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Sarah,

I am writing in support of removing the dams on the Elwha river. This is one of the few situations that is clearly win/win:

* Salmon will be restored generating millions in new income for commercial, tribal and recreational fishers.
* Hundreds of construction jobs will be created.
* Job losses will be avoided at the local mill.

Thank you for taking the time to listen to my concerns.

Sincerely,
Jonathon Orelove

[redacted]

DAVID STROUD
[redacted]

Received
DSC-TWE
NOV 17 1994
C43-olym-404-06

NOV 11, 1994

DEAR SARAH BRANSOM

YES GET RID OF THOSE DAMS ON THE ELWAH, AND "NOW" IS NOME TOO SOON. ALL OUR VOLUNTEER WORK MONITORING STREAMS AND SHORELINE ON HOOD CANAL AND DISCOVERY BAY SEEMS FUTILE WHILE THE ELWAH CONTINUES TO HAVE ITS GREAT FISH POTENTIAL DENIED

SINCERELY
David Stroud
Jane Stroud

November 11-1994

National Park
Service
Elwha River Project
Ms Sarah Branson,

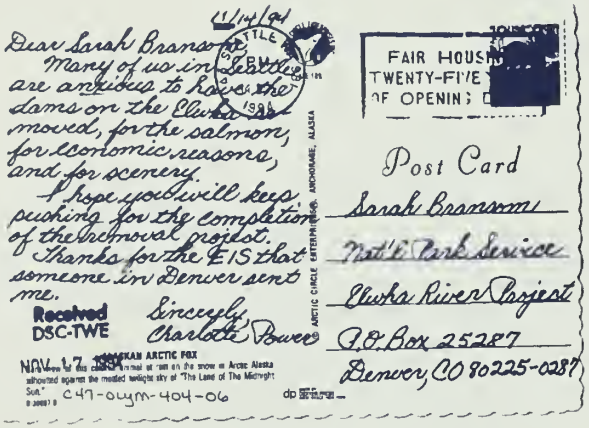
Received
DSC-TWE
NOV 17 1994
C46-olym-404-06

Dear Ms Branson,

I am in favor for removing the dams. So the Salmon can come back to their Natural Habitat. I am sure their are other sources for electrical power.

Very truly yours,
Bertha C. Egerter

[redacted]



11/14/94

Dear Sarah Bransom,

Many of us in Seattle are anxious to have the dams on the Elwha removed, for the salmon, for economic reasons, and for scenery.

I hope you will keep pushing for the completion of the removal project.

Thanks for the EIS that someone in Denver sent me.

Sincerely,
Charlotte Bowes

Received
DSC-TWE

NOV 1 7 1994

C47-olym-404-06

FAIR HOUSI
TWENTY-FIVE
OF OPENIN

Post Card

Sarah Bransom
Nat'l Park Service
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

ARCTIC CIRCLE ENTERPRISES, ANCHORAGE, ALASKA

ALASKAN ARCTIC FOX

Received
DSC-TWE

NOV 1 9 1994

C48-olym-404-06

[redacted]

November, 7, 1994

Dear MS. Bransom;

Concerning The Elwah dams;

as a longtime resident and a nearest neighbor To the Aldwell dam, I Feel That I have more Than a passing interest in whether they stay or go. I would like to see salmon above both dams, lots of salmon. How they would get there is The problem.

Status Quo:

At present, with both dams blocking gravel migration downstream. There is very little spawning gravels left in the lower river, between the dams, and most importantly below the Aldwell dam. Today those mature salmon and steelhead below The Aldwell dam That survive the warm water and lack of spawning gravels and do spawn successfully, often lose their young to varied water depths, Created by water releases from the Aldwell dam. This often leaves The young stranded and/or trapped in pools that dryup or They are eaten by gulls, herons or raccoons while so Trapped. This is repeated with every large water release.

One further problem is lack of pools and back-waters for fry protection and to keep them from washing to sea. These pools and backwaters are Created in natural rivers by uproots, Trees, logs and drift wood also logjams. unfortunately The dams no longer allow These to pass and or accumulate

Concerning Meterials Trapped behind the dams: it would seem That much of the meterials accumulated behind The dams Could be removed with a standard hydraulic dredge as the reservoir is lowered. These meterials Could be processed for value or placed in low spots on The perimeter of the reservoir provided These low spots are located in advance by Sonar. These meterials having value could be processed directly From The dredges' Conveyor pipe in a screening plant, Strategically placed. For an instance, near the Elwah resort. These meterials could be classified and sold to recover some of the costs of dredging, however enough of these gravels must be left to nourish the spawning beds below The dams.

Fish recovery:

I think we are all aware of the large amounts of mud that will flow down the river, but we should look at the rapid recovery of the Toutle River, after the Mt. St. Hellens eruption, for guidance. The primary reasons the Toutle River Fish rebounded so rapidly was 1. spawners at sea to return; 2. Side streams that were able to restock the main river with aquatic life of all kinds. Which brings to mind the necessity of providing Little River, Indian Creek and all the other major side streams with well tended egg boxes for several years to provide just such aquatic life during recovery of the main river. I would suggest that the amount of salmon produced in this manner could equal or exceed those that are being produced naturally in the lower river, now.

Water Supplies:

Included in the apparent water supplies are the hatchery and rearing ponds; the water intake for the pulp mills, The City of Port Angeles and the Dry Creek Water Assn. wells. Of the four the fish rearing complex and the Mill water would be the most affected.

The fish rearing complex as I recall either drilled some emergency wells or planned to during the warm water die off of 1993. The Mills could Concievably recycle their water if given financial aid and time and probably should recycle in the future.

The City of Port Angeles, as I recall, takes their water through a Ranney System, which is a large Caisson on the edge of the water course and latteral perforated pipes driven horizontaly from there into undisturbed consolidated river gravels beneath the river itself. This should not suffer from turbidity problems as long as the sediments realeased from the dam reservoirs don't cause the river to channel and cut down into the consolidated sediments. This is unlikely as under those conditions the river bed should build not cut. The City of Port Angeles has had Morse Creek as a back up in the past. If it's still viable, I don't know.

I can't imagine any problems with the Dry Creek Water Assn. System supply, as, if im correct, they have 2 drilled wells along the riverside.

If the District should have a problem there is a well on Fay Rd. within their system that should be able to supply them easily. The well log is held by Allen and Nadine Ferguson, 683-3953, they are the previous property owners.

Power:

I'm somewhat concerned about the loss of cheap power to the Daishowa Mill. If the dams are removed. Although there has been discussions about special rates from BPA, I find that this may be modified if the large water releases and continued drought are considered. What is being touted as a great financial windfall for the area, during deconstruction of the dams, may turn out to be financial ruin if Daishowa loses their cheap power and folds.

Alternative:

There has been some discussion on building fish ladders over the dams and bypassing or modifying the Turbines to allow the smolt to pass. This indeed would be possible, however without continued spawning gravel nourishment, the river, below the Aldwell dam, would still be a poor fish producer. The area between the dams would not be a candidate for gravel nourishment as it would only add to the filling of the Aldwell resivoir.

One final item in closing. let me suggest that if the dams are removed it be done expeditiously, so as to loose the fewest spawning cycles and I further request that the slough at the mouth of the Elwah be reopened to the river. This is an excellent smolting area and would be ideal for the "so called" dog salmon to spawn as they like slow moving water, sloughs and springs.

with regards

Eddie L. Mayer

Received
DSC-TWE
NOV 18 1994
C50-olym-404-06

November 10, 1994

Sarah Bransom
National Park Service, Elwha River Project
PO Box 25287
Denver, Co. 80225

re: REstoration of the Elwha River

I support the removal of the two dams on the Elwha River, which is the single best opportunity to restore salmon in the Northwest.

I urge approval of this project, and by copy of this letter commend the support of this policy by Senator Murray and Representative Dicks.

By copy of this letter also I am asking other representatives from our State to support this project.

Laura A. Harders

Laura A. Harders
[redacted]

cc: Senator Murray
Washington State representatives

Received
DSC-TWE
NOV 18 1994
C51-olym-404-06

Nov. 14, 1994

To: Sarah Bransom
National Park Service Elwha River Project
P. O. Box 25287
Denver, CO 80225-0287

Subject: Removal of Dams on Elwha River

I have fished the rivers and salt water areas of Washington State for over 60 years. I strongly support the preferred alternative contained in the DEIS. The removal of the dams will allow the eventual restoration of the fish runs in the Elwha and will help to offset the decline in our other rivers. Anything you can do to expedite the removal of the dams would be greatly appreciated.
Thanks.

Howard A Johnson

Howard A. Johnson
[redacted]

cc: The Honorable Patty Murray
The Honorable Norm Dicks

Received
DSC-T...
NOV 18 1994
052-olym-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): DAVID CHILDS

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

1. There is no # benefits vs cost.
2. The effect and effectiveness of silt removal is mostly speculative we could end up with more fish habitat plus loss of power plus problems with the water supply
3. It appears to me the reports are slanted and biased in favor of the dams removal
4. Aren't we destroying an eco-system built up of the two yrs of the dams

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

1. We may be wasting our money or could apply it to better projects such as Lyons wetland improving stream habitat in the west end and [illegible] apply it to the effect
2. We don't know if there is any hard data available. If so it should be cited
3. I think we need someone who has no fish to fry leads the evaluation

OTHER COMMENTS:

There is no guarantee after spending millions that the aim of restoring the river system the adult is has.

OVER

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

I have talked to qualified experts from the Corp of Engineers and they state that the likelihood of returning the river to pre-existing conditions is very problematical and should be approached with much caution than evidenced

Received
DSC-TWE
NOV 18 1994
C53-oym-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

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Turn in your coments at the public workshop or seod them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please returo your comment form oo or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): PETE ROSE
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: STRONGLY SUPPORT DAM REMOVAL. RECREATIONAL LAKES ABOUND; INTACT, WILD RIVERS DO NOT. REMOVAL HERE IS RELATIVELY PAINLESS; EXCELLENT OPPORTUNITY TO EVALUATE SUCCESS, COSTS OF REMOVALS IN OTHER LOCATIONS. FREE GLEN CANYON?

Please continue your comments on the back of this sheet if needed.

Received
DSC-TWE
NOV 18 1994
C54-oym-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or seod them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please returo your comment form oo or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Deborah Homenko - Jerry White
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: Age of dams, in ~~[illegible]~~ relation to their being built before earthquake-proof construction was known. Particularly the Elwha Dam. How would it be possible to make this dam safe and the cost of such a project. the cost and inadequacy of fish ladder construction and maintenance.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: There have been new findings on major faults in the area and the likelihood of a major earthquake ~~in the~~ being possible has been reported.

OTHER COMMENTS: Restoring the salmon runs is of major importance to the local economy. Relicensing an unsafe dam has the potential of lost life and astronomical litigation along with river destruction, the cost of fish ladder construction

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

and maintenance in the long run is too costly with inadequate results.

Post poning removal with relicensing will only result in a temporary dollar saving. The salmon can't wait and the age of the dams and their true stability remains in question.

FREE the ELWHA

Received
DSC-TWR
NOV 18 1994
[redacted]-04ym-404-06

November 14, 1994

Ms. Sarah Branson
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Branson:

I am a 29-year reeident of Port Angelee, Waehington, a teacher and civic-minded citizen. I have long eupported the removal of the dams on the local Elwha River.

These dams were put in (somewhat illegally) years ago, with little consideration given to the long-range effects on aalmon runa and on the biology of the Elwha River syatem in general. The old Indian residents of the Elwha Valley apeak of the times when eo many chinook salmon ran up the Elwha River that one could virtually walk on their backe! One elder told of the vast "pile ups" of fish that took place once the dams were in place. Tena of thousands of giant fish literally bumped into the dams, and with no fish laddera provided, simply died without spawning. Through the yeare the salmon rune have become progreseively depleted, and now the remaina of the native runs are being genetically contaminated by genes from hatchery fish.

Removal of the dame might give one last chance to thoee few ramaining salmon which carry the "gene pool" (what'e left of it) of thoee original giant chinook salmon. The Elwha runs -- if they could be re-estabiiehed -- would repreeent a tremendoue economic booat for thie region. As they currently stand, the rune are extremely small and variable and offer relatively little to the fieheriee of Port Angeles and the surrounding areas.

The electrical energy provided by the Elwha dams ie not reliable, and the local paper mill which utilizes that energy hae threatened to ahut down if a more dependable (and cheaper) eource of electricity ie not guaranteed by the federal government. So, failure to remove thoee dams not only prevente the re-establiahment of the salmon runa, it also runa the riak of cloaing down the local paper mill. In addition to saving the local mill, dam removal would provide employment to people involved in the actual demolition of the existing dame.

I atrongly support the idea of dam removal and hope that the momentum already generated will carry thia project to its anticipated completion.

Sincerely,

Edward L. Tisch

Edward Tisch

Received
DSC-TWE
NOV 18 1994
CS6-OLYM-404-06

Jay and Suzy Wakefield
[redacted]

Sara Bransom
National Park Service
Elwha River Project
P.O. Box 25287
Denver, Colo 80225-0287

Dear Sara:

The Elwha River, as it tumbles through its rocks and pools, and grows in size as you hike along it through the Park, is truly a wonder of the world. Nowhere is there comparable beauty these days.

On my last trip in the Olympics, I met a single fellow from Leipzig, a couple from Britain, and another group of 3 european hikers! Not at all like 20 or 30 years ago! It is wonderful that our economies are being equalized without wars, forming one world. Wouldn't it be a great statement for us to return this river to its natural relation to the sea? **Nowhere else is there such an opportunity** to see if we can re-establish historic andromatous (sea run) fish runs. I hope to live to see it happen.

Regards,

Jay S. Wakefield
Hiker in the Olympics since the 50's

Received
DSC-TWE
NOV 18 1994
CS7-OLYM-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Donald L. Roberts

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): None

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: The lakes formed by the lakes on the Elwha have evolved their own ecosystems. Examples are Trumpeter Swans, and a host of other waterfowl and mammals such as beaver, otter, mink and many others. Removal of the dams will destroy this existing system.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: I do not believe the removal of the Elwha Dams will restor the salmon runs to that river. Ocean over fishing as well as an explosion in the population of sea mammals further assure failure to restor these runs.

OTHER COMMENTS:

Please continue your comments on the back of this sheet if needed.

[redacted]

15 NOVEMBER 1994

SARAH BRANSOM
NAT. PARK SERVICE, ELWHA RIVER PROJECT
PO BOX 25287
DENVER, CO 80225-0287

Received
DSC-TWE
NOV 18 1994
C58-olym-404-06

Dear Ms Bransom:

I am writing to declare my support for the proposal to remove the dams from the Elwha River in Washington State.

We are now aware that these dams have had an extremely negative impact on the ecosystem of the Elwha watershed, especially the salmon runs. The dams no longer serve the purpose for which they were built. The Elwha River Restoration Act of 1992 authorizes the Park Service to fully restore the Elwha and the draft Environmental Impact Statement concludes that dam removal is the only way to fully comply with that law.

As the custodian of our National Parks, I expect the Park Service to work to restore the Elwha ecosystem. I urge you to take the actions necessary to fully remove these dams, thereby giving the salmon runs the best chance to recover, avoiding litigation, creating jobs for residents of the Olympic Peninsula and restoring a national treasure for future generations.

Sincerely,

Katherine Murphy
(KATHERINE MURPHY)

Sophy Johnston
Sophy Johnston

Received
DSC-TWE
NOV 18 1994
C59-olym-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

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Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): ERIC TOBIN
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): NATIVE AMERICAN
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: Have the Anadromous fish prior to Dams used the river above Lake Mills or Rica Canyon and if so how far.

OTHER COMMENTS: Let me comment on your EIS Q+A first.
Q#2 The woody debris is let through the dams every year. The only reason Glive canyon dam is in the park is they expanded the park boundaries. #7 WHY Should the Elwha Dam be lisceused as it never was betor. #8 I don't feel this

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

to be the preferred alternative. DOI may begin by planting in middel + upper river. This was done successfully in fifties (I have access to pictures) turbine runners don't need to be removed. Maximum generation equipment needs to be installed and fish routed around dangerous areas through known methods. Fish should of been routed to upper river years ago, quit studying and just do it. The Park Service has proven its self fine and again to be unable to manage any thing I feel it needs to be disbanded and the lands known as Olp Run by forest service as they managed in 60's and 70's. This project either way will bring no fish as long as the seals are unchecked the rivers netted and as fish wait for sufficent water in rivers to allow spawning are seigned in our inner salt water ways and the fishing laws on the open ocean go unchecked. Draggers have to throw away salmon caught by accident, already dead. NO Management I feel, is better than what government has shown to date, We need the power just route the fish Around the dams and build dams on all other viable rivers with fish passages.

I expect you will pass my comments around as a joke then sanctimoniously go blundering Around in the dark telling your peers what a great job you are doing with no fish in rivers without dams finish dieing out.

ERIC TOBIN

Eric Tobin

yours

P.S. I at least live on Elwha River do any of you.

Received
DSC-TWE
NOV 18 1994
CAO-OLYM-4017-0

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)
National Park Service
Department of the Interior

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NAME (PLEASE PRINT CLEARLY): KRISTAN A. KINCADE

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: SPEED THE DAY OF RESTORATION. NO MORE DEAD AND/OR DYING RIVERS. I REMEMBER CALIFORNIA. Thanks for your hard work.

Please continue your comments on the back of this sheet if needed.

Received
DSC-TWE

NOV 18 1994

C61-olym-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

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NAME (PLEASE PRINT CLEARLY): GENELLE A. DOYLE

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): ASSOCIATE BROKER, WINDERMERE REAL ESTATE

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: Before thought is given to the Elwha River Dams being removed, investigation should determine why the the Northwest rivers, which do not have dams, also, are suffering depleted fish runs.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: We on Olympic Peninsula are about studied out. We have had to deal with a timber crisis, an endangered species law, a Growth Management Act (in some circles called "Got Mine Already"), critical areas, wetlands, etc:, fishing moritorium, and now we are fighting for the survival of our community, as we know it. No one has listened to the people of this community. Only the Olympic National Park people and the Tribes are being heard, and they have a vested interest.

OTHER COMMENTS: The format used at the EIS hearing in Port Angeles, November 14, 1994 was a very controlled atmosphere in which it was impossible to experience the real sentiment of the Port Angeles area. At each of the six stations, where a clip board was used for a facilitator to interpret comments is hardly an open forum for the exchange of ideas. It is, however, an excellen

Please continue your comments on the back of this sheet if needed.

(over)

COMMENTS CONTINUED:

method of control.

To get the message of the community out, we ordered 500 11" X 14" signs on a green background. In two days, we were out of signs, and we ordered 250 more on Friday. Donations came in to cover the cost of the printing, and businesses displayed "RE-LICENSE ELWHA DAMS NOW!" on their reader boards. This was a spontaneous effort, and it shows the sentiment of the community to the outsiders, who were here for the EIS forum.

In the past, some of our community leaders have been afraid to speak up because they felt the necessity of protecting Daishowa, Rayonier, the P. A. water system, and because the Environmental Movement was so strong at the time.

We would hope that the last Election might send a message that we here on the Peninsula are tired of mandates from Washington D. C. We love our area. We are good stewards of our resources. We have had some bad land use practices in the past, which we are working to correct. We don't need nor want "Pork Barrel Projects" that are a waste of everybody's money. We are proud of Olympic National Park, but we don't want it dictating policy to us. We share in the pride the Tribes have in their culture, and we would appreciate it if they were not always pushing for a special status.

We have read that Bruce Babbitt would like to be present and assist in blowing up the dams. It sounds as though the Secretary of the Interior has already made up his mind. One would have to question the Secretary's objectivity in making his decision. I might suggest he not run for political office from this area. His political stock might not be too high.

Received
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NOV 18 1994
CG2-olym-404-01

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

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Please return your commeot form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Garry Weber
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: No augmentation of Salmon runs.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:
I believe hatchery maintenance of native-to-Elwha Salmon should/must be done, but otherwise let natural stray-volunteer happen. Do not introduce further Salmon by mankind's intervention. To me, this is a valuable opportunity to study a natural process.

OTHER COMMENTS: Removal of both dams with full restoration has only positive points, the range of good points runs from local economy building to helping to increase the ocean's fishery, which is now being overfished at almost 50% beyond its recovery capacity. Please take out the dams!

Please continue your comments on the back of this sheet if needed.

more → over

COMMENTS CONTINUED:
I also feel that, if feasible, the use of the dam rubble for artificial reef in the Strait of Juan de Fuca is a wonderful idea.

Received
DSC-TWE
NOV 18 1994
C63-OLYM-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

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NAME (PLEASE PRINT CLEARLY): Jasper L Loucks
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): 0

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: Long term loss of trout fishing in LK Mills & the Elwha R.

② Loss of Bird Winter nesting grounds for Swans on LK Aldwell.

③ Study what dumping 14 to 15 million Cubic Yards of Rock Sand & Gravel into Freshwater Bay

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: I am a 75 year resident of Port Angeles, & US & Former Employee of the O N P. I am upset by the Trend the Park has taken. They Started by taking out the Spotted (not original). They removed large numbers of goats (not original) They Want all the Eastern Brook trout gone (not original) They are Considering Introduction of Introducing Wolves (original) & Now

OTHER COMMENTS: they are Pushing removing Elwha & Glines Can Dams (also not original) If one Were to look at these proposals one would have to think that the Park would like to restore the Park to possible what the Garden of Eden

Please continue your comments on the back of this sheet if needed. I need this

COMMENTS CONTINUED:

Another issue that troubles me is the "main" reason for removing the dams, specifically, to restore the fish runs. Of course, the Indians are supporting the Removal because that means they would have more fish to net - not Supported by Sport fishing. I Can't imagine that the Park is really interested in getting Dungeness fish runs into the river. That just doesn't fit the picture of the O.N.P. as I know it. Govt regulations are killing us now & Heaven Forbid of what if the whole river was under Govt rules & regulations. Don't get me wrong, I'm a big supporter of the Parks, I just think they are Progressing down the wrong Corridor.

Another issue that Daunts me is how in the world are they going to Clean 14-15 Cubic yards of rock & gravel into a Wonderful fishing Ground like Freshwater Bay without disrupting the Bird Grounds underneath. I am not aware of anyone even attempting the project, desired doing it. Seems to me there would be a huge Quantity of Mud that Came out of the Pipe immediately underneath the Water. Cost overruns are Common now days & I don't believe they really know what the total amount would come in. Also, I attended the meeting in the Vern Burton Gym & saw the picture of the Base Structure of the Glines Dam. I agree it was not a pretty picture & it would take a lot of Blasting to replace it, if it Came down to those terms & it was decided Something had to be done, I would stay at the two Dams that Elwha Dam possibly should go & keep Mills Lake Dam as it is. I think the Local People should have a big say in the project & trust that what I have said is clear to you.

Sincerely,

Jasper Loucks

Received
DSC-TWE
NOV 18 1994
C64-olym-404-06

Tuesday, November 15, 1994

Ravi Miro Fry
[redacted]

Sarah Bransom
National Park Service, Western Team
12795 Alameda Parkway
Denver, CO 80225-0287

Dear Sarah Bransom,

I have read through the Elwha River Ecosystem Restoration DEIS, and I would like to say that I fully support the removal of both hydroelectric dams which are currently in place. The marginal amount of power these dams provide is easily replaced, while Salmon habitat is not. I think that it is fantastic that the National Park Service is addressing this problem and looking for ways to increase the spawning areas assessable to Salmon.

I live in Idaho, and it saddens and outrages me to think of what has been done to the salmon spawning grounds in the name of so called progress. While restoring the salmon spawning grounds here seems like an almost insurmountable problem in todays political climate, I feel that the Elwha River provides a unique opportunity to repair a small piece of what we have so carelessly damaged.

Thank you very much.

Sincerely

Ravi Miro Fry

[redacted]
Nov 16, 1994

Received
DSC-TWE
NOV 21 1994
C65-olym-404-0

Sarah Bransom
N.P.S., Elwha River Project
P.O Box 25287
Denver, CO 80225-0287

re: dam removal

Dear Ms. Bransom:

As an environmentally conscious citizen, I write to urge the restoration of the Elwha River ecosystem by removal of the two dams, now formally proposed by the National Park Service. This is the best opportunity to restore salmon anywhere in the Northwest, and would be a dramatic step in the right direction for the environment.

Dam removal is supported by a broad coalition of disperate groups, will create many jobs in construction, and will generate much new income for commercial, tribal and recreational fishermen

Sincerely yours,

Alexander R. Stevens

Alexander R Stevens M.D.

cc to Senator Patty Murray, and Rep. Norm Dicks

Mr. & Mrs Albert A. Haubrich
[redacted]

Sarah Branson
National Park Service
Western Team.

Nov 16-94

Received
DSC-TWE
NOV 21 1994
CGG-OLYM-404-06

Sarah Branson:

My wife and I are upset with the Olympic National Park's stand on the Elwha Dams. We don't want those Dams removed. Removing the Dams will be a big costly mistake. You can not bring back the Dinosaurs without the eggs. We are infavor of fish passages around the Dams.

Sincerely

Mr. & Mrs Albert A. Haubrich

Received
DSC-TWE
NOV 21 1994
CGG-OLYM-404-06

DAVID M. FISHER & IRENE B. FISHER
[redacted]

November 16, 1994

Sarah Branson
National Park Service, Elwha River Project
PO Box 25287
Denver, Colorado 80225-0287

Dear Ms. Branson:

We are pleased that the NPS has released the EIS on restoring the Elwha.

We are very much in favor of the dam removal and the entire restoration project.

By copy of this letter we are also urging our important representatives in Washington, D.C. to do their utmost to secure enabling legislation.

Sincerely yours,
David M. Fisher
Irene B. Fisher

cc The Honorable Patty Murray
→ The Honorable Slade Gorton
U.S. Senate
& The Honorable Norm Dicks
U.S. House of Representatives
Washington, D.C. 20510

Received
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Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

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NAME (PLEASE PRINT CLEARLY): Francis J. Schmitt
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): Crescent Grange #1123
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: What chance do salmon have of surviving until they reach adult stage? I have reason to believe few will live to spawn. No doubt the river will not be polluted for fish but it certainly will be too dirty for Rayonier Mill. There were no pulp mills until after the dams and it takes two dams to clear the water for the high grade pulp. Too expensive to filter the water

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:
There is no mention made of the mighty fresh water river that goes out of the Straits carrying pollution so bad that it even destroying the kelp & eel grass. With the Fraser river and all of the large rivers causing to go sour our waters. The beaches are dying.

OTHER COMMENTS:
How do I know? I have lived here all my 78 years and have owned part of Whiskey Creek Beach since 1938. I have operated a resort on that beach over 30 years, have lived by it & worked by it all my life.

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

With the eel grass and kelp dying off the young fish will have no place to hide and worst of all the place where they need shelter the most is right at the mouth of the River At the mouth of the Elwha river they will have no shelter at all as sand gravel and mud coming down the river after over seventy years of storage will keep the eel grass & kelp from growing for years by covering and moving around during storms.

I feel sorry for the Elwha Indians who are led to believe we can give them what their ancestors had.

In these times until we get our life style changed we cannot turn back the clock.

In fact with some help the two lakes on the river could produce more fish than can be raised after they are gone because coming out of the park the water is not polluted.

One could go up into Canada & get from their lakes, freshwater shrimp, clams & small bait fish things that make the lakes in the Caribou so productive and have rainbow trout bigger than steelhead without having to run the risk of a seal eating them or some other fish eating them.

When I was a boy we fish I often fished in Lake Crescent because one could catch easily bullheads & trout because the lake had more live feed in it. These things seem to have disappeared maybe because of acid rain.

Maybe we should be building more or improving the lakes that we have, so we have seed when we get our act in order and stop polluting the salt water.

Having had the experience of having & observing the salmon fish pen of Whiskey Creek Beach & talking with fish biologists and studying about it the Elwha Indians could make it profitable by raising pen fed salmon. Over a period of time it would be better than gambling Cassinos even though the dams are not removed.

— Francis J. Schmitt

Sharon Feeney
[redacted]



I support removing the two old dams on the Elwha River. This is a beautiful spot & will actually increase the jobs in this depressed area. Here's to a restored Eco system & employment!

Thanks
Sharon Feeney

To Sarah Bransom
Nat'l Park Service
Elwha River Project
P.O. Box 25287
Denver, Co
80225-0287

Received
DSC-TWE
NOV 21 1994
C90-olym-404-06

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NAME (PLEASE PRINT CLEARLY): FLOYD MURRAY
MAILING ADDRESS: [redacted]
AFFILIATION (IF ANY):
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: NONE ! ! !

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: ~~OVER---~~

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

The last opportunity to fully restore the Elwha River ecosystem was when the river undermined the Elwha Dam. By the time the hole was filled and plugged, the ecosystem was damaged to the point where nature could adapt and readjust but never return to its former condition. Then came the construction of Glines Canyon Dam, many years of silt accumulation and the animals dependent on salmon carcasses died; so the ecosystem has had a different character for the last 80 years or so.

Information at the November 14 Workshop indicates that even in the unlikely event that no accidents occur while removing the dams; the fish, swans, etc. now dependent upon the reservoirs will be disrupted; marine life at the river mouth will be killed by fine silt; wetlands will be destroyed and the lower Elwha River valley will be plagued by silt and floods.

Again, the study shows that sediment will have to be stored in artificially created areas out of the stream path and that at least one run (10%) has a poor to fair chance of restoration, so full restoration of the ecosystem as mandated is impossible. At great expense, a sham restoration may be possible but hasn't the public been fooled and taxed enough?

Removal of the dams would also make the Olympic Peninsula more dependent upon the Bonneville Power Administration which has its own problems. That is a dangerous situation.

Even if the Elwha had been left in pristine condition, the salmon runs would be less than half their 1910 volume because of water temperature changes, greatly increased ocean harvesting by many nations and other factors unrelated to their spawning facilities. I was a volunteer in the Salmon Trout Enhancement Program for the Ten Mile Lake watershed in Oregon where restoration efforts are failing even though good spawning areas are accessable. We are in that part of a natural cycle where the predators (including humans) have overwhelmed the food source. It is a cruel hoax to tell the Elwha S'Klallam Tribe that removing the dams will restore their fish when it might cost them their clams.

Received
DSC-TWE
NOV 21 1994
C71-olym-404-06

November 10, 1994

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

I am an Environmental Policy and Assessment major at Huxley College of Environmental Studies at Western Washington University, Bellingham, Washington. As a resident of a small logging community at the base of the Olympic Peninsula, I have seen the effects on salmon due to habitat degradation.

In my 23 years on the Peninsula I have spent lots of time hiking the river bottoms of both Forest Service and National Park land, the Elwha included, and have seen the drastic difference in quality of the two. I have also witnessed the dwindling returns of salmon, who face predation, pollution, and over fishing, only to come to degraded spawning grounds. Sometimes the salmon can not even reach the spawning grounds! Any opportunity to increase or reintroduce salmon and steelhead runs, especially to pristine systems, such as the Elwha River, must be taken advantage of. The following paper supports and provides reasoning for returning the Elwha River to the wild.

The Elwha River is a pristine ecological system. Before it was dammed, the Elwha once supported a huge salmon population. Removal of the dams will allow salmon to enter the excellent spawning grounds in the upper reaches of the Elwha River basin. The opportunity should be taken to create more habitat, especially in a time of overall dwindling habitat on the Olympic Peninsula.

The removal of the dams will not only benefit salmon, but humans as well. The current crisis in the fishing industry of Washington State is partly a result of loss to spawning habitat. Opening up the Elwha will increase fish runs and ultimately give a boost to the depressed commercial fishing industry. According to the Olympic Park Associates, the removal of the dams "will create hundreds of good paying construction jobs for workers on the Olympic Peninsula, plus restoring Elwha River salmon runs will generate over $5 million per year of new income for commercial, tribal, and recreational fisherman." Also, returning the salmon on the Elwha, or anywhere on the Olympic Peninsula for that matter, will install a sense of pride and a boost to the natural heritage of the area. For these reasons, I support the removal of the dams on the Elwha River. Thank you for your time.

Sincerely,
Scott Carey
[redacted]



C72-OL4M-404-06 Received DSC-TWE
NOV 21 1994

I support the preferred alternative of removing the dams! If is the only way to fully restore the Elwha River ecosystem as required by law.

Jonathan Swinton

Received
DSC-TWE
NOV 23 1994
C73-OL4M-404-06

[redacted]

November 16, 1994

Sarah Branson
National Park Service
Western Team
12795 Alameda Parkway
Denver, CO 80225-0287

Re: Elwha River Dams

Possibly you are one who wonders why eight days ago millions of Americans went to the polls and voted the sentiment: "I've had it up to HERE and I'm NOT going to take it ANY MORE!!" Well, one of the reasons is the National Park Service giving serious thought to the idiot idea of destroying the two dams in question.

Here's a partial list of the type of people who want the dams removed:

1. People who love animals more than people.
2. People who want the government to dump great volumes of pork and gravy locally.
3. American Indians--or that portion of the American Indians who feed at the trough of the government largesse.

Removing the dams is so STUPID, stupid, stupid that it galls me that any body in the N.P.S. would give a second thought to the idea and I hope Congress punishes N.P.S. for its lack of discretion.

Maury Medlen

copies:

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National Park Service
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Robert W. Dalton

NAME (PLEASE PRINT CLEARLY): Robert W Dalton
MAILING ADDRESS: [redacted]
AFFILIATION (IF ANY): Olympic Outdoor Sportsmen
Federation of Fly Fishers - Friends of the Earth
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: Additional studies are not only expensive but are prolonging the urgent need to get the dams out.

OTHER COMMENTS: In the last 52 years I have fished, hiked and enjoyed the complete length of the Elwha to it's sourse Aside from the absence of steelhead and salmon, the upper river is virtualy the same as ever. I have been on all of the major streams on the Peninsula and because

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

the Elwha is the most beautiful, it is the most perfect river to restore by removing the dams.

What kind of legacy are we leaving for future generations? The dams are old, the lakes are filling up with deposits, the middle and lower river is so badly scoured the necessary spawning habitat and nutriants are practically gone. What a sad ending for a beautiful river.

About 12 years ago several of us sports men, using long handled tools, moved large boulders aside in the lower river to provide a graveled spaced large enough for spawning chinook to move in and start digging - which they did right away.

In the last 15 years I have worked with the different agencies during spawning times only to see how futile our work had been. One year all the eggs given to a hatchery had to be destroyed because of disease. Other years we have seen thousands of returning salmon die before they could spawn due to diseases found in the lower river. This is brought about by elevated water temperatures.

About 30 years ago I witnessed the result of two avalanches that formed lakes in the river and eventually blew out. The location is short distance up river from the mouth of Long Creek. The amount of destruction for a mile or so was hard to believe. As a result of these avalanches we have seen a large filling in or delta at the head of Lake Mills. It happend then and it could happen again. I'm sure an earthquake in this region could really cause havoc.

There is concern with what to do with deposites at the head of each lake. Keep in mind that Pt. Angeles and Seattle down town areas are built on material sluiced down from hill sides. Steel pipe in place could rapidly move fine gravel and sand down river safely to ocean. ever you want. Start with Lake Aldwell and watch it work.

In conclusion, we have a perfect river to restore. Now is the time to correct some of our mistakes. Don't wait too long. Pt Angeles has found out what a valuable resource fish is. We have a good chance to lose it, all.

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

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Department of the Interior

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): BARBARA E. MOSSMAN
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

LOSS OF JOBS DUE TO DAM REMOVAL
LOSS OF WATER QUALITY
LOSS OF EXISTING SPAWNING BEDS
LOSS OF PRIVATE WATER SUPPLIES
IMPACT OF SEDIMENT REMOVAL ON OTHER ECOSYSTEMS
COST OF SEDIMENT REMOVAL
AFFECTS ON EXISTING WILDLIFE

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

BECAUSE NONE OF MY QUESTIONS WERE ADEQUATELY ANSWERED. AT THE SO-CALLED "WORKSHOP".

OTHER COMMENTS: THIS IS THE MOST ABHORENT SCHEME EVER PERPETRATED AGAINST THE PEOPLE OF THE OLYMPIC PENINSULA.

TO EVEN CONSIDER THE REMOVAL OF TWO SAFE, EFFICIENT AND PRODUCTIVE DAMS AT A TIME WHEN

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

THE PACIFIC NORTHWEST IS FACED WITH A POWER SHORTAGE IS NOT ONLY IRRESPONSIBLE, IT IS A VIOLATION OF OUR CIVIL RIGHTS.

THE "POWERS THAT BE" HAD BETTER COME TO UNDERSTAND THAT THE PEOPLE OF THE OLYMPIC PENINSULA INTEND TO FIGHT THE PUSH TO REMOVE THESE DAMS WITH EVERY METHOD AVAILABLE TO US.

WE ARE DAMN TIRED OF "BIG BROTHER GOVERNMENT" FORCING PROJECTS AND PROGRAMS ON US IN AN EFFORT TO DESTROY THE ECONOMY OF THE PENINSULA AND ENCOURAGE OUR WORK FORCE TO EMMIGRATE TO OTHER REGIONS TO FIND EMPLOYMENT.

THIS HAS BECOME MORE THAN A BATTLE TO SAVE OUR DAMS; IT HAS BECOME A BATTLE TO SAVE OUR CULTURE AND HERITAGE — A CULTURE AND HERITAGE THAT HAS EVOLVED AROUND THE ELWHA AND GLINES CANYON DAMS.

IF THE N.P.S. AND INDIAN TRIBES CONTINUE THIS ASSAULT ON OUR WAY OF LIFE, THEY CAN EXPECT A RESPONSE FITTING THE EXTREMITY OF THE SITUATION.

YOU PEOPLE JUST DON'T GET IT! I HAVE NEVER SEEN SO MUCH IGNORANCE AND IGNORANCE AS WAS DISPLAYED AT THESE PUBLIC (?) WORKSHOPS. IF THIS IS THE BEST THE DAM(N) DESTRUCTION TEAM HAS TO OFFER, THE PROJECT IS DOOMED TO FAILURE EVEN IF WE ALLOWED ITS CONTINUATION.

Barbara Mossman
POB 2141
Forks, Wa 98331-2141

Received
DSC-TWE
NOV 23 1994
c76-olym-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

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Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): DAVID G. SWINFORD
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): CONCERNED AMERICAN

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

WE NEVER NEEDED TO MAKE ANY STUDIES IN THE FIRST PLACE. IT IS THE HEIGHT OF INSANITY TO EVER CONSIDER REMOVING THE DAMS IN THE FIRST PLACE. FISH RUNS HAVE DECLINED IN ALL WASHINGTON RIVERS & STREAMS, INCLUDING THOSE THAT HAVE NEVER HAD DAMS.

REASONS WHY YOU BELIEVE ~~ADDITIONAL STUDY IS NEEDED.~~ DAMS SHOULD REMAIN

POWER SOURCES FROM the Columbia & SNAKE RIVER ARE PRESENTLY INADEQUATE TO SUPPLY THE POWER NEEDS OF WASHINGTON STATE. WE ARE NOW IMPORTING POWER AND WE WILL HAVE TO IMPORT A HELLAVA LOT MORE WHEN BRITISH COLUMBIA DEMANDS THEIR RIGHTFUL SHARE OF ELECTRICAL POWER FROM THE COLUMBIA DAMS. ANY LOSSES FROM WATER POWER WILL HAVE TO BE MADE UP FROM FOSSILE ENERGY

OTHER COMMENTS: SOURCES WHICH FURTHER POLLUTE THE ATMOSPHERE.

FISH LADDERS COULD AND SHOULD BE CONSTRUCTED TO ENHANCE THE FISHERIES OF THE RIVER. (EVEN)

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

MY FAMILY CAN SURVIVE AND BE HEALTHY AND COMFORTABLE WITHOUT FISH FROM THE ELWHA AND OTHER STREAMS BUT WE CAN'T LIVE COMFORTABLY WITHOUT RELATIVELY INEXPLOSIVE POWER.

INCREASED POWER COSTS WILL MAKE MANY KINDS OF BUSINESSES NON-COMPETITIVE AND THEREFORE FORCE THEM FROM OUR ECONOMIC BASE.

THE PEOPLE WHO ESPOUSE THE REMOVAL OF THESE DAMS MUST HAVE VERY LITTLE CONCERN FOR THE AVERAGE PERSON LIVING IN WASHINGTON, INCLUDING THEIR ECONOMIC WELFARE

IF THE PRESERVATIONISTS THINK DAM REMOVAL IS A GOOD IDEA WHY DON'T THEY FORM A CORPORATION TO BUY THE DAMS AND THEN PAY FOR THEIR REMOVAL FROM THEIR OWN RESOURCES? MY OPINION IS THAT THEY WOULD NOT. EVEN PAY FOR THE ATTORNEYS FEES TO ORGANIZE THE CORPORATION MUCH LESS ATTRACT ANY MONEY TO FINANCE SUCH AN IDIOTIC ADVENTURE.

DG Swinford

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

Received
DSC-TWE
NOV 23 1994
D77-olym-404-00

COMMENT FORM

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): J. LARRY McHONE
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): I HAVE SEVERAL AFFILIATIONS BUT THIS IS AS A PRIVATE CITIZEN

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:
THIS HAS BEEN STUDIED TO DEATH IT IS TIME TO MAKE A DECISION. THE MONEY SPENT ON MORE STUDYS WOULD BE BETTER SPENT BUILDING FISH BY PASSES.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: IN MY OPINION THE FEDERAL GOVERNMENT SHOULD BUY THE DAMS FROM THE MILL (DARISHOWA OR JAMES RIVER) THEN RE LICENSE THEM AND SELL THE POWER. AT LEAST THE MONEY INVESTED WOULD PRODUCE A RETURN.
BASED UPON ITEMS 11 AND 12 OF THE NOV 1ST 1994 QUESTIONS

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

AND ANSWERS HAND OUT AND MY OBSERVATIONS OF THE WEATHER DURING MY 62 YRS ON THE PENINSULA, CONTAINING THE SILT AFTER THE DAM REMOVAL WILL BE IMPOSSIBLE. THE RESULTING SILT FILLED RIVER AND RUN OFF INTO THE STRAITS WILL NOT ONLY KILL OFF THE FISH IN THE RIVER BUT ALSO OTHER FISH AND SEA LIFE WITHIN THE FLOW AREA.

THE NORTH OLYMPIC PENINSULA HAS SEVERAL RIVERS BUT ONLY THE ELWHA HAS DAMS, YET THE FISH RUNS ARE DOWN ON ALL. OVERFISHING BY THE TRIBES IS ONLY ONE CAUSE FISHING ON THE HIGH SEAS IS ANOTHER ALONG WITH NEGLECTED AND CLOGGED STREAMS FROM LOGGING & CONSTRUCTION. WE SEEM TO BE MAKING PROGRESS ON THE LOGGING & CONSTRUCTION PROBLEM BUT THE NETS ARE STILL IN THE RIVERS. LETS PAY THE FISHERMEN NOT TO FISH JUST AS WE PAID THE WHEAT FARMERS NOT TO FARM. FROM OTHER ARTICLES I HAVE READ THE COST PER POUND TO SAVE FISH IS UNBELIEVABLE. FISH PASSAGES MAY NOT PRODUCE THE FULL RETURN BUT WILL DO MORE THAN TAKING OUT THE DAMS AND TAKING A BIG RISK ON THIS PLAN TO WORK. THE BAKER DAM PASSAGES SEEM TO WORK.

RESTORING THE HABITAT CAN BE ACCOMPLISHED BY PLACING DOWN TREES IN THE STARAM BEDS AND DUMPING GRAVEL INTO THE RIVER TO BE WASHED DOWN IN A NATURAL WAY.

PLEASE START NOW BY PURCHASING THE DAMS FROM THE MILLS SO THEY CAN GO ON WITH THEIR JOB OF MAKING PAPER. START PROJECTS TO IMPROVE THE FISH RUNS ON THE HOH, DUNGENESS, CYRE, CLALLAM, NOOKSACK, SEKIU, SOOES QUATTE, BIG RIVER, SOLEDUC, BOGACHIEL, CALAWAH, DICKEY & TWIN RIVERS, NOT TO MENTION SOME OF THE LARGER STREAMS SUCH AS MORSE CREEK.

SINCERELY

J. Larry McHone

Received
DSC-TWE
NOV 23 1994
C78-olym-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Pamela L. Lowry

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): homeowner on beach at Freshwater Bay

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

Water quality and availability for wells in the area.
Potential flooding and means to prevent this.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

I believe additional studies would be necessary only if present information does not pinpoint trouble areas and methods to solve problems are not available.

OTHER COMMENTS: As a homeowner on the beach at Freshwater Bay I am excited about having the dams removed and the fish runs returned as long as proper measures are taken to protect the enviorment while this is happening. This area is one of the most beautiful places in the Country and offers a real opportunity to restore the land to its natural condition. There is no reason for a private company to own dams on a public river when their only effect is to provide power for their own use. After attending a public workshop on this subject, I was very upset to learn the Elwha Dam is potentially dangerous. Since these dams offer little or no flood protection and do pose a hazard, I feel they should be removed as soon as possible. The method of piping the silt down the mountainside sounds like the best option to protect the river and protect against flooding and fish kill situations.

This is a project which can be completed with wonderful results. The costs are one-time costs and do not represent a continuing expense to taxpayers. This is our chance to reverse the ill effects of man on the land, to return a fish population that will benefit our Native American brothers and our children and generations to come. Please don't let this opportunity pass us by.

The EIS was a very informative document and I would like to thank you for the copy I received and congratulate those responsible for the writing, research and the publication. You did a wonderful job!!

Pamela L. Lowry
11/16/94

Please continue your comments on the back of this sheet if needed.

Received
DSC-TWE
NOV 23 1994
C79-olym-404-a6

11/19/94

Sarah Bransom
National Park Service, Elwha River Project
PO Box 25287
Denver, CO 80225-0287

I do support the preferred alternative of removing the dams! Its the only way to restore the river system as required by law. If we can remove these dams to restore the salmon runs to their full potential, then what an awesome lesson to be learned by the rest of the country, and perhaps other countries.

The removing of these dams, which is supported by a coalition of environmentaliets, fishermen, indians and the dam owners themselves, would create some good paying jobs for workers on the Olympic Peninsula.

Thank You,
Bill Alvord
William G. Alvord
[redacted]

Nov 16, 1994

Received
DSC-TWE
NOV 23 1994
C80-olym-404-a6

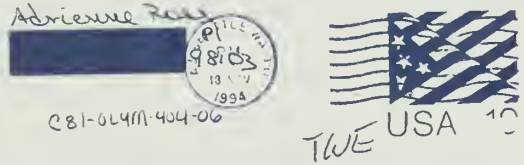
Dear Ms Bransom,

I can add our voices to those who are supporting the removal of the Elwha River dams.

We love the Olympic Park and have hiked and enjoyed its trails from sea level to ski level, for most of our lives.

We feel it is so very important to return the Elwha to its natural state and to restor the salmon runs.

Sincerely,
Roy & Ruth Etten
[redacted]



Adrienne Ross
[redacted]
98103
1994
C81-OLYM-404-06
TWE USA
Sarah Bransom
National Park Service
Western Team
PO Box 25287

On-Dam the Elwha River -
regardless of the mid-term elections
let's do the right thing & not only
the pragmatic ones. Those dams
have decimated salmon & trout
fisheries. Let's restore the runs
& bring back a sustainable
economy to the region.
Adrienne Ross

Received
DSC-T
NOV 23 1994
C81-OLYM-404-06

NOV 23 1994
C81-OLYM-404-06

CARSTEN LIEN
[redacted]
(206) 522-3403

November 18, 1994

Ms. Sarah Bransom
National Park Service
Elwha River Project
Box 25287
Denver, CO 80225-0287

Re: Removal of the Dams on the Elwha River in Washington State.

Dear Ms. Bransom,

I support the Interior Department's preferred alternative of removing both of the dams on the Elwha River. By so doing the ecosystem in the Elwha basin can over time be restored as required by law. The destruction of the river's salmon runs when the dams were built, contrary to then existing state law, serves to illustrate well the horrors of allowing a politically powerful industry to save some construction costs at a very high cost to the economy of the whole region. To assess the true cost of Elwha power, the value of the destroyed salmon needs to be added annually to the very low production costs of the power generated.

Environmentalists, fishermen, Indian tribes, and even the owners of the dams stand together in calling for the removal of the dams. Failure to do so will result in on-going damage to the region. The power is easily replaced; the salmon runs in the Pacific Northwest are hovering on the edge of extinction.

Sincerely,

Carsten Lien

Carsten Lien

cc: The Honorable Patty Murray
United States Senate

The Honorable Norm Dicks
U.S. House of Representatives

Received
DSC-TWE
NOV 23 1994
C83-olym-404-06

November 17, 1994

Sarah Bransom
National Park Service, Elwha River Project
PO Box 25287
Denver CO 80225-0287

I am writing to express my support for the removal of the out-dated Elwha River dams as it is the only way to restore the salmon and the ecosystem to their original conditions. This will be a positive event for the environment and the local community too. The jobs that would be supported by a healthy salmon industry far outweigh any up front costs to this project.

I urge you to avoid the extinction of this magnificent species by ending the gridlock and work towards the removal of these dams, and towards the restoration of the Elwha.

Sincerely,

Mark Ostersmith
[redacted]

CC: Senator Patty Murray
Representative Norm Dicks
Senator Slade Gorton

Received
DSC-TWE
NOV 23 1994
C84-olym-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Denise Diimmel
MAILING ADDRESS: [redacted]
AFFILIATION (IF ANY):
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:
NO

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: None

OTHER COMMENTS: I do not want the Dams out.
Be cause it will Destroy the area.

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

The removal of The Dams will not help the fish to come back be cause. it is too heavily fished by the Indians. I feel the Indians shouldn't net as hearley as they do. Indians should be regulated just like the white men.

It will destroy the area by having a higher unemployment rate for the community.

Received
DSC-TWE
NOV 23 1994
C95-owym-404-04

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

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NAME (PLEASE PRINT CLEARLY): Marion & Helen Craker
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): Private Citizens
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: Flooding should be studied more. If the Indian settlement gets flooded we will all have to pay for it. The Indians are for it because it won't cost them a red Cent. Why not try fish ladders first.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: If so much money is allocated & they run out who is going to pay? The costs are always greater than the Estimates.

OTHER COMMENTS: When that Clean Power is lost, Canada won't have enough power with all the people expected in the north-west.

Please continue your comments on the back of this sheet if needed.

Received
DSC-TWE
NOV 23 1994
C86-olym-404-06

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)
National Park Service
Department of the Interior

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): LES E. ROLINE
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): AGENT ~~#~~ J.L.S. #2, PORT ANGELES
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:
SLUDGE BEHIND DAMS - IS SAID TO BE TOXIC TO FISH, IS IT ALSO TOXIC TO SHELLFISH OR OTHER SPECIES IN STRAITS?
IF DAMS WERE REMOVED, HOW COULD ELWHA FLOODS BE CONTROLLED TO PROTECT LOWER ELWHA RESERVATION?
THE INITIAL GLINES CANYON DAM (ACCORDING TO HARRIET FISH HISTORIAN) HAD FISH LIFT OR LADDER INSTALLED & MAINTAINED FOR 2YRS. AND THEN ABANDONED WHY & BY WHOM?

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:
OTHER RIVERS WITHOUT DAMS ARE NOT EXPERIENCING A POSITIVE GAIN IN FISH RUNS & SPAWNING & REPRODUCTION.
LIFT OR LADDER SHOULD BE POSSIBLE FOR A COUNTRY WHO CAN SEND VESSELS TO MOON, AND IN SPACE GENERALLY.
FOR CITY & COUNTY POWER & WATER, TO MILLS & COMMUNITY, SUPPLY SHOULD BE RETAINED BY RETAINING THE DAMS.

OTHER COMMENTS:
IF DAMS WERE BOUGHT; FROM WHOM ONP, DOI?, WHO WOULD BE THE OWNER & NEW LICENSE HOLDER?
WATCH OUT FOR CHANGE OF ACQUIFER IF DAMS ARE REMOVED.

Please continue your comments on the back of this sheet if needed.

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)
National Park Service
Department of the Interior

Received
DSC-TWE
NOV 23 1994
C87-olym-404-06

COMMENT FORM

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NAME (PLEASE PRINT CLEARLY): CAREY MCAFEE
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): REALTOR WITH WINDERMERE REAL ESTATE / PT. ANGELES
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: IN MY OPINION, FISH "ENHANCEMENT" & "RESTORATION" SHOULD BE TESTED ON OTHER PENINSULA RIVERS (EG. DUNGENESS, LYRE, BOGACHIEL) THAT DO NOT HAVE DAMS BUT HAVE EXPERIENCED DEPLETED FISH RUNS SIMILIAR TO THE ELWHA RIVER. SINCE THE REMOVAL OF A DAM TO BRING FISH POPULATIONS UP HAS NOT BEEN TRIED, HOW CAN YOU CONSIDER SPENDING SO MUCH OF THE TAXPAYERS MONEY IN A GAMBLE TO ACCOMPLISH THIS?

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: I ATTENDED THE EIS AM HEARING IN PORT ANGELES ON 11/15/94. IT WAS EVIDENT TO ME YOU SHOULD SPEND MORE TIME RESEARCHING EVERY ASPECT THE IMPACT THE DAM REMOVAL WILL HAVE. I SPENT MOST OF MY TIME AT THE FISHERIES WORKSHOP AND WAS 1 OF MANY "FRUSTRATED" PARTICIPANTS WHO COULD NOT GET A STRAIGHT ANSWER OR WAS TOLD THAT THEIR QUESTION WOULD BE ANSWERED AT ANOTHER WORKSHOP. BUT WHEN THE

~~OTHER COMMENTS:~~ SAME QUESTION WAS ASKED AT THE OTHER WORKSHOP YOU WOULD BE REDIRECTED TO ANOTHER WORKSHOP GIVE FISH LADDERS / TRUCKING MORE TIME & EFFORT - IF YOU DO REMOVE THE DAMS & THE FISH DON'T RETURN WHAT THEN? PLEASE RELICENSE THE DAMS

Please continue your comments on the back of this sheet if needed.

Respectfully
Carey McAfee

19 November 1994

[redacted]

Received
DSC-TWE
NOV 25 1994
C88-olym-404-06

Dear Ms Sarah Bransom,

I fully support the National Park Service's proposal to restore fisheries on the Elwha River by removing both the current dams. After reading the Draft EIS, I conclude that

- dam removal would also remove the source of broken promises to the Native tribes involved, allowing them to resume accustomed & traditional ways
- dam removal would not significantly harm cultural resources, with the exception of the historic dams themselves, but I think the loss of the dams would be well mitigated by the proposed measures.
- dam removal would benefit the local economy and natural environment
- dam removal would help save our priceless anadramous fisheries.

I commend the NPS on an excellent Draft EIS, and urge you to proceed!

Sincerely,

Martha Jackson

Martha Jackson
U.W. graduate student in anthropology (speciality. archaeology).

Elwha River Ecosystem and Fisheries Restoration ACCEPTING
Environmental Impact Statement(s) COMMENTS THRU 12/3/94

National Park Service
Department of the Interior

Received
DSC-TWE
NOV 25 1994
C89-olym-404-06

COMMENT FORM

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NAME (PLEASE PRINT CLEARLY): CAL MOECK

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): NONE

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: ① MORE FOCUS ON ALTERNATIVE METHODS PERMITTING FISH PASSAGE WITHOUT REMOVING the DAMS.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: ① THE ECOSYSTEM will be violated with a DAM REMOVAL APPROACH, REQUIRING YEARS & YEARS of ADJUSTMENT AFTERWARD — with NO GUARANTEE THAT IRREPARABLE HARM won't be done to the EXISTING HABITAT, WETLANDS & STREAM bed ② I am convinced that all these Studies/RESEARCH have NOT been charged with COST ACCOUNTABILITY as they proceed with their work. NO ONE AT ANYTIME should EVER be given SUCH ASSIGNMENTS without being held ACCOUNTABLE for a BALANCED CONSIDERATION between the SOCIO-ECONOMIC IMPACTS/BENEFITS

OTHER COMMENTS:

Please continue your comments on the back of this sheet if needed.

PLEASE SEE REVERSE

C89-Olym-404-06

COMMENTS CONTINUED:

(3) IT IS ACKNOWLEDGED & AGREED THAT THE REDUCTION OF THE FISH POPULATION IS ATTRIBUTABLE TO NUMEROUS FACTORS, YET THE FOCUS OF RESTORATION IN THIS STUDY IS ON ONLY ONE OF THOSE FACTORS — DAM REMOVAL!! TO PROCEED WITH DAM REMOVAL WITHOUT EQUAL EMPHASIS ON THE OTHER FACTORS THAT HAVE SIGNIFICANT IMPACT ON THE FISH POPULATION IS IRRESPONSIBLE, COSTLY, INEFFECTIVE AND POSITIVELY WILL NOT BE SUCCESSFUL.

IF THERE ARE 4 OR 5 KNOWN PROBLEMS WITH ANY SITUATION, WHY WOULD ANYONE BELIEVE THAT BY RECTIFYING JUST ONE of the 5 PROBLEMS the WHOLE SITUATION COULD BE RESOLVED ??

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)
National Park Service
Department of the Interior

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NOV 25 1994
C90-Olym-404-0

COMMENT FORM

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NAME (PLEASE PRINT CLEARLY): Herbert R. Beleth
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:
I would oppose removal of the dam or dams; for the following reasons.
1. The cost would never justify any potential benefits
2. No experience exists to assure environmental improvement.
3. Loss of pollution-free electricity generation
4. Release of decades-worth of sediments with unknown effects.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:
5. The possible potential increase in salmon propagation could be much more cheaply accomplished by a fish ladder scheme
6. I believe further studies to be a waste of money because of a lack of historical evidence of this kind of a proposal.

OTHER COMMENTS:

Please continue your comments on the back of this sheet if needed.

Received
DSC-TWE
NOV 25 1994
091-olym-404-06



November 20, 1994

Sarah Braneom
National Park Service, Weetern Team
12795 Alameda Parkway
Denver, Colorado 80225-0287

Regarding: Comment on Elwha River Ecosystem Draft EIS.

Greetinge,

My name ie Calmar A. McCune. I live at Port Townsend, Washington. I spend time occasionally hiking in the Elwha River canyon waye, attempting to advance upriver into the Grand Canyon of the Elwha.

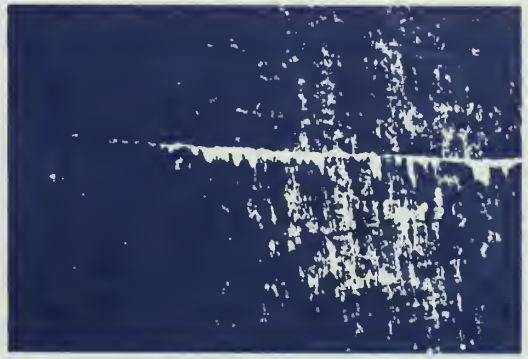
My main comment ie that I favor removing both dame. The reaeons set forth in the Draft EIS for removal of the dams are very sound and forthright.

My backup comment supporting the Draft EIS ie a reality that is overlooked in the entire procees. The reality ie a bit complex, but in general it is that when the dams were erected it wae then unknown what might be the eeiemic disturbance potential for the underlying earth. Now we know. We only found out in the last six years. It ie now known that there is a huge, angular fault from Canada to California about thirty miles below the dame that hae the age, the movement and the geological tell-tell signs of generating earthquakes at the level of a size nine Richter Scale magnitude. A copy of the October 26, 1994, Seattle Timee article about that fault and more recently diecovered nearby fault ie attached.

Another backup comment deals with the phenomenon of the relationship between etructural steel and concrete. Four yeare ago I noticed cracke in a re-enforcement eteel strengthened 1954 concrete block wall in a commercial building that I own. I hired a structural engineer to explain why the wall was cracking and he had no answer. I then took a stone chieel and a mason'e hammer and I chipped away part of the wall to follow a crack to see if I could learn why the wall wae cracking. Once I reached the encaeed re-bar the answer wae obvioue. Moisture had reached the steel causing it to ruet and the rust swelled, expanded. The expansion actually "exploded " the encasing concrete.

To avoid that problem today, like when a concrete-reinforced ferry dock is constructed, the rebar ie taken to Auburn, Washington, where it is placed in a epecial vacuum and epoxy is then coated onto the re-bar. When the dams were erected the etructural steel wae not coated with epoxy. As a result some of the eame steel may have rusted and thereby caused cracks in the dam walls.

For example, the photograph that follows showe seepage from within the upper dam wall. That seepage clearly ie from a crack in the cement, either from rust or a cold-joint at the time of the cement pour. Either way, the crack ehowe the wall ie not an integral unit.

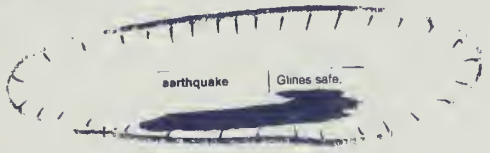


The photograph that follows allowe you to eee many euch cracke in the wall of the upper facility.



Regarding earthquakes and the upper dam I once heard a person from Clallam County eay that the eurrounding rock was etout and earthquake resietant. But that ie not so. The surrounding rock ie fragmented and hae no coheeiveness. The second photograph in the draft EIS, at the page marked "Summary," ehowe fracturee in the weet wall.

In the draft EIS at page 22 the table 1 ie inaccurate. It statee:



In the event of a eize 8 or 8.5 or 9 or 9.2 Richter Scale magnitude earthquake with the epicenter nearby, how can it be eaid that the upper dam, Glines Canyon Dam, ie "safe"? It cannot. The dam would collapee and campers below would drown and fish below would be covered with sediment.

In fact, because of the new knowledge of the greater seismic riek, could that mean that even in-action would be inappropriate? In other worde. doee it mean that the owner of the dams now has a duty to retro-fit each dam to withstand an earthquake of the magnitudes now known to chronically occur under the dams? If so, then I wonder if the liability insurer of the owner of the dams has been put on notice of the increased exposure in the event the dams are not retro-fitted. The increased liability premium may be greater than the cost of alternative electricity. If the dame need to be retro-fitted, in addition to the owner, ie the federal government obligated to ensure public safety by requiring that the owner retro-fit - in the event the owner hae prior to that time refused to retrofit? Maybe, the cost of retro-fitting two dame would be greater than the cost of alternative electricity.

It now appears in the local newspapers that with the Republicans in control of the US legislature that money will not be forthcoming for removal of the dams. If retro-fitting ie required, that coet, alone, may exceed the coet of removal. If Port Angeles Harbor ie loeing its protective spit because of the dams, then, maybe, the coet of an artificial epit will exceed the coet of dam removal. If the unique salmon that run the Elwha are allowed to go extinct, maybe the loss of that fiehery will, over time, exceed the cost of dam removal.

Good luck in your review. Thank you for reading thie. The Draft EIS is excellent. I support removal of each dam. If we wait the eame dams will be removed by the force of gravity.

Very truly yours,
Calmar A. McCune,
[redacted]

Received
DSC-TWE

NOV 25 1994
C91-OLYM-404-06

November 20, 1994

Sarah Bransom
National Park Service, Western Team
12795 Alameda Parkway
Denver, Colorado 80225-0287

Regarding: Elwha Dams

About two hours ago I mailed to you my comment on the Elwha River Ecosystem Draft EIS amd stated in it that a certain newspaper clipping was attached. I forgot to attach it. It is enclosed now. Please attach.

Very truly yours,

Calmar A. McCune
PO Box 845
Port Townsend, Washington 98368

THE SEATTLE TIMES SECTION B WEDNESDAY, OCTOBER 26, 1994

Planning for a NW catastrophe

By Bill Dietrich
Seattle Times science reporter

In a sense, Seattle was in the eye of a disaster yesterday.

At one end of the nation's top geologists met to quantify all manner of natural hazards, from a newly discovered fault under Whidbey Island to asteroids from the sky.

At the other end, the Federal Emergency Management Agency (FEMA) convened to determine how best to respond to such hazards.

Together, they provided insight into the causes and consequences of catastrophes from the perspectives of people who study them and those who clean up the mess.

For Uncle Sam, after footing the bill for disasters ranging from hurricanes in Florida and Hawaii to floods on the Mississippi and earthquakes in California, the new watchwords are Be Prepared.

FEMA mitigation director Richard Moore said such calamities are costing the federal government an average of $20 billion a year. The government wants to switch from picking up the pieces to forestalling damage.

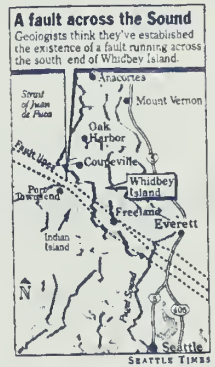
The goal is to cut the loss in life and property in half over the next 25 years. More than 250 people meeting at Seattle Center were scheduled to advise FEMA on precautions it could promote, from strengthening bridges and schools to encouraging better building practices.

No place is getting more federal scrutiny than the Puget Sound basin, where geologists have turned up a litany of potential dangers.

Sam Johnson, a U.S. Geological Survey scientist who helped detect the Whidbey fault, said the warnings are coming because his agency is shifting its emphasis from mapping minerals and fossil fuels to identifying danger spots.

Among the local hazards discussed yesterday at the annual conference of the Geological Society of America, meeting at the Washington State Convention and Trade Center:

• The Whidbey Island fault joins the Seattle fault as two that could generate magnitude 7 or greater earthquakes. Both are caused by the drifting of the crust that contains the Olympic Mountains north to where it bumps against Vancouver Island.



The Whidbey fault runs from northwest to southeast along Admiralty Inlet and marks the line of slippage between the Olympic plate and the Cascade Range plate. Geologists recently found it from sound waves done in a seismic reflection survey by Mobil, Chevron and Atlantic Richfield oil companies more than two decades ago.

Johnson said that it could rupture along a 90-kilometer-long rift and that the resulting tremor would "be comparable to the large earthquakes that have occurred on the San Andreas fault in this century."

Since 1970 there have been three quakes on the Whidbey fault with a magnitude greater than 3, including a 4.7 in 1976. Geologists don't know how frequently a big earthquake will come, although they have found evidence of a huge one 100,000 years ago.

The Seattle fault runs west to east from Bainbridge Island to Lake Sammamish and is caused by the compression of the Olympic plate as it hits the buttress of Vancouver Island.

It caused a quake 1,100 years ago that sent sections of forest sliding into Lake Washington, lifted Puget Sound beaches and sent tsunamis crashing into cliffs.

Johnson said there probably are additional major fault systems west of Mount Rainier and underneath Hood Canal.

• Under way is intense study of the dangers from a potential eruption of Mount Rainier. About 60 mudslides have rumbled off the volcano over the past 10,000 years, some reaching as far as Auburn and Tacoma. Scientists estimated this spring that a big new eruption could kill hundreds or even thousands who live on top of old debris flows.

On Monday, geologists estimated that over the past 4,000 years, the Cascade Mountains have averaged two volcanic eruptions per century. Mount Rainier last erupted about 150 years ago and Mount St. Helens in 1980.

• Research continues into the possibility of a huge earthquake off Washington and Oregon in the subduction zone, where the ocean floor dives under the North American continent. This movement can generate earthquakes ranging from the 6.5 magnitude crustal quake that rattled Puget Sound in 1965 to a deep subduction-zone quake that could reach magnitude 8.5 and spark a huge tsunami wave.

The last such big earthquake occurred 300 years ago.

By comparison, the 1989 Loma Prieta earthquake that rocked the Bay Area and killed 62 was 7.1. Each full-number increase in the scale represents a tenfold increase in earthquake energy.

A quake of magnitude 8.2 in the Seattle area could cost industry alone $84.4 billion, a research arm of the insurance industry has told FEMA.

Received
DSC-TWE

NOV 28 1994
C92-Olym-404-06

November 15, 1994

Sarah Branscom
Nat. Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Sarah Branscom,

My name is Kendra R. Cox. I have been a resident of Washington State for twenty years. I feel a strong connection to this state, this land and protecting the delicate ecosystems within it is very important to me. I am writing to you about my concern for the Elwha River ecosystem.

It is my understanding that there is a proposal to remove the two Elwha River dams. I fully support this proposal as there are so many reasons to remove these dams. Removal of the dams is the best way to restor this diverse ecosystem which was not even taken into account when they were built. A great portion of the Elwha River ecosystem runs through the Olympic National Park. As a member of the National Park Service it is your obligation to protect this ecosystem. Restoring the five species of Pacific salmon which are threatened currently without any means of fish passage would generate $5 million per year of new income for commercial, tribal and recreational fishermen. Failure to remove these two dams will cost far more in the long run leading to gridlock and litigation, extinction for the salmon runs and the loss of nearly 400 jobs at the local mill.

The most important reason for removing these two dams is to honor the Lower Elwha S'Klallam Tribes Treaty of Point no Point. Under the constitution, upholding a treaty is the supreme law of the land. Blocking the fish from passage through the two dams is a clear violation on the Tribs treaty rights to fish. As a United States Citizen, I will not tolerate the dishonoring of Native American treaty rights. The dams have also caused flooding over their sacred ceremonial sites.

There just is no reason not to remove these two dams. We have an opportunity to set right a terrible mistake of the past. We have an opportunity to restor a diverse ecosystem and to restore the Elwha S'Klallam peoples treaty rights.

Please protect Washington state's ecosystems and honor the treaties we have made with Native American peoples.

Sincerely

Kendra R. Cox

Received
DSC-TWE
NOV 28 1994
c93-olym-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): DAVID SIRRINE JOHNSON

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

1. CHANGES TO FLOOD PLAIN AND IMPACT ON PROPERTY OWNERS (EG., WELLS, FLOODING, EROSION, AESTHETICS, WATER ACCESS, etc)
2. SALMON LOSS DUE TO NETTING AT RIVER MOUTH + COMMERCIAL NETTING

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

1. REPORT STATES ONLY THAT FLOOD PLAIN WILL INCREASE / VERY LITTLE INFORMATION ON EXTENT
2. WHAT LIMITS WILL BE USED TO PROTECT RETURNING FISH

OTHER COMMENTS:

AS A HOME OWNER ON THE FLOOD PLAIN, I AM CONCERNED BY THE STATEMENT 'THE RIVER BED WILL RISE 3.5 FEET'. MY WELL AND PUMP HOUSE WILL BE IMPAIRED AND I WILL LOSE USEABLE LAND. WHAT MITIGATION CAN I EXPECT IN A WORSE CASE SITUATION?

Please continue your comments on the back of this sheet if needed.

Howls from the Coyotes

Received
DSC-TWE
NOV 28 1994
C94-olym-404-06

[redacted]

November 21, 1994

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, Co. 80225-0287

Dear Ms. Bransom:

I favor the preferred alternative of removing the Elwha River Dams as a positive step in restoring the river's ecosystem.

I believe the long range benefits of a free flowing river far outweigh the benefit for local mill operations.

Sincerely,

Gordon W. Boyd

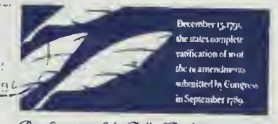


CC: The Honorable Patty Murray
United States Senate
Washington, DC 20510

The Honorable Norm Dicks
U.S. House of Representatives
Washington, DC, 20515

Howell Publications Inc (Alpine Copper News) 1983

[redacted]



Ratification of the Bill of Rights USA 19

C96-0L4M-404-06

Sarah Bransom
National Park Service, Elwha River Project
Box 25287
Denver, Colorado

11-19-94

Received
DSC-TWE

NOV 28 1994
C96-0L4M-404-06

Dear Ms. Bransom,

I support the restoration of the Elwa River ecosystem by removal of the dams.

Thankyou,
O'Neill A. Lindsay

goodhue

November 21, 1994

Received
[illegible]
NOV 28 1994
C95-0L4M-404-06

[redacted]

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom,

I am writing to support the idea of removing the Elwha dams. And yet I wonder what the immediate impact of such action will be.

Considering the long term benefit, however, I do agree that if done properly the removal of the dams will enhance the river's ecosystem and perhaps restore the salmon run and economically benefit many sectors of our populace.

Therefore I favor the restoration of the Elwha to be free of dams. Thank you for your fair consideration of this important matter.

Sincerely,
Katherine A Goodhue

cc: Rep. Dicks
Sen. Murray

Received
DSC-TMS
NOV 28 1994
D97-Olym-404-00

[redacted]

November 20, 1994

Sarah Bransom
National Park Service, Western Team
12795 Alameda Parkway
Denver, CO 80225-0287

Dear Ms. Bransom:

Thank you for having a workshop in Port Angeles and providing opportunity to comment on the Draft EIS for the Elwha River Ecosystem Restoration project. The following comments are respectfully submitted for consideration in preparing the final document.

1. REMOVAL OF LEVEES

The stated purpose of the Draft EIS is to consider ways to **fully restore** the Elwha ecosystem. The draft report finds the only way to fully restore the ecosystem is through removal of both dams.

A glaring deficiency in the document is that it fails to address removal of the levees at the mouth of the river. Removal of all levees, along with removal of both dams is obviously the only way to achieve **full restoration.** Removal of the levees would allow the river to reclaim it's natural floodplain and provide a significant amount of fish habitat.

Rather than recommending removal of the levees to achieve full restoration, the report recommends increasing the height of the levees, construction of new levees, and dredging the river bed. This recommendation would not only fail to achieve full restoration, it would cause additional adverse impacts on the fisheries and ecosystem. Constructing new levees or incressing the height of existing levees would have an adverse impact on adjacent wetlands and floodplain. Dredging the river bottom would remove sediments and destroy fish habitat.

Essentially, failure to remove the levees would be at cross purposes with dam removal - the sediment and fish habitat created by dam removal would be destroyed by dredging the river.

Additionally, there is no guarantee that on-going dredging would be permitted by the various permitting agencies. Experience with the Skagit River, Nooksack River, and other rivers in the northwest has shown that levees do not provide adequate flood protection without periodic dredging. Experience with these

rivers also shows that it can be difficult, if not impossible, to obtain permits for dredging. The on-going cost of dredging, levee construction and maintenance, and compensation to the inevitable flood victims has not been included in the analysis.

By failing to recommend removal of the levees, the Department of Interior has essentially agreed to less than full restoration of the river. Thus the discussion is not about partial restoration vs full restoration, but rather, which of the various partial restoration proposals can best meet the competing demands of the public.

2. SEDIMENT CONTROL

Small and large construction companies alike are required to go to great lengths to prevent any siltation from entering streams, rivers, wetlands, etc. Now comes the government and proposes to purposely dump millions of cubic yards of sediment into salmon habitat. In the process of "saving" the river, the last remaining salmon run could be wiped out from the huge influx of sediment.

3. FISH STOCKS

The Draft EIS rates the availability of stock as "good" for only one of the native fish runs. Stock availability for the other nine runs is marginal or nonexistent. Yet despite the dim prospects of obtaining stocks for native fish runs, the Draft EIS proclaims that restoration potential from removing both dams is "good" to "excellent."

This is like a farmer saying, "I have NO SEEDS to plant this year, but my soil is good, the rain is adequate, and sunshine is plentiful, so therefore, I will have an EXCELLENT CROP."

If stocks of the native runs are not viable, it does not matter if the dams are removed or not - either way there will be no native fish runs.

The logical alternative to stocks of native Elwha River fish, would be to obtain stock from other Washington or Alaska rivers. Unfortunately, this would be against the prime directive of the Park Service - no non-native species allowed. If the dams are removed, we are very likely to end up with no dams, and no fish.

4. FISH COUNTS

The Draft EIS does not include any historical fish counts of the Elwha River. A number of long time local residents state that the Elwha continued to produce an abundance of large fish for 40 or more years after the dams were built. Research should be conducted on historical fishing records to determine the accuracy

of these reports. If it is true that large salmon runs existed for many years after the dams were built, then we should not be looking to dam removal to solve the problem.

5. DURATION OF FISHING RESTRICTIONS

The Draft EIS states that fishing will need to be restricted for an unspecified period of time. At the public workshop, a fisheries expert from the Elwha Tribe indicated that all fishing would need to be restricted for at least 15 years. Howevsr, a ssdiment expert indicated that it would be at least 50 years before the river could support fishing activity.

The Draft EIS does not adequately address or provide any documentation of the length of time it will take for the fishery to fully recover. In addition, the final report will need to address the Elwha Tribe's willingness to cease fishing activities for such a long period of time. It will also need to address any compensation due the Tribe for loss of fishing over this extended period.

6. CULTURAL RESOURCES

The Draft EIS does not address the impact of Dam Removal on ths culture, customs, and heritage of the non-native population of the Peninsula. While the impacts to Tribal culture are addressed, assumptions are made about the economic benefit of dam removal to the Tribe without any supporting data. The report does not take into consideration the other economic activities, such as casino gambling, that have a greater potential to improve the Tribal economy.

7. ALTERNATIVE SOURCES OF ENERGY

Comments made at the public workshop by dam removal advocates, and recent statements by the Secretary of the Interior, indicate that the Elwha Dam Removal project is just a dress rehearsal for removal of Columbia River dams.

Hydroelectric power is a cheep, renewable, and clean source of energy. While it is true that dams alter the natural environment, we need to weigh the benefits against the risks. Removal of dams may improve fish habitat, but the unintended consequence may be greater use of fossil fuels, and the resulting pollution created by both extraction and burning of fossil fuels.

In addition to being a more polluting source of energy, fossil fuels have also been the object of embargos and wars. It wasn't too many years ago that the Nation was desperately searching for alternatives to fossil fuels. While the supply of fossil fuels seems to be adequate at the present time, there is no guarantee

that this situation will continue. When the next OPEC oil embargo or Gulf War erupts, we may wonder why we were in such a hurry to destroy a clean and safe source of energy. The Draft EIS does not adequately address the issues of replacement sources of energy.

8. EMERGENCY POWER SOURCE

The North Olympic Peninsula is isolated from major sources of power, and is at the end of the BPA power grid. In the event of a natural disaster or terrorist attack (during the Gulf War terrorist attacks were a concern) the Peninsula could be cut off from the BPA power. The Elwha dams represent the only opportunity for the Port Angeles area to be able to meet basic emergency needs (hospitals, emergency response teams, etc.) in a crisis. The final EIS should address this issue.

9. COST BENEFIT ANALYSIS

The Draft EIS is easy to read, but does not contain sufficient cost estimates on any of the options or mitigation. Nor does it contain a thorough analysis of the supposed economic benefits of dam removal. A thorough cost benefit analysis should be undertaken prior to a decision being made on dam removal.

10. ANOTHER ALTERNATIVE

An alternative not discussed in any of the previous reports, is to relicense the dams and require James River to set aside a certain amount of money each year for restoration. At the end of the useful life of the dams, this money (rather than tax money) could be used to restore the ecosystem. During the interim, the Elwha could be used as an experimental area for various fish passage and mitigation techniques.

One experimental idea that could be considered, is using a dredge and piping sediment downstream where it is needed for spawning habitat. This combined with fish ladders might provide for improved fisheries as well as an inexpensive and non-polluting source of power.

In addition to these general concerns, I would like to offer the following specific comments:

a. Page 26, paragraph two: Freshwater Bay is west of the Elwha River.

b. Page 40, paragraph six, third sentence: "...undergo physiological changes allowing them to exist in saltwater...." The context of the sentence indicates that the word "saltwater" should be "freshwater."

c. Page 48, paragraph six, fourth sentence: "...large areas of the marine waters of California, Oregon, and Washington were closed to all salmon fishing." This should be corrected to clarify that salmon fishing was closed only to non-Indian

fishing. Indian commercial fishing and river netting continued.

In summary, dam removal requires careful consideration of the costs and benefits of the proposal. Removal of the Elwha dams would not guarantee a return of the native fish runs, and the potential adverse impacts of the action have not been thoroughly analyzed in this Draft EIS. The Government should not rush into removing the dams without carefully considering all of the consequences.

As a final comment, I would like to see a document addressing the cumulative impacts of all of the proposed Government actions on the Peninsula. I realize this is out of the limited jurisdiction of the Park Service, but at some level, this needs to be addressed.

The Olympic Peninsula is currently facing severe logging restrictions, but seems to be weathering the storm. Now we are faced with a new onslot of Federal initiatives: dam removal; a new National Marine Sanctusry in the Strsits; more threatened and endangered species; burn bans due to the Clean Air Act; expensive improvements to water systems as a result of the Clean Water Act; and the list goes on. Whether we can withstand these new storms looming on the horizon remains to be seen.

It is time to take a coordinated look st the plans of all of the various Government agencies as they relate to the Olympic Peninsula. The cumulative impacts these proposals will have on the environment, economy, customs, and cultures of all of the peoples of the Olympic Peninsula must be addressed.

Sincerely,

Melanie J. Caltrider

cc: Senator Slade Gorton
Senator Patty Murray
Congressman Norman Dicks

Received
DSC-TWE
NOV 28 1994

C98-olym-404-06 11/12/94

Dear Ms. Bransom,

I Am writing to express My Adamant support for Removing the 2 Dams on the Elwha River & Restoring the Salmon Runs.

I Believe this is Long overdue & Hope that it will Proceed As quickly As Possible.

Thanks for your Help,

Chris Herman

WINTER SUN
CHRIS HERMAN
[redacted]

cc Patty Murray
Norm Dicks

Received
DSC-TWE
NOV 29 1994
C99-0yjm-404-0k

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

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Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Thomas A. Tutton & Meaghan Tutton 11/27/94
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): None
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: None

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: N/A

OTHER COMMENTS: We oppose removal of either DAM.
Why? We have reviewed the latest Draft EIS and we are not at all convinced that there is a justifiable purpose or a real need. The Dams were

Please continue your comments on the back of this sheet if needed. (over)

COMMENTS CONTINUED:

constructed long before the area became part of the National Park. I (Thomas) studied Ecology in Forestry School and have some understanding of what an Ecosystem means. The Draft EIS speaks of restoring the Ecosystem. An Ecosystem is an evolving process; often it is adapting to Natural Changes. How the Ecosystem has Adapted to man made changes. Suppose Two Landslides had blocked the River in the same manner as the Dams? Would the DOI propose to blast open the River Channel? Never.

The real hidden agenda is part of conceptual philosophy of the DOI to rid the landscape of all evidence of MAN MADE activities. This Philosophy has been demonstrated in other DOI action such as removal of old Homesteader's Cabin's etc.

The so called justification to restore the passage for anadromous fish is based on a great deal of speculation notwithstanding the elaborate charts, statistics and pretty pictures. It is really quite uncertain when, if ever, the fish will return. There are many factors involved, and it is very naive to blame everything on the Dams.

The Indian Treaty Argument is equally spurious. This isn't something that happened yesterday. I dare say that if an investigation were made of Indian treaties and agreements many would be found in default. If, in fact, there is a breach of a viable treaty (I find no convincing evidence that there is) the Government could probably Compensate the Indians for a lot less than the cost of Dam removal and subsequent clean up.

In summary it appears to us that all the studies, meeting etc. are designed only to placate the local populus. The DOI has their minds made up from the start. All the effort time and money spent are all part of the Central philosophical plan to remove man made structures. In our opinion it is an ill advised plan and the whole process; studies, Removal, clean up, Loss of cheap power, is a tremendous waste of Taxpayer Money.

Received
DSC-TWE
NOV 29 1994
C100-OLYM-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Elsie A. Bates

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: Before the dams were built the tributaries to the Elwha above Glines Dam were full of fish. This was known by early day sportsmen as well as Indians. Mills Lake does not provide as good an area for fishing. The land under the lake was valuable as lowland wintering for bears, elk, and deer. Being in Park the animals were protected from hunters. (see pic. p.109 The Elwha Report, Jan '94)

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: The larger the eco-system in the Olympic Park the more effective it will be in preserving species & providing recreation. Also because it was a more beautiful place. I guess this is pritty self-evident.

OTHER COMMENTS: I appreciate the comments made in the Elwha River Ecosystem Restoration DEIS Oct. 94, regarding the meandering nature of the original Elwha compared to the straighter, deeper river it has become. Below the Glines Dam, the edges of the river are so swift and deep and within several miles of the ocean

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

that a hiker or sportsman looking for a place to stand must take care not to slip in and be swept away by the current. After removal of the Dams (Glines) there will I suppose, be a cataract for the fish to negotiate both coming inland & going out. The present river offers fish pools and eddys for them to rest in. Comparison with the Hoh River shows how useful the finer gravels sedimentation is providing habitat, raising the water level and forming pools.

Received
DSC-TWE
NOV 29 1994
C101-OLYM-404-06

Elizabeth J. Bryer
[redacted]

November 25, 1994

MS Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

I am terribly disappointed about the rejection of the proposal to remove the two Elwha River dams.

In order to restore the fish and the natural habitat of the Elwha River it is necessary to remove those dams.

Besides restoring the eco-system of the River removing the dams will create hundreds of good paying construction jobs for workers on the Olympic Peninsula. It will also provide new income for commercial, tribal and recreational fishermen.

I strongly support the removal of the two dams on the Elwha River which will restore the Elwha River eco-system as required by law.

Sincerely Yours,

Elizabeth J. Bryer

Elizabeth J. Bryer

P.S. Please, Ms. Bransom do what you can to make this important project possible and please let me know if any further developments. Thank you very much.

Copies sent to: Senator Patty Murray
Rep. Norm Dicks

Received
DSC-TWE
NOV 29 1994
C102-OLYM-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): (Registered as Noni M. Andersen) Huber
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: fish ladders

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: dam removal is too expensive and highly theoretical as a solution. It could be a major ecological disaster for this area for decades.

OTHER COMMENTS:

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

I do not believe these dams should be removed. I believe fish ladders are an effective method for salmon return.

I feel the Park boundry should be moved so that the dams are outside of the Park jurisdiction.

The 2 lakes formed by the Elwha dams have many species of wildlife that would be destroyed or disturbed by the removing of the dams.

Dams give us cheap power. ~~Ed~~ This is not a time to remove them as power needs are increasing.

Fish ladders would be cheaper and a more positive alternative to removing the dams.

As a project as this has never been done (removing of dams) all results of this are supposition.

We like our dams, our lakes, our inexpensive power & cleaner water supplied to west-end residences.

Received
DSC-TWE
NOV 29 1994
C103-olym-404-06

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)
National Park Service
Department of the Interior

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): W. F. Hennessey

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: None

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: I am a local business person (11 employees). I am in favor of dam removal and believe the relevant issues have been adequately studied. While the dams may have had a positive effect on the local economy during

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

its initial growth phase I believe that they are no longer economically viable when all current costs are considered.

I think that removal will have an immediate and long term positive effect on a local economy which is currently depressed. A partial list is as follows:

1) jobs and influx of dollars during removal phase.
2) long term improvement in tourism and related jobs.
3) long term improvement in local fisheries, commercial and sport, and related jobs.
4) more predictable source of power for local mills

I am hopefull that common sense will prevail and that the dam removal project can move forward.

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)
National Park Service
Department of the Interior

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NOV 29 1994
C104-04YM-404-04

COMMENT FORM

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): PHILIP V. ZALESKY
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:
REMOVE DAMS BY PERMITTING RIVER TO DO MOST OF WORK
IF NET LOSS OF WILDLIFE HABITAT ON RESERVOIR, CONSIDER MITIGATION ELSEWHERE.
DETERMINE MINIMUM COSTS + MAXIMUM ECOLOGICAL + ECONOMIC VALUE
DETERMINE VALUE TO SPORT FISHERIES + COMMERCIAL FISHERIES ON OLYMPIC PENINSULA

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:
SEEK INVOLVEMENT OF BUREAU OF RECLAMATION IN DAMS REMOVAL BECAUSE OF THEIR EXPERTISE AND EXPERIENCE WITH RIVERS AND BOR HAS EXPERIENCE BUILDING DAMS

OTHER COMMENTS: REMOVE DAMS
TEMPORARY DIKE TO TUBING SEDIMENT
CONSIDER A DIKE AT A DOWN RIVER FOR INDIAN VILLAGE + PORT ANGELES WATER SUPPLY. THEN LET THE SEDIMENT FLOW OUT TO STRAIT BY BYPASS
CONSIDER ALSO A SCHEME OF LESS THAN TOTAL RESTORATION (ENOUGH FOR SALMON TO GO UPSTREAM)

Please continue your comments on the back of this sheet if needed.

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NOV 29 1994
C105-04YM-404-06

cc W Clinton - Slade Gorton - Patty Murray
Peninsula Daily News - Seattle PI

[redacted]

Dear Bruce Babbit!

5/1/93

Elwha Dams

We have always considered ourselves conservation minded but must take exception to the proposed removal of the Elwha Dams for the following reasons

1. These Dams have been in place so long that an eco system has developed around and beyond them so should one system be removed to try and restore another

2. Other streams on the Olympic Peninsula to the west of the Elwha have had their salmon runs all most destroyed and their are no dams on these rivers e.g. Hoh and Bogachiel and others. So what proof is there that salmon runs can be restored to the Elwha until we find out what caused the other runs to be depleted.

3. A considerable source of pollution free and cheap electricity will be lost which since this area gets its power from Bonneville will not only raise the cost to this area but, since they are going to have their hydroelectric generation cut back to save the salmon in the Columbia, they will have to purchase additional power

4. There is a tremendous tonnage of silt behind the dams and no matter how carefully it is removed some is going to go downstream. Silt in the gravel beds ruins them for spawning and once the silt is in it is estimated that it will take from three to thirty years to get it out and make the stream a suitable spawning bed and in addition Port Angeles's water supply is taken out of the Elwha using a Ranney system which uses the gravel bed of the river as a filter for the water. In all probability a new and expensive filtering system will need to be put in.

5. If this tremendous amount of money is available during these times, it would seem that this money would give us more results if it were used to buy up endangered wetlands, other endangered areas and to study why the salmon runs in the

(3)

other west peninsula area are so depleted

If you would please check out these objections and use them in your judgement on the wisdom of this proposal

Thanks

Phyllis Childs

ELWHA RIVER RESTORATION PUBLIC MEETING
VERN BURTON COMMUNITY CENTER
PORT ANGELES, WA
NOVEMBER 14, 1994, 1:30 - 4:00 P.M.

Received
NOV 14 1994
C106-olym-404-06

NAME ROBERT MAPLE NORMAN ADDRESS AFFILIATION (IF ANY) NONE

IT WAS A SERIOUS LACK OF FORESIGHT TO INSTALL THE DAM WITHOUT ~~FISH~~ CONSIDERATION FOR SALMON, BUT I FEEL IT WOULD BE AN EQUAL LACK OF FORESIGHT TO REMOVE IT WITHOUT CONSIDERATION FOR PEOPLE

POPULATION GROWTH IS ~~FOLLOWING~~ AN EXPONENTIAL CURVE. POPULATION ~~IS~~ DOUBLED SINCE THE 1950'S BUT IS EXPECTED TO DOUBLE AGAIN IN 41 YEARS. EACH TIME IT DOUBLES MORE PEOPLE WILL BE ADDED TO EARTH THAN WERE ADDED IN ALL OF MAN'S HISTORY PUT TOGETHER. THUS WITHIN A DECADE ENERGY WILL BE CRITICAL,

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NOV 14 1994
C107-olym-404-06

11/14/94

Elwha Dam Removal

(1) If dams are removed, there is no guantee that fish will return

(2) Flooding will occur; engineers say reinforcework + channels will control the water thus adding to the expense

(3) Other rivers on the peninsula which used to be full of fish do not have them now.

(4) One of these dams is not in the park; why does the park want them both?

(5) During winter power failure in Port Angeles, power from the dams is wheeled into the city

(6) Taking dams out will ruin some of our recreation areas.

(7) It will cost the taxpayers too much for the benefit derived.

(8) We local people resent the federal government telling us what is good for us.

(9) These information meetings apparently accomplish nothing as far as area citizens are concerned.

(10) I see no benefit to our area or to the fishing - Get fish into the big, unimpeded rivers first

Sincerely,
Hardie Huntington
[redacted]

P.S. This area is growing rapidly - all requiring Power. Bonneville at the present time is buying Power whenever it can be obtained. We need these dams!

Received
DSC-TWS
NOV 14 1994
C108-olym-404-06

Comment at 11/15/94 meeting

(1) Draft EIS is fine and both dams should go.

(2) Both dams are going to fall eventually To earthquakes

(3) Since in last 6 years we learned we have size 9 Richter Scale magnitude EQ, Then Draft EIS should state dams will go. (over)

(4) Since dams will go, it is best to let them go under a removal program, rather than at an unannounced time when campers + fish will die.

Best Calypso Cove

NATIONAL HEADACHE FOUNDATION
5252 N Western Avenue
Chicago, Illinois 60625

Mr. Delmar A. McCune (92-7030)

P.S.
Draft EIS speaks of leaving dams all but new seismic info requires that dams - if remain - must be retrofitted for size 9 Earthquake

Received
DSC-TYE
NOV 14 1994
cl09-olym-404-06

COMMENTS FOR THE NOV. 14 MEETING FOR " COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT ELWHA RIVER ECOSYSTEM RESTORATION, CNP, WA. OCT 1994 SUMMERY

My name is Harry Lydiard. I am a resident of [redacted], and my address is [redacted].

I have testified previously before FERK and in Washinton D.C. on the subject and I ask that that testimony be considered for the final EIS.

My testimony today is limited to comments on specific points I feel should be corrected in or added to the subject document.

First I suggest that the term "Freshwater Bay" as used on page I and elsewhere be dropped since that term generally refers to a bay west of Angeles Point. Refer instead to the beach east of the mouth of the Elwha or the beach between the mouth of the Elwha and Ediz Hook. I would add also that not only has the beach receded and steepened it has become a cobble beach as well.

Second, on page VIII add the coets to the City of Port Angeles and the Federal government for Ediz Hook maintenance and preservation. This figure is now up to between 8 and 10 million dollars and should be a part of the background information contained in the refer nced document and in the FERC Draft Staff Volumes 1 and 2 Glines Canyon and Elwha. This is an expense which grows yearly and is according to the docu ents directly attributable to the retention of sediments by the dams.

Third correct picture caption facing page 5 to Elwha rather than Glines.

You state on page 7 "Both Lake Mills and Lake Aldwell have inundated sites of cultural and religious significance for the Lower Elwha S'Klallam Tribe". Is this a historical fact based on archeological evidence or a statement of recent origen? Documentation is needed before it is accepted ae fact.

On page 10 change in paragraph 4 to "oil" from "on".

On page 16 it is stated "the estuary at the mouth of the river has decreased in size by about one-half mile from its pre-dam size". Since you are referring to an area it would be more eppropriate to use an area type description rather than e distance measurement. The mouth of the river has not retreated a half mile since the dams were built.

On page 23 it is stated rainfall is 56 inches --per year I assume. That figure is too high for the river mouth- in fact probably 2X too high.

Also on page 23 clarify that the 16% river gradient is in the Elwha Basin. In referring to "upper portion of the Elwha River" one would assume the 16% gradient would be the upper ½ of the river when in fact it is only the upper 3 or 4 miles of e 45 mile river.

On page 26 clarify that the referenced pipeline and associeted rip-rap protects about 1½ miles of the bluffline from direct wave erosion; not es the report states "was routed at the base of these bluffs". Incidentally the wording of that section is likely to be misread since the reader could assume that "up to" and "as much ae" were close to actual. They are not. Paragraph 2 should be rewritten to reflect what is actually taking place.

Thank you.

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NOV 14 1994
C110-olym-404-a

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

11-4-94

COMMENT FORM

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Ginger White

MAILING ADDRESS: [redacted]

lead agency environmental group

AFFILIATION (IF ANY): Interpretive Guide; Audubon, Sierra Club, Quaker

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

We need to look long term - unto the 7th generation is not a bad scale, though even that is more short term than we might look.

Safety, especially of Elwha Dams, is a real issue long term.

Health of our resources long term.

Commitment to our tribal agreements long term.

Natural reestablishment of Elwha Hook, long term.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

(Admit to not having read whole document, as some of above may be covered.)

OTHER COMMENTS: I urge the decision to remove both dams. I have hiked the Elwha within the ONP, to the end of the maintained trail at Elwha Basin. This river needs to be natural, with its natural resources of fish, as far as possible.

Please continue your comments on the back of this sheet if needed. Ginger White

Received
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NOV 14 1994
C111-olym-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Robert H. Dowell

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): Sportsman - Fisherman - 30 years

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

How can you justify stream improvement at 300 million dollars when the Bogachiel, the Hoh etc. are rivers with no dams — and are terrible.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

Your Sportsman claim these rivers are in good shape — Bilodeau

OTHER COMMENTS:

If you want people on your side please provide homes. Reports that are believable.

Please continue your comments on the back of this sheet if needed.

Received
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NOV 14 1994
CIIZ-olym-4ora

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

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NAME (PLEASE PRINT CLEARLY): CARL T. McLUEN

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): NONE

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: It is obvious to me who have fished those rivers for 30+ years that dam removal will have no impact on fish runs. Since the latest interpretation + all large natural fish runs have been with it, and caused much of the decline

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: any simple research of the fish counts from 1910 till today should help to show the real problems.

OTHER COMMENTS: It is time for end Pork Barrel politics + and shut off these wasteful million $ EIS boondoggles and promote some genuine support for timber jobs decline.

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

The timber industry has been destroyed by overharvesting followed by abrupt shut downs.

The tourist industry is on the same as the fish have been decimated by indian privileges.

monopoly gambling has been authorized sure an undesirable element of people to the Peninsula.

We need a great government and reform of the judicial system.

Carl T. McLuen

Received
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NOV 14 1994
C113-olym-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Laura L. Jalesky
MAILING ADDRESS: [redacted]
AFFILIATION (IF ANY):
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:
Remove ~~all three~~ two dams to allegiantely restore the fisheries & the ecosystem.
There should not be a dam in a National Park. The parks are mandated to protect the ecosystems of which they are apart.
REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: Dam removal - Use expert advice on the cheapest, most environmentally sensitive process - Slow and easy!

Please continue your comments on the back of this sheet if needed.

Received
DSC-TWE
NOV 14 1994
C114-olym-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Selina Keeton
MAILING ADDRESS: [redacted]
AFFILIATION (IF ANY): Resident, Recreationist, Taxpayer
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:
REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: Only that I support removing BOTH the Elwha & Glines dams. Too much to be gained in restoring the habitat back to its original place & state of being - I would love to see the Elwha River run free.

Please continue your comments on the back of this sheet if needed.

Received
DSC-TWE
NOV 14 1994
C115-044M-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

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NAME (PLEASE PRINT CLEARLY): Edwin R. Johnson
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): Friends of the Elwha
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: What composition of material is the bluffs between Elwha and Ediz Hook. How much gravel, sand, dirt, and clay?

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: Because Ediz Hook was made up of gravel and sand most of which came from the Elwha. The bluffs appear to be mostly dirt & clay which wouldn't settle out to form the spit.

OTHER COMMENTS: I am in favor of Elwha dam Removal.

Please continue your comments on the back of this sheet if needed.

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C116-044M-404-06

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National Park Service
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COMMENT FORM

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): CAROL PHILPOTT
MAILING ADDRESS: [redacted]
98362

AFFILIATION (IF ANY):
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: There have been no information given out on the effect of Dam removal on any of the wells in the area. This will affect both the City of Port Angeles as well as private citizens wells. There is no guarantee that dam removal will, in fact, restore the salmon runs.

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

The Federal reports have admitted this fact about the salmon runs.

Surely we could come up with a less expensive way to get fish up & down the river. The Elwha River could be used as an experimental area. This could find out the best way to answer all the questions raised.

The Federal government is under the misunderstanding that the people in this area are in favor of dam removal. This is not the case. We will lose much more than anything that will be gained. It will take a minimum of 10 years before any salmon runs will be re-established. One of our largest employers, Daishowa America, will lose it's inexpensive power. If they can't get cheap power, they have said they will close! We cannot afford to have one of the top 3 employers leave our County.

The sediment released from both dams will flood the river & ruin the fish hatcheries along the river as well as wells.

These lakes have become home to many water fowl, fish and other animals which will be lost. The Trumpeter Swans, which is an endangered species which will lose their home.

Property at the mouth of the river will flood much sooner and at lower rainfalls. This property formerly belongs to the Elwha Indians which means the government will end up saving them again.

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NOV 14 1994
C117-olym-4a4-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): BOB PHILPOTT

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: THE INDIAN FISHING NETS. GET RID OF THEM BEFORE YOU SPEND ANY MONEY ON DAM REMOVAL.

RELICENSE THE DAMS. ENOUGH MONEY HAS BEEN SPENT AGAINST THE DAMS. You are allowing businesses that need the dams for low cost power.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

Bonneville will charge so much for electricity that business will close rather than fight & spend many more millions.

OTHER COMMENTS: The people of the Olympic Peninsula DO NOT want the dams removed. Don't shove your ideas down our throats. You leave well enough alone. The Indians netting most of the fish at the mouth of the river is our real problem. Get those nets

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

out of there first before you commit to spending millions of dollars on the dams. Taking the dams out won't help. Getting the nets removed will help.

We, the people, cannot destroy wetlands. You can't either so forget about destroying Lake Mills and the rest of the Wetlands. It is against the law. Remember that, please. You are not allowed, by law.

Get the nets removed. That is your REAL PROBLEM of fish not returning to the 5 miles of habitat. Use your head. 5 miles of habitat is enough if you get the nets out of the mouth of the river & out of the river entirely. Doesn't that make any sense to you?

If you take the dams out, the Elwha Indian tribe land they live on will be flooded out.

Also if you want fish to come back, get rid of the 3½ mile long nets of commercial fishermen. 30 miles of nets is terrible. They kill hundreds of thousands of fish they don't even want. They just get caught & die for no use at all.

Received
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NOV 14 1994
C118-olym-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY):

MAILING ADDRESS:

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:
I FEEL THAT THE ELWHA DAM SHOULD BE REMOVED - EVERYTHING POSSIBLE TO ACHIEVE THIS SHOULD BE DONE.
SUPPORT FULL FUNDING

PLEASE CONDUCT A THOROUGH ECONOMIC STUDY OF THE ECONOMIC BENEFITS OF DAM REMOVAL, INCLUDING

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: FISHERIES, TOURISM, RECREATION, ETC

OTHER COMMENTS:

Please continue your comments on the back of this sheet if needed.

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DSC-TWE
NOV 15 1994
C119-04yM-404-06

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)
National Park Service
Department of the Interior

COMMENT FORM

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Please return your commeot form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Ronald Beil
MAILING ADDRESS: [redacted]
AFFILIATION (IF ANY): Land Owner
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:
What about the other rivers in the Pacific Northwest? Why are their fish populations suffering? Shouldn't we be spending money on solutions that affect all the rivers?

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:
I think that the project has too many potentially catestrophic varibles that if they "go wrong" will create a gigantic liability on the Govt. and the Taxpayer.
Risk assessment has no where been presented in dollar terms.
We as taxpayers would like some "quantifiable" cost/benefit studies.

OTHER COMMENTS: This should be a low priority issue. Money would be better spent elsewhere. Whoever allows this project to proceed should be voted out of office!

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

All in all, what a monumental waste of money.
I say to spend no more money on the issue.

C120-olym-404-06
11/11/94

DON & THEA FAGER
[redacted]



Wren Building, College of William & Mary

SARAH BRONSON
NATIONAL PARK SERVICE - ELWHA
P.O. BOX 25287
DENVER, COLO 80225-0287

DEAR MS BRONSON,

Received DSC-TWE C120-olym-404-06 11/15/94

I SUPPORT THE PREFERRED ALT. OF REMOVING THE DAMS! IT IS THE ONLY WAY TO FULLY RESTORE THE ELWHA RIVER ECOSYSTEM AS REQUIRED BY L.A.W.

THANKS,

DON & THEA FAGER
1522 Eastmont
E. Wenatchee, WA 98802-4252

Don & Thea Fager

Janet A. Thompson
[redacted]

Received
DSC-TWE
NOV 23 1994
C121-olym-404-06

Ms. Sarah Bronson
National Park Service
P.O. Box 25287
Denver, CO. 80225-0287

November 15, 1994

RE: Draft EIS on restoring the ELWHA

Dear Ms. Bronson:

Thank you for the opportunity to comment on the Draft Environmental Impact State on restoring the Elwha River.

I strongly support the preferred alternative of removing the dams! It is the only way to fully restore the Elwha River ecosystem as required by law. NPS needs to start taking ACTION.

As Washington State has grown over the last 100 years we have severely impacted our wild salmon runs. The impacts have come from a variety of sources: dams, habitat destruction, and over fishing the ocean-going catch. Throughout the Puget Sound, the Columbia River system and the coast we have, at best, declining fish runs. On the Olympic Peninsula we have the best chance of restoring one of our major fish runs by removing the dams on the Elwha. Why - because the habitat in the system is some of the most intact habitat in the State. We must restore these runs. Additionally, the restoration of the runs on the Elwha will assist in our over all efforts to restore native wild salmon runs throughout the State.

Our wild salmon runs have, in the past, been a significant source of commercial revenue. Restoration of the ecosystem will provide significant economic benefits for the region. This project will provide $90 million in new income to the workers on the Olympic Peninsula, with project - related spending generating an additional $21 million for area businesses. Having made the investment in restoring the river the Elwha salmon and steelhead, increased commercial and sport fishing will generate an additional $5 million per year in new revenues.

Respectfully,

Janet A. Thompson

cc WA. Congressional Delegation

Received
DSC-TMS

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)

NOV 15 1994
C123-OLYM-404-06

National Park Service
Department of the Interior

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.
Please retorn yoor comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): G WILL GING
MAILING ADDRESS:

AFFILIATION (IF ANY):
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: I Stiongly recommend removal of these two projects. I believe it is the last restoration project in the Pacific Northwest because most of the watershed is protected within Olympic N.P. Make the commitment now, do not wait. We owe it to ourselves and future generation. It is not to much to spend to protect our heritage. Act now.

Please continue your comments on the back of this sheet if needed.

Received
DSC-TMS

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)

NOV 15 1994
C123-OLYM-404-06

National Park Service
Department of the Interior

COMMENT FORM

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Fred Fellerman
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): Washington Environmental Council, Board of Directors
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

The economic multipliers associated w/ restoring fish runs, treaty rights and employment on the Peninsula

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

There are many values associated w/ Restoration which should be enumerated before company to the cost of Removal.

OTHER COMMENTS: There are few places where watershed restoration can produce such dramatic benefits The dire conditions of our Region's Salmon stocks demands that such efforts be undertaken in an expeditious manner.

Please continue your comments on the back of this sheet if needed.

Received
TWE
NOV 15 1994
C124-olym-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): David E. Ortman
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): WISE USE Movement
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

None

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

None

OTHER COMMENTS: Please remove both dams on the Elwha River as soon as possible

Please continue your comments on the back of this sheet if needed.

Received
DSC-TWE
NOV 15 1994
C125-olym-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

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Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Deover, CO 80225-0287.

Please return your comment form oo or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Gary C. Brown
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): None
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: Impact on trout fisheries Above Lake mills, I beleive you would impact a great trout fisheries, where wild native trout flourish and would become food for salmon & Steelhead.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: Please leave it alone

Please continue your comments on the back of this sheet if needed.

Received
DSC-T...
NOV 15 1994
C126-olym-404-04

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Marci Johnson

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: REMOVE THESE DAMS ASAP!

Please continue your comments on the back of this sheet if needed.

Received
DSC-TWE
NOV 15 1994
C127-olym-404-06

To Whom....

I came here ready to express my opinion that I believe the Elwha should be restored to as much of its pristine condition as possible. I am relieved by what I heard. From the way you were talking it sounds like a done deal! Is this true? I hope so. Yet I am apprehensive.

① Can the Republicans reverse this process? Yes.

② If the dams provided a larger economic impact to the area would their de-construction be proposed? Of course not.

And for these reasons I still feel a little hollow this evening. Are you merely doing a job? Do you feel the way you do and hold your opinions because you are paid to?

Wouldn't it be nice if our jobs all coincided with our beliefs?

2

I envy you and your restoration job, because it coincides with my beliefs.

I only hope that the restoration of the Elwha takes place not because it has greater economic value without the dams, not because it's an interesting project to see if it can be done, not because any politicians are worried about re-election, but because it is the right thing to do for the salmon, for the people, for my children, and for the earth.

Buck W. Shaffer

Received
DSC-TWE
NOV 15 1994
C128-Olym-404-06

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)
National Park Service
Department of the Interior

COMMENT FORM

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): David Lloyd Cook
MAILING ADDRESS: [redacted]
AFFILIATION (IF ANY):
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: The comments I have heard have been very informative and thought out. So little human intervention as possible. Nature really will take care of itself given time and patience. Based on our last elections, some folks don't appear to be very patient. They need to learn.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: They need to go forward. We need to act!

OTHER COMMENTS: I've written one letter to you all already. I'm in favor of the dams being removed / Sediment regulated naturally / trails provide some sort of tourism for the salmon as the sediment moved downstream / Restoration of original native species of animals (pre dam animals) /

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

satisfy the Indian treaties

Thank you
Dave Cook

Received
DSC-TWE
NOV 15 1994
C129-04YM-4ot-a

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Tim Stearns

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

- economic value of failing to honor the Lower Elwha Treaty right
- the value of retaining and restoring the culture should be considered
- local economic diversification efforts – improved tourism
- quantify benefits for removal – recreation, fishery, tourism

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

some local residents are paranoid
local area diversification needs to be explored

OTHER COMMENTS:

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

Please fully restore the fisheries.

Please remove the dams ASAP.

Please restore the area to its pristine position.

This project is the ideal win/win
- restoration of tribal fisheries & culture
- restore diversity to declining salmon runs
- continue mill operation with a stable power supply
- demonstrate dam removal is possible and affordable
- the mill can continue have access to the cheapest power in the country
- restore the ~~super~~ integrity of Olympic National Park

This area will receive a rare second chance
- see if a river can be restored
- real shot in the arm to local tourism and recreation
- see how well salmon can repopulate an area

Restoring the area is a key political triumph demonstrating that
government can play a key role in economic transition
the collective can finance the cost of removal shifting the cost from Lones River to the public

Received
DSC-TWE
NOV 15 1994
c130-oym-4of-a

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service

Department of the Interior

COMMENT FORM

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): WILLIAM RAIN

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): NONE

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: I think the dEIS addresses all important concerns sufficiently.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: I hope to see removal of both dams entirely. Sediments should be allowed to flow out of the valley through natural river erosion with minimal mechanical intervention.

A tax on imported lumber of foreign origin should be levied specifically to pay for the deconstruction of the dams.

Please continue your comments on the back of this sheet if needed.

Received
DSC-TWE
NOV 15 1994
C131-olym-404-a

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)
National Park Service
Department of the Interior

COMMENT FORM

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Nick Gayeski
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: I find the Draft Programmatic EIS reasonably thorough and convincing that there are no technical reasons why both dams cannot be removed. I strongly support the Proposed Action of removing both dams.

Please continue your comments on the back of this sheet if needed.

Received
DSC-TWE
NOV 15 1994
C132-olym-404-a

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)
National Park Service
Department of the Interior

COMMENT FORM

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Turn in your coments at the public workshop or send them to: Sarah Bransom, Natinnal Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.
Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): TRUDY BARTOSEK
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: I think we need to proceed with removing both dams. I don't know if additional studies are needed. We have to restore the salmon runs in the Elwha - we owe it to the tribes that depend on the fisheries.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS:

Please continue your comments on the back of this sheet if needed.

Received
DSC-TWE
NOV 30 1994
C133-olym-404-06

Dear Sarah Bransom

I am writing to let you know I am, we are, in support of the removal of the two dams in the Elwha River

We encourage you to support this

Thank you

Greg Sabella
Mindy Sabella
Port Townsend
Washington

Received
DSC-TWE
NOV 30 1994
C134-olym-404-06

[redacted]

November 25, 1994

Ms. Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

I wish to express my strongest support in favor of removing the two dams on the Elwha River.

Having reviewed the Draft Environmental Impact Statement released by the Park service, it is clear that taking out both dams is good for the river, good for the fish, and good for the citizens of the North Olympic Peninsula.

It is now time to act, and I urge you to do everything you can to have the dams removed and the river restored to its natural state.

Sincerely,

Thomas R. Grimes

Thomas R. Grimes

Received
DSC-TWE
NOV 30 1994
C135-01YM-404-06

Sarah Bransom
National Park Service, Elwha River Project

Please support the removal of the Elwha Dam as this is the single best opportunity to restore salmon anywhere in the Northwest.

Thank you for wisdom,

E. Zahn, [redacted]

E. Zahn

PROF. O. J. WHITTEMORE
CERAMIC ENGINEER
[redacted]

Received
DSC-TWE
NOV 30 1994
C136-01YM-404-06

Nov. 28, 1994

Sarah Bransom
National Park Service, Elwha River Project
P. O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

I should like to be recorded that I support the removal of the dams on the Elwha River. Not only should these not be in a National Park but also a valuable salmon run could be restored by their removal.

Sincerely

O. J. Whittemore

11/27/94

Received
DSC-TWE
NOV 30 1994
C137-04ym-404-06

Sarah Bransom
National Park Service
Elwha River Project

Dear Ms. Bransom,

Although the election results reduce the odds in favor of removing the dam, we still wanted to express our support.

Please continue to try to find a way to take down the damn. We'll be happy to support it with our Tax dollars!

Sincerely,
Mark & Carolyn Boatsman

Received
DSC-TWE
NOV 18 1994
C138-04ym-404-0

Tuesday, November 15, 1994

Bruce Olson
[redacted]

Sarah Bransom
National Park Service, Western Team
12795 Alameda Parkway
Denver, CO 80225-0287

Dear Sarah Bransom,

I am writing to you to voice my complete and enthusiastic support for the removal of both hydroelectric dams on the Elwha River! It's high time that we begin to reverse some of the horrendous damage we have inflicted upon the salmon with our short-sightedness. After reading the DEIS it becomes clear that the power produced by these dams in unnecessary and easily replaceable, while the damage they do to the anadromous fisheries is massive, and at this point and time inexcusable.

My hat off to the National Park Service for proposing the removal of these dams.... Hopefully it's a trend which will grow.

Thank you for your time.

Sincerely,

Bruce Olson

Bruce Olson

11-14-94

Received
DSC-TWE
NOV 21 1994
C139-0494-404-06

Sarah Bransom
national park Service
12795 alameda Parkway
Denver, Co. 80225-0287

Dear MS Bransom:
we are very much against removing the Elwha Dams, we need the Electric power and it would cost a lot of money to take them out.
we notice the park is very still about the other Rivers, which also have no fish, even tho there is no dams.
if the dams are removed there is no way the fish are coming back as long as the government lets the seals eat them and Indians put nets in.
a nother good reason why there is no fish, the government let Japan and Russia swept the ocean with their nets!

Sincerly
Fred and vera machenheimer

Received
DSC-TWE
NOV 30 1994
C140-0494-404-06

November 21, 1994

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver CO 80225-0287

Dear Sarah,

I just finished reading the draft EIS for the Elwha River and wanted to tell you how important it is for the proposed action to be funded and carried out. Removal of the Elwha and Glines Canyon dams is an all win situation. The geology, river morphology, hydrology, water quality, fisheries, wildlife, vegetation, land use, recreation use, esthetics, marine resources, cultural resources, and tribal morality are all to benefit from restoration of this priceless environment.

Please do what you can to see that this project is fully successful. It makes perfect long term economic sense to restore the free flow of water. I believe this basis will provide more for the economy than the cost of demolition. Everyone comes out a winner and the precedent will be everlasting.

Sincerely,

David Nettleton
[redacted]

Received
DSC-TWE
NOV 30 1994
C141-044M-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM — Supplementing my oral testimony at Port Angeles

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS. in early November. (see encl. notes)

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

11/29/94

NAME (PLEASE PRINT CLEARLY): Jack H. Markley
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): Ordinary citizen interested in good solutions to problems
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:
The option (#-?) for removing the lower (+lowest, oldest) dam and upgrading the upper (highest, newer) dam needs much more consideration.

It's been largely ignored — maybe it's too obvious?

REASONS WHY YOU BELIEVE ADDITIONAL ~~STUDY~~ emphasis IS NEEDED: (on the above option)
1) To maintain, not lose hydropower
2) To benefit fish — get them over the dam — enforce the law!
3) To minimize cost and maximize benefits.
4) To show the public that the NPS isn't a rules-bound bureaucracy interested in its own perpetuation, but an organization that can truly analyze options and select one that offers the most bang for the least buck.

OTHER COMMENTS:
A Final Reason To Support this option — The upper dam can always be taken out at a later date. We should get busy trying to get the fish over the upper dam — obey the law, and demonstrate all the best technology we can muster on a showcase situation!

Please continue your comments on the back of this sheet if needed.

Forest

COMMENTS CONTINUED:
Please refer to my letter of 2/10/92 and response of 4/7/92 — to Supt. Finnerty, Olympic N.P. — Their file # L7619 (OLYM-N55) — report of this phase (It's on file + available)

That was 2½ years ago — still no fish moving upriver, despite an ongoing violation of an existing Washington law! Thus the comments of my 1992 letter seem further justified. Do we want good, reasonable solutions (progress) or extreme-view polarization? Last Nov. 8 seemed to offer a clue, to the publics view! Good luck for a workable solution!

Jack Markley

M.F., Duke University
1953
(dark age?!)

Elwha — Rough Notes on Thoughts Presented 11/94

So Far — Characterized by —

1) Money wasted on pseudo-scientific "studies"

Received
DSC-TWE
NOV 30 1994

2) Posturing of politicians, catering to extremist positions - each side.

3) Almost invisible voice of reason, interested in all sides of the issue + achieving most progress on problems for least + cost in $ + effort + time.

(See the WSJ — excellent review —)

Why don't we talk more about "options" — legal, reasonable + illegal

1) Remove the older, less efficient, lower dam - opening up — miles of spawning river, at least power loss + removal expense!

2) Force the owners of the higher, newer upper dam to obey the existing law — build fish passage — as a condition of relicensing. Also require technical efficiency upgrading to offset the lower dam power loss.

3) Spend a few dollars on trying, experimental best-idea ways to actually get the fish past the upper dam, (as part of #2. No more "studies")

4) ~~Find out why the Park Service, Indians, Daishowa Paper Co, other special interests~~ Expose the ~~Thereby~~ Achieving maximum objectives for the people at the least cost. (for fish, power, environmental aesthetics, community disruption, tax cost)

To do this, someone should start asking why the mega-power groups — Park Svs, Indian Tribes, Daishowa Power, Politicians + all want the most expensive solutions at the least

"Hours of discussion" in Public.

LCSC Lewis Clark STATE COLLEGE
8TH AVE AND 6TH STREET LEWISTON, ID 83501

P. S. Received DSC-TWE

I still don't have any info on the options (as offered at the P.A. mtg —)

- Summary?
- Copies (as at mtg)?
- Whatever?

I don't need a big stack of paper - just the basic facts thanks

JM

Received DSC-TWE
NOV 30 1994
CI42-OLYM-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service

Department of the Interior

COMMENT FORM

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Harry R. Tveit

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): Clallam Bay - Sekiu Chamber of Commerce

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: Using FISH LADDERS

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: Cost FACTOR ALONG with I believe most of these runs will never be restored until net FISHING in the rivers is stopped

OTHER COMMENTS: Destroying the Lakes & their ecosystem would be devasting — RELICENSE the dams now without economic restrictions + "red tape"

Please continue your comments on the back of this sheet if needed.

Received
DSC-TWE
NOV 30 1994
C143-014M-404-06

Robert Wilson
[redacted]

(1760) PNRC-LS 10030B5F

October 19, 1994

Robert Kennedy, Director
National Park Service
1849 C S St NW
Washington, DC 20240

Director Kennedy:

I recently read an account of the National Park Service's proposal to remove the Elwah and Glines Canyon Dams on the Elwah River in the Olympic Peninsula of Washington State.

My family and I wholeheartedly support this plan, in fact, in light of the critical state of the immensely important salmon fisheries here in the Pacific Northwest, these dam removals are essential to the environmental and economic health of the region.

The estimated costs of $100 million are mitigated many times over when considering not only the value of the fisheries lost over the active life of these dams, but considering the potential restoration of the historically prolific Elwah anadromous fisheries, the costs are very reasonable.

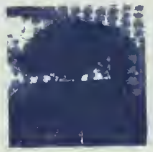
Of course when adding the quality of life values for the entire region which would be enhanced hy an undammed Elwah, the cost becomes acceptable.

WE can't let cost determine the quality of life in the magnificent Pacific Northwest when it comes to the environment that we all depend on to sustain us.

Let us rectify the mistakes of the past and remove BOTH the Elwah and Glines Canyon Dams.

We deserve no less.

Sincerely,
Bob Wilson & Family
Bob Wilson



John Forrest Barker
LANDSCAPE
ARCHITECTS, P.S.

Received
DSC-TWE
NOV 30 1994
C144-014M-404-06

Brian Winters, Project Manager
National Park Service
Olympic Nat'l. Park

Please remove the dams on the Elwha River to restore the potential for restoring the natural streams and all of the values they represents.

Thank you
John Barker

1514 Northwest 52nd Street, Seattle, Washington 98107
206/783-2870 • 206/783-3212 fax

DEC-01-1994 13:16 FROM AIS OF WA INC. TO 13039692236 P.02

Received
DSC-TWE
DEC 01 1994
C145-olym-404-06

ELLIOTT S. TREMAINE

Ms Sarah Bransom
Elwha River Project

Dear Ms Bransom

I am a long time supporter of the Elwha River Project

Every day I am more convinced that we must do everything in our power to preserve our wild salmon

An absolutely marvelous starting point would be to remove the Elwha Dams.

I could enumerate all the reasons suggested for inclusion in a letter like this - all of which you've read or heard hundreds of times - but I want to spare you having to reasons again so I'll simply urge you to make every effort to get the dams out and bring the salmon back.

Sincerely,
Elliott Tremaine

TOTAL P.02

Received
DSC-TWE
DEC 05 1994
C146-olym-404-06

December 1, 1994

Sarah Bransom
National Park Service, Elwha River Project
Denver, CO 80225-0287

Dear Ms. Bransom,

I am writing to urge your continued support for removal of the two Elwha River dams. In 1992 Congress passed the Elwha River Restoration Act authorizing the restoration of the Elwha's magnificent salmon runs. Earlier this year Secretary of the Interior, Bruce Babbit confirmed in his report, the only way to restore the10 runs of salmon to the Elwha by mandating dam removal.

The removal of the Elwha dams has widespread support by environmentalists, Native American tribes, the dam owners, the surrounding community and even the pulp mill owners who uses the power from the dam.

The removal of the Elwha Dams is a **wise investment** It is the single best opportunity to restore salmon anywhere in the Northwest.

The Elwha Act **protects nearly 350 jobs** at a Port Angeles mill by providing the mill access to a reliable alternate energy supply of electricity.

Dam removal will **provide $90.4 million in new income** to Construction workers in Clallam county.

Removing the dams will **generate at least $5 million per year in new revenues** from increased tribal, commercial, and sport fishing.

Please support the restoration of salmon runs, the creation of new employment opportunities and the prevention of dislocated workers, by supporting the decision to remove the two Elwha River Dams.

Thank you for your support.

Sincerely,

Melissa Antol,
[redacted]

12/1/94

Sarah Bransom
NPS Elwha River Project
PO Box 25287
Denver CO 80225-0287

Received
DSC-TWE
DEC 05 1994
C147-olym-404-06

I am writing in support of removing the dams on the Elwha River.

- Save the salmon runs
- Restore this beautiful river.

Sincerely

STEPHEN COBERT
[redacted]

Received
DSC-TWE
DEC 05 1994
C149-olym-404-06

December 1, 1994

Sarah Bransom
National Parks Service,
Elwha River Project
PO Box 25287
Denver, CO 80225-0287

Dear Ms Bransom,

I support the removal of selected dams on the Elwha river in an effort to preserve the important ecosystem & restore dwindling salmon runs.

Sincerely,

Sheri Lynn Smith MD
[redacted]

Received
DSC-TWE
DEC 05 1994
C1SO-OLYM-404-OC

12/1/94

Sarah Bransom
Nat'l. Park Service, Elwha River Project
PO Box 25287
Denver, CO 80225-0287

Dear Ms Bransom,

I strongly support the Park Service's proposal to remove the two Elwha dams because I believe it is the only way to fully restore the Elwha River ecosystem —— as required by law.

My understanding is that this action has support of a broad coalition including fishermen, Native Americans, environmentalists, and even dam owners.

Please continue your work toward this effort —— get rid of the dams!

Sincerely,

Jan Miller
[redacted]

Received
DSC-TWE
DEC 05 1994
C1S1-OLYM-404-OC

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): BRENDA WARNER
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: POSSIBLE WAYS TO STABILIZE RIVER BANK - ESPECIALLY along PRIVATELY OWNED LANDS.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: To ALLEVIATE SOME of THE LANDOWNERS WORRIES.

OTHER COMMENTS: AFTER attending THE INFORMATION MEETING IN PORT ANGELES I FIND MYSELF EVEN MORE IN FAVOR OF THE DAM REMOVAL. Not just for THE Salmon RUNS, But BECAUSE of the ENTIRE ECO-SYSTEM that RELIES ON A healthy RIVER to SURVIVE. IF BECAUSE of the RECENT ELECATIONS A cut BACK ON THE

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

PROJECT IS NEEDED. I WOULD LIKE TO SEE THE LOWER DAM REMOVED AND RESTORATION STARTED. THE WHEN THE POLITICAL CLIMATE CHANGES GO BACK FOR THE UPPER DAM REMOVAL.

Received
DSC-TWE
DEC 05 1994
CIRC-OLYM-404-06

December 1, 1994

[redacted]

To: Sarah Bransom
National Park Service, Elwha River Project
P O Box 25287
Denver, CO 80225-0287

cc: The Honorable Bill Clinton
President of the United States
The White House
1600 Pennsylvania Avenue
Washington, DC 20500

The Honorable Slade Gorton
United States Senate, Washington, DC 20510

The Honorable Patty Murray
United States Senate, Washington, DC 20510

The Honorable Jennifer Dunn
U. S. House of Representatives, Washington, DC 20515

Subject **Comments on Elwha River Environmental Impact Statement - Plea to Save Our Endangered Salmon Runs**

I would like to go on record as being **in favor of the preferred alternative of removing the Elwha River dams.** Our salmon are in peril here in the Pacific Northwest. I believe that removing these two out-dated dams and allowing the fish access to the over 75 miles of high quality habitat inside Olympic National Park is the sensible thing to do - a wise investment both economically, and in the preservation of our valuable national heritage.

Robert R. Keever

Robert R. Keever
(206) 833-4487

Received
DSC-TWE

DEC 05 1994

C153-04M-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

Mail copies to:
Rep. Norm Dicks
2467 Rayburn
House Office Bldg.
Wa. D. C. 20515

Mail copies to:
Senator Slade Gorton
Hart Senate Off. Bl
Room 730
Wa. D. C. 20510

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

Mail copy to: President Clinton The White House 1600 Pennsylvania Ave. Washington, D. C. 20500

NAME (PLEASE PRINT CLEARLY): CLINT HULSE

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): Port Angeles Business Assn. ✕ C of C. ⊛

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: Why is the Dept. of Interior orchestrating & facilitating the workshops. That is inting. dating. ONE of the 2 Lakes isn't in the Natl Park. THE LACK OF FISH IS A LARGE PROBLEM that is much bigger than 1 River out of dozens of Rivers.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: ALL OPTIONS HAVE NOT BEEN PURSUED. IT SEEMS THAT beaurcrats & politicians have taken the easy way out, which is to spend A lot of money to remove the dams and make it sound positive because it will create jobs. Thats like saying that A lot of deaths will create A Lot of jobs. The death will leave create A Lot of jobs. The death will leave and the mortician will have jobs - Is this positive.

OTHER COMMENTS: A job open and the grave diggers

IT APPEARS the DEPT. of INTERIOR is determined to remove the dams.

Please continue your comments on the back of this sheet if needed.

⊛ These are my personal views (NOT ANY affiliation).

C153-04M-404-06

COMMENTS CONTINUED:

The workshop in Port Angeles was poorly handled. Facilitators were performing too many functions.

How can the Final decision be made by one person? In this case - the SECRETARY OF THE INTERIOR.

The attached adequatly described the biased workshop.

Received
DSC-T
DEC 05 1994
C154-olym-404-06

[redacted]

November 28, 1994

Sarah Bransom
National Park Service
Western Team
12795 Alederde Parkway
Denver CO 80225-0287

Deer Ms Bransom

Although I live e long way from the Elwhe River I em somewhet femiliar with the two dems on that river end the proposals to restore the salmon runs in that streem. I heve looked at these dams end em aware of their size and type of construction. The cost estimates which have appeared in the "Peninsule Deily News" ere too vague to justify any ection. As is often the case in proposals of this kind, the costs and benefits ere not yet well developed.

These are not large dams. The prospects that the proposals will produce the desired results in terms of salmon run restoretion ere also too uncertain to justify them. However these dems do present opportunities to find out what benefits might result from the removel of one or both on the Elwha

In recent years two dams have been removed on the Clearwater River in Ideho (the Stites dam above Kooskie, end the Washington Water Power dem near Lewiston) end the costs were nowhere near those currently being mentioned for the Elwhe. One is inclined to suspect these proposals ($180,000,000 to $300,000,000) must entail costs for compensating both dem owners end residents elong the river for supposed property velue losses, end possibly some park development money. The owners have elready reeped the benefits of the power from these dems end the residents must have been aware of the risks of building on such sites. (It is not as though the proposals would flood them out.)

Until such time as more believable cost informetion can be provided, these proposals should be tabled. We ere in no position today to throw money at this sort of problem. But we should be willing to look at well-based recommendationns, which promise to improve our understanding of salmon run recovery possibilities. The federal governmennt should obtein firm cost estimates for the separate removel of these dems. Separate removal would provide an opportunity to test the effect it has, after which the results might be beneficial to future plans for this end other streems.

The Elwhe is unique in heving direct access to the ocean, whereas those dams removed from the Clearwater provided no really useful information about the effect on salmon spawning, and only e little information ebout sediment disturbance.

Very sincerely yours,

Robert J Hoyle

Robert J Hoyle, P E.

Received
DSC-TWE
DEC 05 1994
C155-olym-404-06

Dear Sarah Bransom,

As an avid outdoor enthusiast and environmentally conscious citizen, I am writing you in support of the Park Service's recommendation to remove both dams from the Elwha River. The only alternative that would allow the full restoration and rehabilitation of the Elwha River ~~and~~ ecosystem and its native anadromous fisheries is the removal of these aging dams. Hopefully this will be enough of a reason to remove these dams. Someday I'd like to take my kids to the river when it is restored.

Thank you,

Mike Hankins

Received
DSC-TWE
DEC 07 1994
C136-olym-404-06

R. A. SHERRY
[redacted]

11/30/94

Sarah Branson
Natl Pk Service
Denver Co

Dear Ms. Branson:

Am writing you to urge removal of the Elwha Dams. They are

(1) Illegal

(2) Blocking the largest river system on the Olympic Peninsula – with VIRGIN SPAWNING streams.

(3) Restore the salmon runs – a bonus for all Americans as well as the local fisherman (Indian + fish-eating birds + mammals.

(4) This will be done (sometime). The longer we wait, the more it will cost.

Thanks. Sincerely

Robert A Sherry

Re
DS
DEC 07 1994
C152-olym-404-06

12/2/94

Dearest Sarah,

I can't let this chance go by to tell you how strongly I feel about supporting the removal of the Elwha Dam that is hindering the flow of the Elwha River for our precious salmon. What more can I write? It needs to be done to save fish and to clear my conscience. Now that I feel better the sooner the better

Yours truly,
Lois Bonn,
a Sierra Club member

Received
DSC-TWE
DEC 07 1994
C153-olym-404-06

December 2, 1994

Sarah Bransom
National Parks Service
Elwha River Project
PO Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

I am writing to comment on the draft Environmental Impact Statement for restoring the Elwha River. I strongly suport the preferred alternative of removing the dams. This is the only way to fully restore the Elwha River ecosystem and its salmon runs.

Restoring the Elwha is the single best opportunity to restore salmon anywhere in the Northwest, and it would provide tremendous economic benefits for the Olympic Peninsula. Please move forward to implement this important project.

Sincerely,

Martha S. Cheo
[redacted]

cc: your members of Congress

Received
DSC-TWE
DEC 07 1994
C153-olym-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): BILL ROBERDS
MAILING ADDRESS: [redacted]
AFFILIATION (IF ANY): Citizen & Taxpayer
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:
Can the Government Be trusted to Accomplish Anything, without special interest BENEFIT?

Does the Park Service Really NEED MORE REAL ESTATE?

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:
Government Cannot Be trusted
Park Service Cannot Be trusted

OTHER COMMENTS: Please leave us alone., less Government is Better Government.

NATIONAL Park Service is out of Control.. They are not listening to the People whom they should Serve.

Please continue your comments on the back of this sheet if needed.

Robert Y. Grant
[redacted]

Received
DSC-TWE
DEC 07 1994
C1G0-olym-404-06

3 December 1994

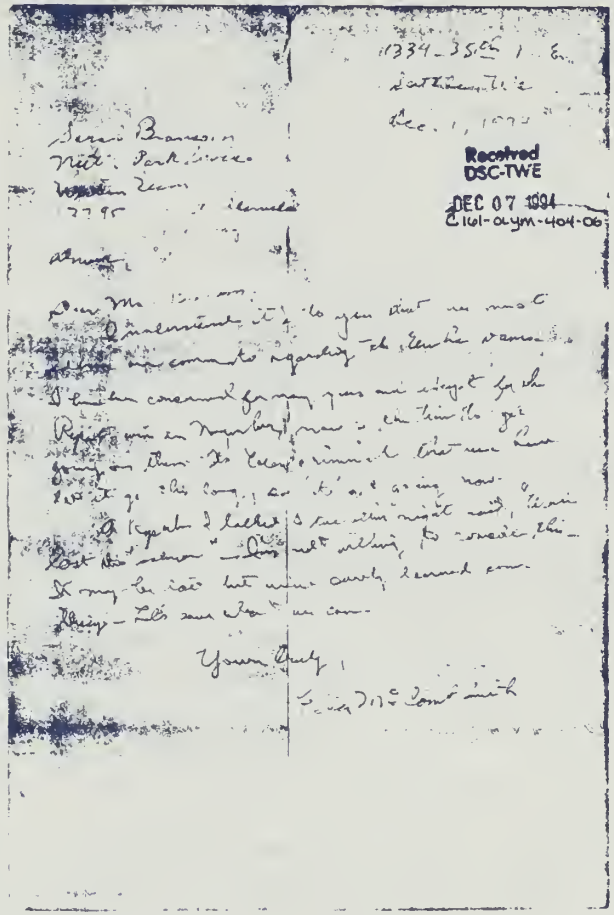
Mr Randy Brannon
National Park Service, Elwha River Project
P.O Box 25287
Denver, CO 80225-0287

Dear Mr Brannon -

Please excuse the informal, hand written note, but my Word Processor computer is unavailable at my [redacted] today. However, I have been following the Elwha Dam case for years and didn't want to miss out on a chance to put in another word for Dam Removal as the preferred alternative. Failure to move ahead now will only add to the already considerable costs involved in litigation and other higher costs such as lost revenue and other related costs which would be incurred if the works is delayed further.

Thank you.

Richard Grant
[redacted]
New Dorp



Received
DSC-TWE
DEC 07 1994
C161-olym-404-06

DON & THEA FAGER
1522 Eastmont
E. Wenatchee, WA 98802-4253



C162-OLYM-404-06

SARAH BRANSOM
National Park Service - Elwha
P.O. Box 25287
DENVER, CO
80225-0287

Dear Sarah:

We support the proposed initiative to remove the dams! We want the salmon

Thank you

DON & THEA FAGER
1522 Eastmont
E. Wenatchee, WA 98802-4253

Received
DSC-TWE
DEC 07 1994
C162-OLYM-404-06

Received
DSC-TWE
DEC 07 1994
C163-OLYM-404-06

December 4, 1994

Sarah Bransom
National Park Service,
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Sarah:

I support dam removal on the Elwha River. Study after study has shown that dam removal is the only way to fully restore the Elwha River ecosystem and its salmon runs-- AS REQUIRED BY LAW!

Removing the two out-dated Elwha River dams offers the best opportunity for salmon restoration anywhere in the Northwest. These dams completely block access to over 75 miles of pristine habitat protected inside Olympic National Park.

Dam removal has broad-based support from environmentalists, fishermen, Native Americans, business groups, and even the dam owners. Failure to remove the dams will lead to more litigation and gridlock, extinction of salmon runs, violation of tribal treaty rights, and the loss of hundreds of jobs on the Olympic Peninsula.

As a Washington resident who often visits the Elwha Valley to hike and fish, I ask that you do all you can to remove the Elwha dams once and for all.

Thank you sincerely,

Kenneth G. Bennett

Kenneth G. Bennett
4496 NE N Tolo Road
Bainbridge Island, WA 98110
(206)842-6652

Received
DSC-TWE
DEC 07 1994
C164-olym-404-06

David G. Anderson
4123 Whitman Avenue N. Apt. 1
Seattle, WA 98103

December 3, 1992

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom,

I am writing you to comment on the EIS for the Elwha River in Olympic National Park. I fully support the removal of the dams on the Elwha, and the restoration of the once magnificent salmon runs that historically occurred in this river.

The Elwha is the best opportunity for salmon run restoration in the Northwest, which as you know is crucial since our salmon runs are now in such bad shape. The removal of these dams has broad based support from local Tribes, environmentalists, and the dam owners themselves. Their removal has also already been mandated by Congress, and would provide numerous jobs for local residents. Fishermen, Tribes, and the ecosystem of the entire Elwha drainage would benefit tremendously from the restoration of salmon runs in this river.

Please help see that these dams are removed. Thank you.

Sincerely,

David G. Anderson

①

Received
DSC-TWE
DEC 07 1994
C163-olym-404-0

12-5-94

SARAH BRANSON
NATIONAL PARK SERVICE
ELWHA RIVER PROJECT
P.O. BOX 25287
DENVER, CO 80225-0287

RE REMOVAL OF DAMS FROM THE ELWHA RIVER

I AM IN SUPPORT OF THE PREFERRED ALTERNATIVE OF REMOVING THE DAMS. IT IS THE ONLY WAY TO FULLY RESTORE THE ELWHA RIVER ECOSYSTEM & ITS SALMON RUNS AS REQUIRED BY LAW.

I HAVE LIVED IN THE SEATTLE AREA FOR 36 YEARS & HAVE FISHED MOST OF THE RIVERS & THE SOUND FOR THE LAST 30 YEARS. I HAVE WATCHED WITH DISMAY & HORROR AS OUR ONCE BOUNTIFUL SALMON RUNS HAVE BEEN SYSTEMATICALLY DESTROYED, SOME OF THEM TO THE POINT OF EXTINCTION. A VERY LARGE PART IS DUE TO THE DESTRUCTION OF THEIR HABITAT & REPRODUCTION AREAS.

AT ONE TIME THE ELWA RIVER PRODUCED ~~ONE~~ OF THE LARGEST & MOST BEAUTIFUL FISH IN THE NORTHWEST, AN OLD INDIAN SAYS SOME OF THE MATURE CHINOOK WERE THE LENGTH OF 3 SQUARE STEPS.

(2)

IF THE DAMS CAN BE REMOVED MOST OF THE RIVER IS IN THE NATIONAL PARK AREA & FUTURE DEVELOPMENT OF THE RIVER IS PROHIBITED AND IN ALL PROBABILITY THE WILD SALMON RUNS WILL RETURN TO THEIR ONCE BOUNDIFUL GLORY.

SINCERELY

Burton Park

Received
DSC-TWE
DEC 07 1994
C166-olym-404-06

4625 W. Bonnie Dr.
[redacted]

Sarah Bransom
National Park Service, Elwha River Project
PO BOX 25287
Denver Co 80225-0287

Dear Ms. Bransom:

We support the preferred alternative of removing the dams! It is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law. Restoring the Elwha is a wise investment--this is the single best opportunity to restore salmon anywhere in the Northwest.

Sincerely,

Robbi Castlebery
Vic Castlebery

Vic and Robbi Castlebery

Received
DSC-TWE
DEC 07 1994
C167-olym-404-06

Judy Marshall
[redacted]

December 2, 1994

Sarah Bransom
National Park Service
Elwha River Project
P. O. Box 25287
Denver, Colorado 80225-0287

Dear Ms. Bransom:

It has come to my attention that there is a possibility that there will not be complete removal of the Elwha River dam. I had thought the 1992 session of Congress passed the Elwha River Restoration Act which would mandate full restoration of the Elwah!

Please be advised that I support the preferred alternative of removing the dams! This is a beautiful area and it deserves to be fully restored so that the ecosystem can return to its previous state and the salmon runs can be renewed.

Restoration of the Elwha is a wise investment and the best single opportunity to restore salmon anywhere in the Northwest. It has been a a terrible disappointment this past couple of years to see the diminished salmon runs.

Failure to remove the dams at this time will simply lead to more litigation and gridlock, in addition to the possibly extinction of salmon runs, and violation of tribal treaty rights.

Very truly yours,

Judy Marshall

JM/yt

CC: The Honorable Slade Gorton
The Honorable Norm Dicks

Received
DSC-TWE
DEC 07 1994
C168-olym-404-06

2102 31st Ave S.
[redacted]

Ms. Sarah Bransam
National Parks Service, Western Team,
12795 Alamedo Parkway
Denver CO 80225-0287

Ms. Bransam,

I have read the Elwha River Environmental Impact Statement and heartily support the "preferred" alternative for the reasons detailed in the EIS. It seems to be the best chance to restore the Elwha River anadromous fish runs. I urge you to implement this alternative before the runs become extinct.

Yours sincerely,

Joe Ginsburg

Joe Ginsburg

cc: Slade Gorton
Norm Dicks

Received
DSC-TWE
DEC 07 1994
C169-olym-402-06

Judy Marshall
[redacted]

December 2, 1994

Sarah Bransom
National Park Service
Elwha River Project
P. O. Box 25287
Denver, Colorado 80225-0287

Dear Ms. Bransom:

It has come to my attention that there is a possibility that there will not be complete removal of the Elwha River dam. I had thought the 1992 session of Congress passed the Elwha River Restoration Act which would mandate full restoration of the Elwah!

Please be advised that I support the preferred alternative of removing the dams! This is a beautiful area and it deserves to be fully restored so that the ecosystem can return to its previous state and the salmon runs can be renewed.

Restoration of the Elwha is a wise investment and the best single opportunity to restore salmon anywhere in the Northwest. It has been a a terrible disappointment this past couple of years to see the diminished salmon runs.

Failure to remove the dams at this time will simply lead to more litigation and gridlock, in addition to the possibly extinction of salmon runs, and violation of tribal treaty rights.

Very truly yours,

John Owens

JO/jm

CC: The Honorable Slade Gorton
The Honorable Norm Dicks

I agree with the recently issued EIS which confirms that removing both dams is the only way to fully restore the Elwha. I hope to hike with my grandchildren someday soon along the banks of a scenic, restored, wild river - the Elwha!

Rachael Black
member - Seattle Mountaineers
- Washington Trails Association
- Sierra Club
AND I VOTE!

Received
DSC-TWE
DEC 07 1994
C170-olym-402-06

12/05/94

Dear Ms. Bransom:

Please remove the Elwha River Dam!!!

I have backpacked and hiked and climbed in the Olympics for over 20 years, and consider it the most wonderful "back yard" one could ask for to raise children in and find solace and beauty in.

There is no point in having a dam inside the National Park. We need to take decisive action to save the few Northwest salmon runs left.

Received
DSC-TWE
DEC 07 1994
C172-oLym-404-06

December 6, 1994

Sarah Bransom
National Park Service
Elwha River Project
P.O. Box 25287
Denver, CO. 80225-0287

I should like to state my support for the removal of the Elwha River Dams.

I bslieve that a very thorough, and many-agency, cooperative study has shown that this is one of the last best hopes of restoring the many fish runs of the Elwha River, as well as the dependent ecosystem. Having the spawning areas within the protection of the Olympic National Park, gives this particular project a good chance.

Trying to license the outmoded dams, seems like putting a finger in a dike, as far as a long-term solution.

It has been heartening to note that the local mill, that is using the power generated by the dams, is also in favor of their removal.

Sincerely yours

Mildred E. Yeoman

Mildred E. Yeoman
[redacted]

Received
DSC-TWE
DEC 07 1994
C173-oLym-404-06

[redacted]

December 3, 1994

Ms. Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-028

Dear Ms. Bransom:

I am writing to express my support for the removal of the dams on the Elwha River. There is no doubt that this is the best, if not the only, way to restore salmon runs on this river. It has been demonstrated that fish ladders and lifts do not work very well. Neither does transporting smolt downstream around dams.

Since most of the Elwha River is in the Olympic National Park it is protected from the deleterious effects of logging, diversion of water for irrigation, and pollution from industrial and domestic sources. This makes it an ideal river in which to reestablish salmon populations.

This project, if carried out, would produce a large number of short term and long term jobs on the Olympic Peninsula.

Sincerely,

Charles D. Louch

Charles D. Louch

Dear Ms. Bransom -

I support the preferred alternative of remaing the dams! It is the only way to fully restore to Elwha River ecosystem and its salmon runs as required by law. Thank you!

Received
DSC-TWE
DEC 07 1994
C174-04YM-404-06

Frank DiBiase

[redacted]

(xx) 884-9558

deGroat [redacted]

OLYMPIA WA 985
PM
DEC
1994

PLY P&DF 985 12

C175-04YM-404-06

USA 19

Sarah Bransom
National Park Service,
Elwha River Project
P.O. box 25287
Denver CO 80225-0287

Dear Ms. Bransom: Great DEIS! 12/2/94

Having examined the Elwha River Environmental Impact Statement, I support the preferred alternative of removing the dams. This is the only way to restore the Elwha River salmon runs. This alternative has broad-based support, and failure to remove the dams would cost the government millions of dollars more in litigation, as well as violate tribal treaty rights and cause the loss of further jobs on the Olympic Peninsula.

We are writing to our legislators, asking them to please move quickly to remove the Elwha River dams.

Please respond -

Sincerely,

Greta and Ray de Groat

[redacted]

Received
DSC-TWE
DEC 07 1994
C175-04YM-404-06

[redacted]

Dec. 1, 1994

Sarah Brannon,
National Park Service
Elwha River Project
PO Box 25287
Denver, Co. 80225-0287

Received
DSC-TWE
DEC 07 1994
C177-oym-404-06

Dear Madam.

I support the alternative of removing the dams! It is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law.

Dam removal has broad-based support from environmentalists, fishermen, Native Americans, business groups and even the dam owners.

Restoring the Elwha is a wise investment — this is the single best ~~opportunity~~ opportunity to restore salmon anywhere in the Northwest.

Failure to remove the dams would lead to more litigation and gridlock, extinction for salmon runs, violation of tribal treaty rights and the loss of hundreds of jobs on the Olympic Peninsula.

Sincerely,
Vivianne M. Taylor

[redacted]

Nov 5 1994

Received
DSC-TWE
DEC 07 1994
C176-oym-404-06

Dear Sarah:
Dear Sirs:

I am writing to register my full support for removing the dams. It is the only way to fully restore the Elwha River. I just wish it could begin a similar process on all of our rivers.

The salmon are becoming extinct. This would be a great opportunity to restore the salmon runs — so needed!

Please do all you can to support this Restoration Act. I join the public to support dam removal. Thank you!

Sincerely,
Barbara Strunk

Received
DSC-TWE
DEC 07 1994
C178-olym-404-06

December 4, 1994

Sarah Bransom
National Park Service,
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Sarah:

I support dam removal on the Elwha River! Study after study has shown that dam removal is the only way to fully restore the Elwha River ecosystem and its salmon runs-- AS REQUIRED BY LAW!

Removing the two out-dated Elwha River dams offers the best opportunity for salmon restoration anywhere in the Northwest. These dams completely block access to over 75 miles of pristine habitat protected inside Olympic National Park.

Dam removal has broad-based support from environmentalists, fishermen, Native Americans, business groups, and even the dam owners. Failure to remove the dams will lead to more litigation and gridlock, extinction of salmon runs, violation of tribal treaty rights, and the loss of hundreds of jobs on the Olympic Peninsula.

As a Washington resident who often visits the Elwha Valley to hike and fish, I ask that you do all you can to remove the Elwha dams once and for all.

Thank you sincerely,

Susan Marie Anderson

[redacted]

We live on Chambers Creek, where once the salmon spawned in great numbers. Now I can't even find some carcasses on the banks.

I wholeheartedly support the preferred alternative of removing the dams! It is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law. We don't have much time left....

I wish you a Merry Christmas and a Happy New Year, in which you do all you can to SAVE THE SALMON - RESTORE THE ELWHA!

Received
DSC-TWE
DEC 09 1994
C180-olym-404-06

Seasons Greetings
Ruth Beck

Dr. & Mrs. R.J. Beck

[redacted]

C181-olym-404-06

SEATTLE WA
FEB
1994

USA 19

Sarah Branscom
Nat'l. Park Service - Elwha RV. Proj.
PO Box 25287
Denver, CO
80225-0287

© USPS 1991

12-4-94

Dear Ms. Branscom,

Devastated to read in the paper that the Elwha dam removal effort is DEAD. Now I hear there's a glimmer of hope.

I support the EIS preferred alternative of removing 2 dams.

Received
DSC-TWE
DEC 09 1994
C181-olym-404-06

Laura Lindstrom
4120 Pt. White Dr. NE
Bainbridge Is., WA 98110

Received
DSC-T
DEC 08 1994
C183-olym-404-06

[redacted]

12/6/94

Sarah Branscom
National Park Service, Elwha River Project
PO Box 25287
Denver, CO 80225-0287

Dear Ms Branscom:

We are writing you today to let you know we support the preferred alternative of removing the Elwha dams. It is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law.

The dam removals have broad support from environmentalists, fishermen, Native Americans, business groups and even the dam owners. Restoring the Elwha is a wise investment - this is the single best opportunity to restore salmon anywhere in the Northwest. Failure to remove the dams would lead to litigation and gridlock, extinction for salmon runs, violation of tribal treaty rights, and the loss of hundreds of jobs on the Olympic Peninsula.

Thank you

Sincerely,

Colleen Wright
David Glickerman

Received
DOC TWE
DEC 08 1994
C184-oym-404-06

December 6, 1994

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

As a member of The Mountaineers and a concerned citizen I would like to emphatically voice my support for the preferred alternative of removing the dams on Elwha river! It is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law.

The two dams are outdated and removing them offers the best opportunity for salmon restoration anywhere in the Northwest. These dams completely block access to over 75 miles of pristine habitat protected inside olympic National Park.

Dam removal has broad-based support from environmentalists, fishermen, Native Americans, business groups and even the dam owners. Failure to remove the dams would lead to more litigation and gridlock, extinction of salmon runs, violation of tribal treaty rights, and the loss of hundreds of jobs on the Olympic Peninsula.

Sincerely,
Tamara Wulff
[redacted]

cc: Norm Dicks, State Representative

6 Dec 94

Dear Mrs. Bransom -

The broad base of support for the Elwha Dam removal serves to support the rightness and necessity of doing it!

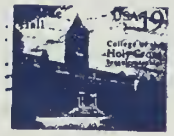
Removal would seem to be the best chance to restore salmon runs in NW.

Please carry out the Congressional Restoration Act passed in 1992.

Sincerely,
[redacted]
don and emily grindell

Received
DOC TWE
DEC 08 1994
C175-oym-404-06

Pam Pritzl
[redacted]



C186-olym-404-06

Sarah Bransom
Nat'l Park Service, Elwha River Project
PO Box 25287
Denver Co
80225-0287

12-5-94

I'm writing in support of removing the two out-dated Elwha River dams in Wash. State. The removal of these dams offers the best opportunity for salmon restoration anywhere in the Northwest

Pam Pritzl
[redacted]

Received
DSC-TWE
DEC 08 1994
No need to reply — send a flyer!
C186-olym-404-06

Received
DSC-TWE
DEC 08 1994
C187-olym-404-06

05 DEC 94

Sarah Bransom
National Park Service, Elwha River Project
PO Box 25287
Denver, Colorado, 80225-0287

Dear Ms. Bransom,

I'm writing you to support the alternative of removing the Elwha River dams. This is our best opportunity to restore salmon habitat anywhere in the Northwest, and all of the watershed involved is already Federal park land so that no private interests would be adversely affected by it. This is the alternative which best accords with Congress's stated aim in the 1992 Elwha River Restoration Act.

Failure to remove these dams will lead to more litigation, worsening chances for improvement in the disastrous salmon situation, possible violation of treaty rights and more litigation therefrom, and potentially the loss of jobs in a region already hit hard by the loss of timber-related employment.

Even the dam owners support removing them. You should too.

Sincerely yours,

LTC Jonathan Newmark
[redacted]

CC: Hon. Slade Gorton, US Senate
Hon. Norm Dicks, US House of Representatives

W. Cary Deaton, P.S.
Certified Public Accountant

Tacoma Security Bldg. • 917 Pacific Avenue, Suite 101 • Tacoma, WA 98402 (206) 383-5280 • fax (206) 383-5278

Received
DSC-TWE
DEC 09 1994
C188-olym-404-06

• Business Valuator
• Litigation Consultant
• Management Advisor

December 5, 1994

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom.

I understand that the recently issued Elwha River Environmental Impact Statement confirms that removing both of the dams on the Elwha River is the only way to fully restore the Elwha and its salmon runs.

I implore you to move forward, as I believe restoration of the Elwha is the single best opportunity to restore the salmon population anywhere in the Northwest. I am supported in this belief by dozens of environmental groups of national stature, the Native American Tribes affected and the dam owners themselves.

Please act now, before this magnificent resource is gone forever

Best regards,

W Cary Deaton, CPA

cc: The Honorable Slade Gorton
The Honorable Norm Dicks

[redacted]

12-7-94

Sarah Bransom
Nat'l Park Service
Elwha River Project
P.O. Box 25287
Denver, Co. 80225-0287

Received
DSC-TWE
DEC 09 1994
C189-olym-404-06

Dear Ms. Bransom,

My husband & I are both in agreement that restoring the Elwha is a wise investment and the best opportunity to restore salmon anywhere in the Northwest.

Not only will it restore 10 runs of Elwha salmon and steelhead but it will provide immense economic benefits for the region like $6 million in new income to workers on the Olympic Peninsula with projected spending and additional $21 million per year in revenues. It will also generate 5 million per year of new income for commercial, tribal and recreational fishermen.

Dam removals are supported by a broad coalition of environmentalists, fishermen, Native Americans and even the dam owners!

Failure to remove the dams would result in more gridlock litigation and extinction of salmon runs and the loss of 400 jobs at the local mill.

Let's get the dams removed right away.

Sincerely,
Mr. & Mrs. Terry Still

Received
DSC-TWE
DEC 09 1994
C190-OLYM-404-06

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)
National Park Service
Department of the Interior

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your comments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): JUDITH L. WINTHROP
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): FOUNDING MEMBER: THE COUSTEAU SOCIETY, ALSO MEMBER OF THE ~~ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED~~: FOLLOWING: THE WILDERNESS SOCIETY, THE NATURE CONSERVANCY, FRIENDS OF THE SEAOTTERS, FUND FOR ANIMALS, SAVE THE REDWOODS, IFAW, PAWS, GREENPEACE.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:
I AM AGAINST REMOVING THE DAMS. I BELIEVE THAT WILL BE MORE HARMFUL TO ALL WILDLIFE IN THE AREA NOW. I BELIEVE THE ORIGINAL PROMISE OF SUPPLYING A FISH LADDER SYSTEM - SHOULD BE FOLLOWED. THIS WOULD GIVE THE FISH HELP - BUT NOT HARM ANYTHING ELSE. IN TRYING TO GUESS WHAT MIGHT HELP THE FISH, IF THE DAMS ARE REMOVED IT WILL BE HARMFUL TO WILDLIFE THAT IS A FACT... AND THERE IS NO CERTAINTY THAT IT WOULD HELP OR DO WHAT IT IS INTENDED

OTHER COMMENTS: IN OF HELPING THE FISH,
DO ONLY GOOD. DO NOT DO HARM. PEOPLE HAVE DONE TOO MUCH HARM TO NATURE - DON'T DO MORE HARM IN THE NAME OF "HELPING"... I AM A VERY STRONG ENVIRONMENTALIST - I VOTED FOR BRUCE BABBITT WHEN HE RAN FOR PRESIDENT AND AM A VERY STRONG SUPPORTER OF HIS AND VICE

Please continue your comments on the back of this sheet if needed.

C190-OLYM-404-06

COMMENTS CONTINUED:

PRESIDENT AL GORE FOR THEIR ENVIRONMENTAL POSITIONS. I WISH THEY WERE EVEN STRONGER TO HELP STOP PRIVATE CORPORATIONS AND INDIVIDUALS FROM RUINING AMERICA'S RESOURCES FROM THE TREES, THE WATER, AND ALL WILDLIFE AND PLANTS.

BUT SOMETIMES LEAVING WHAT HAS ALREADY BEEN DONE IS BETTER THAN GOOD WISHES - BUT NOT A WISE MOVE.

- PLEASE STOP THE GRAZING OF FARM ANIMALS ON OUR PUBLIC LANDS AT RIDICULOUS LOW FEES.
- PLEASE STOP HUNTING OF PREDATORS ON PUBLIC LANDS
- PLEASE KEEP PROTECTING THE FORESTS - ESPECIALLY OLD GROWTHS AND HABITATS OF ENDANGERED SPECIES.
- PLEASE SAVE THE WETLANDS
- PLEASE RENEW AND STRENGTHEN THE ENDANGERED SPECIES ACT.
- UNFORTUNATELY I'VE LEARNED THAT AS AN ENVIRONMENTALIST - EACH BATTLE THAT IS FOUGHT AND LOST: IS GONE FOREVER... BUT EACH BATTLE THAT IS WON - IS ONLY WON UNTIL "THE OTHER SIDE" TRIES TO FIGHT IT AGAIN IN HOPES OF WINING.

DON'T SPEND TIME AND MONEY DOING THE WRONG THING HERE - WE NEED TO WIN EVERY GOOD BATTLE - ESPECIALLY WITH THE RECENT SHIFT IN POLITICAL POWER IN WASHINGTON.

THANK YOU,

Judith L. Winthrop

YES TO
FISH LADDERS WILL HELP, AND ANYTHING ELSE THAT CAN HELP THE FISH BUT WITHOUT HURTING ALL OTHER MAMMALS THAT ALREADY DEPEND ON THAT HABITAT AS IS.... WHEN A SHIP GOES DOWN IN WATER IT IS AT FIRST AN ENVIRONMENTAL PROBLEM (AS BUILDING THE DAM ORIGINALLY WAS WRONG) BUT THEN THE SEALIFE GROWS UP AROUND THE OLD SHIP AND THEY THRIVE (AS THE HABITATS ARE NOW around the DAMS)... IT WOULD BE WRONG TO TAKE THE OLD SHIP AWAY AFTER IT IS TURNED INTO A GOOD ENVIRONMENTAL PART (JUST AS THE DAMS ARE NOW) -
YOU MUST LOOK AT IT IN THIS LIGHT - NOT AS IT WOULD BE TO BUILDING A NEW DAM - THAT WOULD BE BAD.

THANK YOU AGAIN -

Received
DSC-TWE
DEC 09 1994
C191-olym-404-06

Chris Matera
[redacted]
December 6, 1994

Sarah Branson
National Park Service, Elwha River Project
P O.Box 25287
Denver, CO 80225-0287

Dear Sarah:

I completely support removing the Elwha River Dams, now! The Nortwest ecosystems have been decimated by unbelievably rampant clearcutting. Our salmon are gone, the wildlife are almost gone and the entire natural world in the Pacific Northwest is collapsing. If we don't turn it around now, it will be all lost forever. I am not exaggerating, the abuse of the land out here is staggering.

Please!!!!!, do something to restore the paradise that once existed here and take a stand for the land. Anything less is stealing from our children.

Chris Matera

cc: Norm Dicks

Received
DSC-[redacted]
[redacted]
DEC 09 1994
C192-olym-404

December 3, 1994

Sarah Bransom
Elwha River Project
National Park Service
P.O. Box 25287
Denver, Colorado 80225-0287

RE: Elwha River Draft Environmental Impact Statement

Dear Ms. Bransom:

I am writing in support of the preferred alternative, removal of the Elwha River dams. This is the only alternative that fully achieves the intent of the Elwha River Restoration Act of 1992.

Removal of the dams would restore anadromous fish access to 75 miles of habitat protected inside the Olympic National Park. It is the linchpin to restoration of the Elwha River ecosystem since other wildlife, ranging from black bears to bald eagles, would benefit as would the natural nutrient cycling tied to anadromous fish.

Historically, the wild chinook of the Elwha were the largest salmon on the Olympic Peninsula, and uniquely adapted to their natal river. They were exceptionally long-lived in order to achieve the large size that gave them the strength to reach the upriver spawning grounds. The Elwha also historically supported sizable runs of every other species of Pacific salmon that inhabits North American waters.

In addition to restoring a historic natural legacy, removal of these dams would finally right the violation of state law that occurred when they were built. Washington's first legislature passed a law in 1890 that required construction of fish passage on dams "wherever food fish are wont to ascend." Federal fisheries law also required consideration for the passage of salmon. Yet the dams were built without ladders or other fish passage facilities.

Sincerely,

Susan Saul

Susan Saul

Received
DSC-TWE
DEC 09 1994
C193-olym-404-06

[redacted]

December 3, 1994

Sarah Branson
Natl Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms Branson

The only way to fully restore the Elwha River ecosystem and its salmon runs as required by law to remove the dams.

The removal of the dam has support from fishermen, Native Americans, environmentalists, business groups and even the dam owners.

If the dams are not removed there will more litigation and extinction for salmon runs and violation of tribal treaty rights.

Sincerely,
Roberta H. Littleson

Received
DSC-TWE
DEC 09 1994
C194-olym-404-06

Dear Sir:

I support the removal of the two Elwha Dams.

The salmon runs in the northwest have taken a terrible beating in the last few years, I think that maybe we could began to reverse this trend by restoring the salmon runs in the Elwha River. It would be a good investment.

Thank you
Ralph Quistorff

Ralph Quistorff

[redacted]

Detrich Schmidt

Received
DSC-TWE
DEC 09 1994
C195-olym-404-06

I support the preferred alternative of removing the dams. It is the only way to fully restore the Elwha River eco-system and its salmon runs as required by law.

Detrich Schmidt

(206) 483-0511

Received
DSC-TWE
DEC 12 1994
C197-olym-404-06

November 27, 1994

Serah Bransom
National Park Service, Elwha River
P.O. Box 25287
Denver, Co 80225-0287

RE: Draft EIS, Elwhe River
Ecosystem Restoration

Dear Ms Bransom:

The recreational fishing community is opposed to the removal of the Two Elwha Dams. We base our opposition for the following reesons.

The cost of the proposed removal is out of touch with reality. Perhaps more than one hundred streems could be restored for far less money.Excellent fish ladders or some other lifting device is much more reasoneble.

Siltation creeted by removal will cause serious damege to the spawning beds along the Straits. Many other species will be effected,such as, Sea Bess, Ling Cod and bait fish.

It is our belief that there will not be great benefits to all fisherman. A small Group may benefit a great deal but it will not be recreetional fisherman. The closures that may occur to get this river into production mey destroy the recreational fishing industry.

Heving the Federel Government involved in what goes on in state waters cannot be e good deal for enyone. We do not need another leyer of Federal People screwing things up.

Sincerely,

Herold Van Riper
Chris Mohr
Representatives Clallem Bay/Sekiu Recreetionel Fishing Interests

Dec 7, 1994

Received
DSC-TW
DEC 12 1994
C198-04ym-404-06

Donald Niven Wheeler
[redacted]

Sarah Bransom, National Park Service
Elwha River Project
Dear Sarah Bransom:

As a long-time resident of Clallam County, I have a special concern for the Elwha. But I would be concerned anyway, as a member of the human race.

It is not often that we have a chance to undo the damage done by mistakes of the past such as the building of the dams on the Elwha. Here is a case where, for a moment, we do have that chance.

Lets remove the dams and restore the salmon runs. Lets restore to the Native Peoples their tribal rights.

Thank you for your consideration

Donald Niven Wheeler

Received
DSC-TWE
DEC 12 1994
C199-04ym-404-06

December 8, 1994

Sarah Bransom
National Park Service
Western Team 12795
West Alameda Parkway
Denver, CO 80225-0287

Dear Miss Bransom:

Attached, please find my comments to the National Park Service as the result of their recent workshop in Port Angeles, Washington. It was a farce and a complete waste of time and money. I am sending this to you to be sure that some one other than the National Park Service will know how we the people feel about this boondoggle.

We could have ample runs of salmon in the Elwah today if the proper steps had been taken about forty years ago, but due to political pressures, no one has made an honest eff ort to produce salmon in this river. Now the National Park Service has reached its goal, (of course no ons else would want to remove the dams at this tremendous cost in money and environmental destruction if the river was full of fish).

Now we have Public Law 102-495 authorizing the Secretary of Interior to have the dams removed IF that action would be FULLY RESTORE the Elwah Ecosystem and Native Fisheries. Frankly I do not bslieve this river can be FULLY RESTORED by any method.

The alternative of adding fish passage facilities, which have improved greatly in the past few years and can be done for about what it costs to do the final impact statement and produce fish in 3 or 4 years.

Lets show some common sense for a change and save our clean cheap power plants, beautiful lakes and recreation areas and God only knows how many millions of dollars. Relicense the Dams now !

Sincerely

Chuck Towslee

Charles (Chuck) Towslee
[redacted]

ct;at

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Charles E. Towslee

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

1. Replacement of cheap clean lost power supply due to dam removal.
2. Using clean gravel from upper end of both lakes to replenish spawning gravel in lower river, annually or as needed.
3. Modern new fish passage methods not considered by FERC report or E.I.S.
4. Affects of silt deposits on Freshwater Bay and other nearby beaches.
5. Can this river ever be fully restored in todays environment and in what time frame and cost?

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

1. The Pacific Northwest will have a power deficit of 1700 to 2900 average Mega Watts by 1997. B.P.A. Power will be much costlier.
2. We would have more salmon in the river now if this gravel had been applied in the past 20 years.
3. No fish passage experts were on the E.I.S. team.
4. There is no proof this river can be fully restored by removal of dams.

OTHER COMMENTS: The removal of the two dams on the Elwah River would probably be the most counter productive, expensive boondoggle ever foisted upon us Taxpayers and our children. The loss of power alone would amount to 848 million (1990 dollars) over 50 years. With the power deficit we now have, we should preserve what we have. No one really knows what the final

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

cost might be, possibly over a trillion dollars.

We have a beautiful river and two great lakes that have a great potential for producing salmon, trout and other wild life. They have been neglected for 80 years, mainly for political reasons, such as not insisting on fish passage when the dams were built and later on due to bickering between Fisheries, National Parks, Tribes and environmentalists. No agency has made an honest effort to maintain the river in a productive state.

As I mentioned above, there are many new modern fish passage methods today not even considered by the E.I.S. team. A good example is Puget Powers Fish Passage/Enhancement Program on the Baker River over two power dams. They had a returniin 1994 of 16,000 Sockeye, largest on record. There are new ways of passing smolts over dams such as the Eicher Screen with 97% survivalland fish friendly turbines where they pass right through.

Also there are many lessons to be learned from the Regional Aquaculture Associations in Southeast Alaska, made up of fishermen that have taken over Hatcheries and sites that Alaska Fish and Game couldn't make produce and now are having excellent returns. It can be done, although all of the above was by private enterprise.

Just by replacing the spawning gravel in the Lower Elwah could have kept a viable run going. Please help save this river and the lakes from destruction. If these dams are removed it will take many many years for it to heal up and there is no proof that it ever can be fully restored.

Lets get these dams relicensed and start raising fish.

Received
DSC-TWE
DEC 12 1994
C200-olym-404-06

512 Boylston Ave. E., #106
Seattle, Wa. 98102
December 8, 1994

Sarah Bransom
National Park Service
P.O. Box 25287
Dsnver, Co. 80225

Dear Ms. Bransom:

I understand that the recently issued Environmental Impact Statement recommends that the two dams on the Elwha River be removed. I agrse with this alternative as do many citizens as well as groups such as the Tribss, fishermen and environmental organizations.

The removal of the dams is the best method of restoring the salmon runs lost when the dams were built. It is unacceptabls that this common sense project be scuttled for political reasons, which ssems to be motivating thoss opposed to the rsmoval.

Sincerely
Hazel Wolf
Hazel Wolf

Received
DSC-TWE
DEC 12 1994
C201-olym-401-06

December 7, 1994

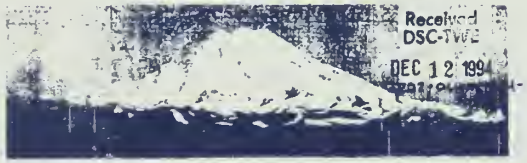
Sarah Bransom
National Park Service
Elwha River Project
P O Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

We support the removal of the dams, particularly regarding the Elwha River and its salmon runs.

If the dams are not removed, litigation is sure to follow, and possibly the extinction of salmon runs, the violation of tribal treaty rights, and the loss of many jobs on the Olympic Peninsula.

Sincerely yours,
Alice J Dewell
Alice J. Dewell
Julian C. Dewell
Julian C. Dewell



Dec 1. 1994

Dear Ms. Bransom,

I strongly support the preferred alternative of the draft Environmental Impact Statement to remove both Elwha River dams in order to restore the Elwha River ecosystem and the salmon runs, it is the only choice that makes sense. We need to act now if we are going to save the salmon.

This alternative would provide tremendous economic opportunities for the Olympic Peninsula.

Please free the Elwha

Sincerely,

Debbie Metz
P O Box 381
Manchester Wash
98353

Received
DSC-TWE
DEC 12 1994
C203-olym-401
06

[redacted]
Dec. 5, 1994

Sarah Bransom
N.P.S., Elwha River Project
P.O. Box 25287

Dear Madam:

I wish to add my support to the many citizens who are concerned thet the Elwha Dams may never be removed, as mandated by the Elwha River Restoration Act.

I have thought of the possibilities of drilling a series of tunnels through the dam. Would it save money? Fish ladders might be feasible, but they would not remove the reservoir from the park. Once that is gone, we could plant trees to restore the original clear water. This could take several years.

I have not seen the EIS, but I know the dam removal was the prefered alternative.

Yours truly,

John Warth

John F. Warth

Received
DSC-TWE
DEC 12 1994
c204-olym-404-06

December 6, 1994

Sarah Bransom
National Park Service, Elwha River Project
P. O. Box 25287
Denver, CO 80225-0287

Dear Ms Bransom,

I support the National Park Service's recommendation to remove both dams on the Elwha River as the only way to fully restore the Elwha River's ecosystem. The Elwha River, through ths Olympic National Park, was at one time and has the potential to be once again, an enormous resource for anadromous fisheries. As salmon fisheries in the Northwsst continue to decline and are on the verge of extinction, the rehabilitation of the Elwha ecosystem by removing the two dams is a necessity. The removal of the dams and the restoration of the ecosystem would also provide a needed food resource for wildlife within the Olympic National Park.

Restoring the Elwha is a wise investment. This is the single best opportunity to restore salmon anywhere in the Northwest. Dam removal has broad-based support from environmentalists, fishermen, Native Americans, business groups and even the dam owners.

Failure to remove the dams would lead to more litigation and gridlock, extinction for salmon runs, violation of tribal treaty rights, and the loss of hundreds of jobs on the Olympic Peninsula.

Sincerely,

Donna Wakefield

Donna Wakefield

14800 Interurban Ave. South
Unit 67
Tukwila, WA 98168

(206) 246-2323 #67

Received
DSC-TWE
DEC 12 1994

December 8, 1984

c204-olym-404-06

Sarah Bransom
National Park Service
Western Team
12795 Alameda Parkway
Denver, Colorado
80225-0287

Dear Ms. Branson,

Thank you for the opportunity to review the Elwha River Ecosystem Restoration Draft Environmental Impact Statement. You and the other National Park Service Preparers have done a commendable job in putting this document together. The photographs and illustrations provide a nice touch.

The proposed action, full removal of both Glines Canyon and Elwha dams, seems the clear choice as the only way to restore the Elwha River ecosystem and meet the congressional mandate in Public Law 102-495.

The restoration of important fisheries, increased local employment and attraction of more tourists will all be beneficial.

I support the removal of both dams. I look forward to reviewing subsequent documents including the "Implemention EIS."

Thank you,

Michael Hill

[redacted]

Cascades
Olympic National Park, Washington
Photograph by David Muench

Cascades in the Soleduck River Valley are glacier fed

DEAR MS. BEANSON,

I am writing in support of removing the Elwha River Dams. I believe that dam removal, although expensive, will be a wise investment in the long run. Dam removal will create many construction jobs for Olympic Peninsula workers and eventually generate income for local fishermen. I believe it is the best opportunity to restore salmon here in the Northwest.

Sincerely,
Matt Vande Putte

Received
DOC/TWE
DEC 13 1994
C207-olym-404-06

SARAH BEANSON
NATIONAL PARK SERVICE
ELWHA RIVER PROJECT
P.O. BOX 25287
DENVER, CO
80225-0287

Co-Producer NATIONAL PARK CONCESSIONS, INC
Star Route 1, Box 11
Port Angeles, Washington 98362 NPL 253

Produced by Beautyway, Box 340, Flagstaff, AZ 8600[illegible]
Cooperative Publisher with Museums, Parks, and Travel Organizations 711

C254

C208-olym-404

EVERETT, WA 982
DEC 1994

Fort Recovery, Ohio 19 USA

Ms Sarah Branson
N.P.S – Elwha River Project
P.O Box 25287
Denver, CO
80225-0287

MRS. DIANE PORTER GIBBINS
[redacted]
Dec 7, 1994

Dear Ms Branson
Re: the Elwha Dams
I'd support the preferred alternative of removing the Elwha Dams. It is the only way to fully restore the Elwha River system to its salmon runs as required by law.
Thank you
D. Gibbins
Senior Citizen

DEC 13 1994
C208-olym-404-06

Received
DSC-TWE
DEC 13 1994
C209-Olym-404-06

[redacted]

Dec. 2, 1994

Dear Madam,

I support the preferred alternative of removing the dams as it is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law.

Restoring the Elwha is a wise investment.

Sincerely
Virginia Walsh

Received
DSC-TWE
DEC 13 1994
C210-Olym-404-06

3148 Laurel Road
Longview, WA 98632-5551
(206) 423-4658
7 December 1994

Sarah Bransom
National Park Service Elwha R. Project
PO Box 25287
Denver, CO 80225-0287

Re: removal of Elwha dams

Dear Ms. Bransom:

We support the preferred alternative of removing both dams from the Elwha River.

Because of lack of agriculture upstream, salmon runs restored to the Elwha will face fewer survival problems than do the salmon runs on the Columbia. This appears to be a particularly promising piece of the solution to the complex salmon problem.

Sincerely,

Ruth T. Deery
Harold A. Deery

Ruth T. Deery
Harold A. Deery

Received
DSC-TWE
DEC 13 1994
C211-olym-404-06

December 7, 1994

Sarah Bransom
National Park Service
Elwha River Project
P O Box 25287
Denver, CO 80225-0287

Dear Ms Bransom,

I am writing to tell you how crucially important it is to destroy the dams that are currently blocking the Elwha River, one of the premiere salmon watersheds in the world I therefore strongly support the preferred alternative that was studied in the recently completed EIS to remove these dams and bring this spectacular resource radiantly back to life with the wealth of giant salmon it had nurtured for thousands of years

I'm sure I hardly need to remind you of the strong arguments supporting full dam removal and restoration of the Elwha watershed. The potential regeneration of salmon habitat in such a rare, nearly pristine river basin would offer major benefits for the surrounding natural ecology, the local economy, and the broader human community. It would be a superb and historic investment in our future, helping to set a national-- if not global-- precedent for taking strong action to restore native habitats and sustainably reintegrate wildlife and people within the natural environment.

Furthermore, removal of these dams already enjoys widespread support from business groups, Native Americans, fisherman, environmentalists, and the dam owners alike. Failure to remove the dams would be a costly, irresponsible sacrifice of the public interest, leading to more litigation, the loss of a great many jobs, violations of treaty rights, and the extinction of internationally significant salmon runs

The time has now come for decisive action on behalf of the broader public and environmental welfare I ask that you please seize this unique opportunity to exercise your leadership and pursue a timely removal of the Elwha dams

Thank you very much for your time and attention

Sincerely,

W Grant Crook

W Grant Crook

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, Co. 80225-0287

Received
DSC-TWE
DEC 13 1994
C212-olym-404-06

Dear Ms. Bransom -

Re the public comment solicited on the draft EIS for Elwha River restoration:

I favor the preferred alternative of removing the dams. As a participant on my electrical utility's annual consumer study groups, I had the opportunity to look into efficiency, conservation, and development of renewables. Because that approach is more than capable of meeting power needs and because the crisis in declining salmon runs must be addressed immediately and substantively, I urge you to follow through with implementation of dam removal ASAP!

Thanks you.

Sincerely,
Sheralyn Wells

[redacted]

Received
DSC-TWE
DEC 13 1994
C213-OLYM-404-06

December 6, 1994

Sarah Bransom
National Park Service, Elwha River Project
P.O.Box 25287
Denver, Colorado 80225-0287

Dear Ms Bransom:

I have heard a great deal about the Elwha Dams and their removal over many years. However, for the first time, I saw the EIS. It is astounding how much support the removal of the dams has and what economic sense it makes. At a time when we are trying to restore the economic base of our communities, the removal of the Elwha Dams and the restoration of the fisheries is a must. What a wonderful opportunity we have to invest in the future.

Clearly put, I am for the preferred alternative of removing the Elwha Dams and restoring the economic vitality represented by the return of the salmon runs.

Sincerely yours,

Kim Wright

V. Crane Wright

cc: Sen. Slade Gorton
Congressman Norm Dicks

Received
DSC-TWE
DEC 13 1994
C214-OLYM-404-06

December 6, 1994
NPS, Elwha River Project
P O Box 25287
Denver, CO 80225-0287

Dear Ms Bransom,

I'm writing you in regards to the Elwha River Project I strongly support the preferred alternative of removing the dams. I believe it is the best way to restore the river's native salmon runs The Northwest's historic salmon runs have all but vanished as a result of short sighted management decisions made by the state and federal governments This is an historic opportunity to begin restoration of this potentially renewable resource As one of the many hard working, tax paying, fish loving, native Washington residents, who often visits this area, I believe my opinion should be given do regard.

Sincerely,

Dan Monaghan

Dan Monaghan

[redacted]

Received
DSC-TWE
DEC 13 1994
C215-OLYM-404-06

Sarah Branson,

I ardently support the removal of both dams on the Elwha River.

I have read the Environmental Impact Statement entirely and am appalled at the cavalier way the salmon runs were spoiled and the tribal treaty rights ignored - again.

In 1992 Congress mandated full restoration of the Elwha River. We the citizens of Washington State expect the National Park Service to protect our natural resources and not sit idle and allow continuing degradation!

Sincerely,

[redacted]

Received
DSC-TWE
DEC 13 1994
C217-OLYM-404-06

Sarah Branson
NPS - Elwha River Project
Denver CO 80225

Julie Tubbs
[redacted]

Dec. 9, 1994

Dear Ms. Branson
I support the alternative to remove the dams. The plight of the salmon is a sad state of affairs and this decision to remove the dams could be a huge step in the direction the salmon population need before they are wiped out.

So much research has been done and all signs point to the enrichment the removal would bring.

Thank you for your time.
Sincerely,
Julie Tubbs

Received
DSC-TWE
DEC 13 1994
C218-Olym-404-06

December 10, 1994

Sarah Bransom
National Park Service
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom,

I am writing in support of the National Park Service proposal to remove the two Elwha River dams on the Olympic Peninsula. We are struggling in the Northwest to restore our salmon runs. The Elwha River Project offers the best opportunity for restoration.

It is the right thing to do for our National Park, it is the right thing to do for Native American treaty rights to fish the Elwha River in perpetuity, it is the right thing to do for the salmon., and it is the right thing to do legally.

I am sending a copy of this letter to my representatives in Congress in the hope that they will lend whatever support is possible to this proposal.

Sincerely,

Georgeanne Brown

Georgeanne Brown
4608 Dayton Avenue North
Seattle, WA 98103

Received
DSC-TWE
DEC 13 1994
C219-Olym-404-06

6 December 1994

Sareh Brensom
N P S, Elwhe River Project
P O Box 25287
Denver, CO 80225-0287

RE: Elwha E I S

Dear Ms. Bransom;

I em writing to support the removal of the Elwha dams, to suggest some confirming economic enalysis, and to make an observation.

I have recently visited both dem-sites to see for myself what the canyon might look like and consider the architectural importance of the power houses (the later should have been considered in the E I S). Both power houses ere ordinary concrete industriel structures, for which there ere many finer examples of design at other dams.

In the past year I have visited most of the dams on the Columbie end Sneke rivers. One is mightily impressed by the vast switchyards and enormous power distribution lines emenating from the yards. Implicitly, one is reminded of the awful and large impacts thet these dams have had on fisheries end the seemingly insurmountable problems of mitigating those impacts. Conversely, at the Elwha dems one is astonished to see very, very small trensmission lines ettached to them. These smell lines, when compered to the total destruction of six runs, seems all out of proportion.

The cost of removing the Elwha dams and reviving the fish runs forever compared to the nearly equal amount spent eech year on the Columbia for barging smolt to no great benefit should be considered in the weighing of whether the Elwha project makes sense. Get some larger regional or national perspective to make the case for removal. It is the single and finest opportunity to restore salmon in the whole region.

And finally, removal and salmon restoration are required by lew. Lets get on with it.

Sincerely yours,

BCB TWB

Beetrice and Bill Booth
[redacted]

elwha1

Received
DSC-TWE
DEC 13 1994
C220-olym-404-06

Sara Branson
National Park Service,
Elwha River Project
P.O. Box 25..87
Denver, CO 80..5-02..

RE: Draft EIS, Elwha River Ecosystem Restoration

Dear Ms. Branson,

I am writing to comment on the draft environmental impact statement for the Elwha River ecosystem restoration.

This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula, an area that is now very depressed due to both logging and fishing restrictions.

I strongly support the Secretary of The Interior's recommendation to remove both dams and restore the st... species of salmon within the Elwha River ecosystem.

Sincerely,

A. Ted Pearson

[redacted]

Dec 8, 1994

Received
DSC-T...
DEC 13 1994
C221-olym-404-06

Dear Ms Branson

I am writing to express my support for the prefered alternative ~~to~~ of the Elwha River EIS.

The idea of the Federal Government correcting an environmental mistake made years ago would encourage reasonal, rational consideration of wilderness issues. If we know that things can be corrected it might defuse radical opposition to any actions outside of the city limits.

And it will restore the sadly missed salmon runs

Sincerely

Jim Funk

[redacted]

Emma Corrine
[redacted]

Received
DSC-TWE
DEC 13 1994
C222-ouyn-404-00

December 6, 1994

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

RE: Elwha River Draft EIS

Dear Ms. Bransom:

I strongly support the preferred alternative of removing the two Elwha River dams as described in the draft Environmental Impact Statement.

Restoring the Elwha River is a "Win-Win" solution. It is part of a negotiated settlement of a protracted legal controversy surrounding the dams. The 1992 Elwha Act is fully supported by commercial and recreational fishing groups, environmental organizations, Native American tribes, businesses, the dam owners and the pulp mill that uses power from the dams.

It is critical that the Interior Department implement the Elwha Act as soon as possible. The Secretary should include full funding in the Administration budget for acquisition and removal of the dams, followed by restoration of the fish runs. Similarly, Congress needs to approve that funding request. The consequences of *not* do so would be extremely harmful for all parties concerned.

Failure to remove the dams would return us to the gridlock and litigation over the Elwha which the region faced prior to the 1992 Act. The result would be endangered species listings and possible extinction for Elwhe River salmon runs, continued diminishment of Tribal treaty rights and the potential closure of one of the largest employers on the Olympic Peninsula.

While at one time the Elwha dams may have played an important role in bringing electric power to parts of the peninsula, today the adverse impacts of these 2 dams far outweigh any remaining benefits they might provide. The environmental, economic and cultural costs the Elwha dams impose on the region ere huge, while the amount of energy they produce is comparatively small. Their combined output is approximately 19 average megawatts, or less than one tenth of one percent of the power usage in the Northwest.

Removing the dams will have no significant impact on the power supply for the local community or the Northwest. The Elwha Act provides for the power needs associated with dam removal by directing BPA to supply Deishowa with replacement power at the same rate as other industrial users. Cost-effective, less damaging alternative resources such as energy conservation and wind turbines are available for BPA to utilize for supplying the small increase in power requirements associated with Elwhe dam removal.

I would also point out that removing the dams is required by numerous laws. The Elwha Act requires the full restoration of the Elwha ecosystem and its historic salmon runs. Numerous studies and reports by FERC, the federal resource agencies, and others all confirm that the only way to achieve that legal mandate to restore the 10 distinct runs of Elwha salmon and steelhead is through dam removal.

In addition, the Federal Power Act prohibits the licensing dems in a National Park. The Glines Canyon dam therefore cannot receive a new license due to its presence in Olympic National Park. In 1990 a legal opinion released by the General Accounting Office of Congress confirmed this point. Any efforts to keep the dam in place are bound to land in federal court.

Furthermore, dam removal is an important step in upholding Native American treaty rights the federal government is legally responsible for defending. Federal Courts have affirmed that the 1855 treaty between the United States and the Lower Elwha S'Klallam Tribe protects the Tribe's right to fish the river; yet by blocking fish passege to most of the river, the dams have effectively negated this right central to the Elwha people's cultural, social and economic life.

Restoring the Elwha also makes good economic sense. Removing the dams is a wise investment -- it is the single best opportunity to restore salmon anywhere in the Northwest. The combination of pristine habitat protected within the park and the ability to remove the only obstacles to access that habitat add up to an excellent likelihood of success for rebuilding the Elwha River selmon runs at a relatively modest sum.

The Elwha Act protects nearly 350 high-wage union jobs at Daishowe's Port Angeles mill by providing the mill access to e reliable alternative supply of electricity. In addition, dam removal will provide millions of dollars of new income to construction workers and businesses in Clallam County. Restoration of the fish runs following dam removel will generate millions of dollars more every year from increased tribal, commercial and sport fishing.

I urge you to move swiftly in completing your final EIS, with dam removal as the preferred elternative, as well as providing funding to acquire and remove these dams. Pleese keep me informed of your actions on this matter. Thank you for considering my views.

Sincerely,

Emma Corrine

Emma Corrine

cc: Secretary Bruce Babbitt
Senator Slade Gorton
Senator Patty Murray
Senator Mark Hatfield
Representative Jim McDermott
Representative Norm Dicks
Representative Jennifer Dunn

Dec 1, 1994

Received
DSC-TWE
DEC 13 1994
C224-olym-404-06

Sarah Branson
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms Branson:

In regard to the excellent EIS on restoration of the Elwha River fisheries resources I wish to make the following comments.

Removal of the two Elwha dams is the only way to restore the Elwha ecosystem and its valuable fisheries resources. I strongly support the removal of these dams as proposed in your preffered alternative. Restoration of Elwha R. salmon and steelhead runs depends on timely dam removal. If the dams aren't removed the salmon runs face imminent extinction and the region will lose hundreds of valuable jobs.

Please restore the Elwha River before it is too late.

Sincerely,

James M Thomas

[redacted]

[redacted]

Received
DSC-TWE
DEC 13 1994
C225-olym-4040

Sarah Branson
Nat'l Park Service
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Branson:

I strongly support removal of the Elwha dams, the prefered alternative identified in a DEIS prepared for the purpose of improving salmon runs on the Elwha River. This alternative is the only one that will get the job done.

Please inform me of your decision regarding this matter when it is made.

Sincerely,

TRYGVE B. SCETTELAND

Received
DSC-TWE
DEC 13 1994
C226-olym-404-06

Sarah Bronson
Nat'l Park Service
P.O. Box 25287
Denver, CO. 80225-0287

RE: Comment letter on Elwha River Draft EIS

Dear Ms. Bronson:

The only viable way to restore the Elwa River ecosystem is removal of the two Elwha dams.

I strongly support the preferred EIS alternative. For by restoring the river's salmon run, we will both help the Environment & create hundreds of new jobs.

The 1992 Elwha Act has a broad base of support from business groups, Native Americans & Environmentalists and both Dams Owners. I urge you please to move forward with funding and implementing the 1992 Elwha Act and help our Region AVOID more litigation and gridlock.

Sincerely,

J.L. MAY

[redacted]

Received
DSC-TWE
DEC 13 1994
C227-olym-404-01

12/1/94

SARAH BRONSON
NATIONAL PARK SERVICE
BOX 25287
DENVER, COLORADO 80225

RE: ELWHA DAM

DEAR MS BRONSON,

THE PARK SERVICE HAS PRODUCED A VERY GOOD EIS ON RESTORING THE ELWHA RIVER. WE URGE YOU TO RECOMMEND TO SECRETARY BABBIT THAT HE CHOOSE AS A FIRM DECISION THE PREFERRED ALTERNATIVE IN THE EIS: REMOVE THE 2 DAMS.

WE'LL LOSE TOO MANY JOBS IF SALMON RUNS AREN'T RESTORED.

THANK YOU IN ADVANCE FOR YOUR CONTINUED WORK.

PETER & CHRISSIE FROST

[redacted]

Sarah Bronsom
National Park Service
Po Box 25287
Denver, Co, 80225-0287

Received
DSC-TWE
DEC 13 1994
C228-olym-404-06

Dear Ms. Bronsom

I am writing to comment on the draft Environmental Impact Statement for restoring the Elwha River. I wholeheartedly support the preferred alternative of removing the Dams. I understand that removing the dams will go a long way toward fully restoring the Elwha River, and it's Salmon runs. At a Time in history when the pacific Northwest's once Tremendous Salmon runs are in decline, restoring ecosystems such as the Elwha become more & more important. Not only because it's the law should these dams be removed ... it's also the right thing to do for our Children and our Children's Children

Respectfully yours
Mitch Sanchotena
executive coordinator
Idaho Steelhead & Salmon unlimited

Ms, SARAH BRANSOM
NPS
P.O. Box 25287
DENVER, CO 80225-0287

Received
DSC-TWE
DEC 13 1994
C229-olym-404-06

RE: COMMENT ON ELWHA RIVER DRAFT EIS

DEAR MS. BRANSOM,

I WRITE TO SUPPORT IMPLEMENTATION OF THE EIS's PREFERRED ALTERNATIVE. I URGE YOU AND THE NPS TO IMPLEMENT THE PREFERRED ALTERNATIVE AS SOON AS POSSIBLE.

THE ELWHA DAMS SHOULD BE REMOVED. THESE DAMS ARE ENVIRONMENTALLY, LEGALLY, AND ECONOMICALLY INDEFENSABLE. PLEASE MOVE TO SECURE FUNDING FOR, AND IMPLEMENTATION OF, THE PREFERRED ALTERNATIVE.

SINCERELY,
Charles Ray
CHARLES RAY
[redacted]

Received
DSC-TWE
DEC 13 1994
C230-olym-404-0

December 1, 1994

Sarah Bransom
National Park Service
P.O. Box 25287
Denver CO 80225-0287

Dear Ms. Bransom,

I support removing the 2 Elwha River dams, as proposed in the NPS' preferred alternative. Restoration of Elwha River salmon depends on dam removal. This is good economics as well as good for salmon. Please restore the Elwha River!

Thank you.

Sincerely,

Pat Ford
[redacted]

Received
DSC-TWE
DEC 13 1994
C231-olym-404-0

Sarah Bransom
National Park Service
PO Box 25287
Denver CO 80225-0287

Re: Comment Letter on the Elwha River Draft EIS

Dear Ms Bransom:

I support the preferred alternative in the EIS. Removal of the 2 Elwha dams is the only alternative which will allow restoration of historic salmon runs.

Congress has already authorized dam removal. We now need action - not more litigation and gridlock. Please help our region move forward with funding and implementing the Elwa Act.

Sincerely

Marcia Landerson
[redacted]

cc: Ron Wyden
Mark Hatfield

Received
DSC-TWE
DEC 13 1994
C232-olym-404-06

Sarah Branson
National Park Service
PO Box 25287
Denver CO 80225-0287

Re: Comment Letter on Elwha River Draft EIS

Dear Ms Branson:

The Elwha salmon runs used to be magnificent. The only viable way to restore them is to take out the dams. My family used to vacation every year on the peninsula and fish for salmon - now we worry about losing them entirely! It is time to move forward and get rid of those dams!

Sincerely,
Judith Clark Turpin
[redacted]

Received
DSC-TWE
DEC 13 1994
C233-olym-404-06

Nov. 29, 1994

Sarah Branson
National Park Service, Elwha Project
PO Box 25287
Denver, CO 80225-0287

Dear Mr. Branson:

I urge you to support removal of the dams on the Elwha River. The removal has been recommended by many government agencies but apparently will only happen when Congress approves the budget for the work. At the next time, please note that the dams should come out & the Elwha should run free so salmon can return.

Sincerely,
Jan M. Glick
[redacted]

Received
DSC-TWE
DEC 13 1994
C234-olym-404-06

SARAH BRANSON
NATIONAL PARK SERVICE
PO BOX 25287
DENVER, CO 80225-0287

DEAR MS. BRANSON:

I AM WRITING REGARDING THE DRAFT EIS FOR RESTORING THE ELWHA RIVER. I STRONGLY SUPPORT REMOVAL OF BOTH DAMS AS SOON AS POSSIBLE. THIS IS THE ONLY WAY TO RESTORE THE RIVER ECOSYSTEM AND ITS HISTORIC SALMON RUNS.

WE CANNOT MISS THIS HISTORIC OPPORTUNITY.

SINCERELY.

SCOTT TAYLOR
[redacted]

Nov. 29, 1994

Received
DSC-TWE
DEC 13 1994
C235-olym-404-06

Sarah Branson
National Park Service
PO Box 25287
Denver, CO 80225-0287

Dear Ms. Branson,

I'm writing to acknowledge the excellent work done on the EIS concerning restoration of the Elwha River and to encourage continued effort toward removal of the two dams on the river. The Elwha once contained healthy runs of the species of Pacific salmon but those runs are now threatened with extinction. Please make restoring the Elwha a top priority.

Bob Johnson
[redacted]

Nov. 29, 1994

Received
DSC-TWE
DEC 13 1994
C236-olym-404-06

Sarah Bransom
National Park Service
PO Box 25287
Denver, CC 80225-0287

Dear Ms. Bransom,

The EIS on restoring the Elwha makes a compelling case for dam removal. Now comes the more difficult step, mustering the public and political will to fund the removal of the 2 dams. I want to add my voice to the chorus of those who support taking out the dams. I believe that removing the dams is necessary to restore the salmon runs. It is a good step for the people of this country. Let's do it!

Sincerely,
Ian Cantrell
[redacted]

cc: Norm Dicks
Slade Gorton
Patty Murray

Received
DSC-TWE
DEC 13 1994
C237-olym-404-06

Pat Buller
5504 N.E. 190th
Seattle, WA 98155

November 30, 1994

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

I am writing to comment on the draft Environmental Impact Statement for restoring the Elwha River. I strongly support the preferred alternative of removing the dams. This is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law.

Restoring the Elwha is the single best opportunity to restore salmon anywhere in the Northwest, and it would provide tremendous economic benefits for the Olympic Peninsula. Please implement this important project as soon as possible. If the 1992 Elwha Act is not implemented, our region faces more protracted litigation and governmental gridlock.

Sincerely,

Pat Buller

Pat Buller

cc: Senator Slade Gorton
Senator Patty Murray

Received
DSC-TWE
DEC 13 1994
C238-olym-404-06

Sarah Branson
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Branson:

I am writing to comment on the draft EIS for restoring the Elwah River. I support the preferred alternative of removing the dams. This is the only way to fully restore the river's ecosystem + salmon runs.

Restoring salmon runs are vital to the NW economically + ecologically. Please implement this important project + remove the dams as soon as possible.

Sincerely,
Loretta Ahouse
[redacted]

Received
DSC-TWE
DEC 13 1994
C239-olym-404-06

November 29, 1995

Sarah Branson
National Park Service
PO Box 25287
Denver CO 80225-0287

Dear Ms. Branson:

The EIS on restoring the Elwha River and its legendary salmon runs is excellent. We strongly support removing the two dams, as outlined in the preferred alternative. If the dams aren't removed, the salmon runs face imminent extinction. Despite the cost of dam removal, alternatives for restoring salmon runs are <u>much</u> more costly and <u>much</u> less certain throughout the Northwest. Jobs are also at grave risk as salmon disappear. Restore the Elwha before it's too late!

Sincerely,
Kathy Fletcher, Ken Weiner and Joshua Fletcher Weiner
[redacted]

Sarah Branson
Nati Parie Service
P.O. Box 25287
Denver Co 80225-0287

Received
DSC-TWE
DEC 13 1994
C240-olym-404-06

Re: Comments on Elwha River DEIS

The ecosystem depends entirely on removal of the two dams for its restoration, including the restoration of the Salmon runs. I support the preferred alternative in the DEIS. This helps both jobs & the environment.

Help end the gridlock & move forward with funding & implementing the 1992 Elwha Act.

Sincerely,
Rick Barrett
[redacted]

Received
DSC-TWE
DEC 13 1994
C241-olym-404-06

November 29, 1994

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom,

I'm writing to comment on the draft EIS for restoring the Elwha River. I strongly support the preferred alternative of removing the dams. This is the only way to fully ~~[illegible]~~ restore the Elwha River ecosystem and its salmon runs as required by law.

Restoring the Elwha is the single best opportunity to restore salmon anywhere in the Northwest and it would provide tremendous economic benefits for the Olympic Peninsula. Please implement this important project as soon as possible.

Sincerely,
Susan Stephens
[redacted]

Received
DSC-TV
DEC 14 1994
C242-olym-404-06

8 December 1994

Sara Bransom
National Park Service
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft EIS, Elwha River
Ecosystem Restoration

Dear Ms. Bransom:

I am writing to comment on the draft environmental impact statement for the Elwha River ecosystem restoration. This is an important project for the Pacific Northwest, which will provide tremendous economic benefits for the Olympic Peninsula. I strongly support the Secretary of Interior's recommendation to remove both dams and restore the six species of salmon within the Elwha River ecosystem, in its entirety.

Sincerely,

James B. Tippett
5228 49th Ave. SW
Seattle, WA 98136

Received
DSC-TV
DEC 14 1994
C243-olym-404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): RICHARD W. STACHOREK
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): NONE
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

1. MODERN FISH PASSAGE SYSTEMS
2. IMPACT TO PRESENT ECO-SYSTEM SUPPORTED BY THE LAKES: MILLS & ALDWELL
3. USE OF DAMS AS FUTURE WATER SUPPLIERS (POWER ALSO)
4. THE SEALS DESTROY 8 TO 10 FISH PER SEAL PER DAY IN THEIR SEARCH FOR FOOD. REDUCE THE SEAL POPULATION
5. THE COMMERCIAL TRAWLERS (FISH PROCESSING FACTRIES) MUST BE CONTROLLED

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

1. FULL RESTORATION TO EARLY 1900 A.D. CONDITIONS IS IMPOSSIBLE WITH WHAT IS PRESENTLY PROPOSED FOR REASONS TO NUMEROUS TO LIST
2. THE TOTAL COST TO REMOVE THESE DAMS CAN ONLY BE DESCRIBED AS A WILD GUESS.
3. HOW LONG WILL IT REALLY TAKE FOR THE SYSTEM TO CLEAN ITSELF?

OTHER COMMENTS: I WAS MOST DISTURBED TO FIND HOW DETERMINED MEMBERS OF THE PARK SERVICE TEAM WERE TOWARD IMPLEMENTS, FISH PASSAGE SYSTEMS, AND HOW MANY OF THE LOCAL PEOPLE IN THIS AREA FEEL THAT THE PARK SERVICE DOES NOT HAVE THE PUBLICS INTEREST AT HEART, BUT EMPLOY A SELF-SEEKING AGENDA. I TRULY HOPE OUR PARK SERVICE DOES

Please continue your comments on the back of this sheet if needed.

(OVER)

COMMENTS CONTINUED:

NOT RISE TO THE TOP OF THE HATE LIST WHICH INCLUDES:

1. USED CAR SALESMEN
2. LAWYERS
3. POLITICIANS

} NO TRUST HERE!

IT IS A KNOWN FACT IN THIS AREA THAT THE INDIANS NET MORE FISH THAN THEY WOULD HAVE PEOPLE TO BELIEVE, AND ALONG WITH THE SEALS AND FORIEGN COMMERCIAL FISHERS WE CONTINUE TO LOSE SUCH A VALUABLE RESOURCE AS OUR SALMON AND OCEAN-RUN TROUT. RESPONSIBILITY FOR LOSS OF THESE RESOURCES CAN ONLY BE BLAMED ON OUR POLITICAL SYSTEM:

1. DEPT OF FISH & WILDLIFE (WASHINGTON STATE)
2. THE NATIONAL PARK SYSTEM
3. THE POLITITIONS WHICH EMBRACE THE SPECIAL INTEST GROUPS

IT IS NEVER TOO LATE TO START. THE ENVIRONMENT MUST BE CONSIDERED BY ALL OF THE CITIZENS OF THIS WONDERFUL COUNTRY OF OURS.

Richard W. Stanford
Lcol USAF, RETIRED

P.S.

The first time I fished Wash State's water was back in July 1969 at that time there was plenty of fish and plenty of good water. Now, 25 years later, the salmon/steelhead are in trouble and the forest are a shambles.

Twenty-five years ago we had a dept. of wildlife service, a park service (National) and a bunch of egg-head conservationists that were paid high salaries, to help this environment stable and intact.

You have all failed to do your job. Get off your damn butts and get to work!

You have: an address that fit a bunch of feather merchants. all show and no performance.

Received
DSC-TWE
DEC 14 1994
C244-aym-404-06

December 6, 1994

Ms. Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 809225-0287

Subject: Support for Elwha Dam Removal

Dear Ms. Branson,

I reviewed the Draft EIS for the Elwha River Ecosystem Restoration (October 1994) and I strongly support the alternative for removal of both dams. Restoring the Elwha River is the best opportunity to help the salmon in the Northwest. The removal of the dams would help create hundreds of jobs that are needed in the area. Tax dollars would be better spent restoring salmon runs for future generations instead of B-2 bombers.

The project is a great chance to give something back to the environment and our children instead of continuing to harm our natural resources for economic development.

Sincerely,

Jay Stuesse
[redacted]

THELMA T. GILMUR
[redacted]

Received
DSC-TWE
DEC 14 1994
C245-olym-404-06

Sarah Bransom
National Park Service
Elwha River Project
Box 25287
Denver, CO 80225-0287

I dont like to hear in the media that we will not be able to remove the Elwha dams. The E.I.S. gives a preferred alternative of removal. For some time before elections all comments heard pointed to the importance of removal. It is the only way to restore the ecosystem and its salmon as required by law.

Sincerely.

Thelma Gilmur

Received
DSC-TWE
DEC 14 1994
C246-olym-404-06

Sareh Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

December 12, 1994

Deer Ms. Bransom.

I wish to express my wholeheerted support for removal of the Elwha and Glines Canyon dams on the Elwhe River I've followed this issue since 1985, when I first camped along the Elwha end heerd stories about the legendary Elwha salmon runs. Removal of the dams would not only provide the opportunity to restore these runs, but could elso restore the Elwha to its old beauty end wildness, a worthy ect in itself.

Sincerely,

Jenine Blaeloch

Jenine Blaeloch
PO Box 95545
Seattle, WA 98145-2545

Received
DSC-TWE
DEC 14 1994
C247-olym-404-06

Janet Weedman
[redacted]
Dec. 7, 1994

Dear Ms. Bransom,

Please act now to remove the Elwha dams. So many forces are behind removal, and the salmon desparately need the habitat provided by the Olympic National Park. Please, don't pass up this opportunity!

Full restoration, now! Remove the dams!

Thank-you - Sincerely,

Janet Weedman

Received
DSC-TWE
DEC 14 1994
C248-olym-404

Mr. John A. Lombard
[redacted]

December 11, 1994

Ms. Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

RE: Elwha EIS

Dear Ms. Bransom:

I received a copy of the EIS for the Elwha River Project through Senator Murray's office, and would like to submit my strong support for the preferred alternative of removing the dams. It is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law.

I work on the central staff of the Metropolitan King County Council, where I am lead staff for surface water and fish habitat issues. Through this work, I have become aware of how critical it is that many small steps be taken to preeerve the salmon runs of the Pacific Northwest. Removing the dams on the Elwha is one of those rare, relatively big steps available to us.

One complaint I would note about the EIS was that it said almost nothing about the reliance of the mill in Port Angeles on electricity from the Elwha dams and what effect removal of the dams would have on the mill and its jobs. I have read elsewhere that this is not expected to be a problem. If so, then it seems to me there is almost no reasonable argument against removing the dams except the short-term cost. Comparing thie to all of the coste that reduced fisheries and possible listinge under the Endangered Species Act could have in the Pacific Northwest, it seems clear that removal is the best long-term action.

Sincerely,

John Lombard

John Lombard

cc: Honorable Slade Gorton
Honorable Norm Dicke

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

Received
DSC-TWE
DEC 14 1994
C249-Olym-4a-01

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): William P. Henry, Sr. (WP94) 12-08-94

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): None

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: The reality of removal costs for removal of the dams. Any time I've heard my federal government suggesting priliminary figures of two or three hundred million dollars for anything, that normanlly translates to over two BILLION dollars. I also don't understand how the sediment outflow (assuming removal) is going to drift toward Freshwater Bay (west) from the Elwha. The natural drift flow is to the east, and both experts and Native Americans have stated that to be the reason for Ediz Hook's creation.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: On 11-14-94, at the 2 "hearings" held in Port Angeles, I heard the "experts" from government admit that that fisheries "resoration" is impossible, and that "enhancement" would be the more proper term. It seems more logical to try to enhance fish runs in the Dungeness and/or Hoh Rivers - which have no dams - before embarking on expensive and unproven theory. There seem to be as many "experts" in the private sector who disagree with the Interior "experts."

OTHER COMMENTS: I think it is also important to note that an altered, but nonetheless real "ecosystem" has been created as result of the dams. As a 23 year resident of this area, I can recall salmon and steelhead teeming in the open portion of the Elwha and its feeder streams and estuaries prior to the Boldt decision, and the ultimate negotiations

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

which led to full-mouth netting. It was from that point that the fish populations began the most obvious declines. Has anyone considered treaty negotiations to eliminate the impact from at least that factor. I've heard the fisheries people say that escapement is permitted in the netting, and I've heard other knowledgable people say just the opposite - so what am I to believe?

I cannot say that the dams can or should stand forever, but I know that they do play a role in flood control.

I must vote in opposition to dam removal at this time. Community consensus appears to support that position. Show me what can be done for runs in some non-dammed rivers, and how the runs are being protected from drift-netters on the open sea (among the many factors involved), and perhaps you can better justify some kind of real need for dam removal.

(WP94)

CRYSTAL IMAGES
Technical Research/Writing/Photography/Publishing
KATHLEEN MARIE MENKE
PO Box 2031 McCall, Idaho 83638 Phone/Fax:(208)634-3909

Received
DSC-TWE
DEC 14 1994
cas0-olym-404-0

December 10, 1994

Sarah Bransom
NPS, Western Team
12795 Alameda Parkway
Denver CO 80225-0287

Dear Sarah:

Regarding dam removal on the Elwha. Get on with it! More than any other action in the NW, the action of dam removal can be a living demonstration of how fisheries populations can restore themselves if given a restored ecosystem.

Please add me to your mailing list and keep me informed of your progress. I am the editor of Idaho's Sockeye Scene, a quarterly newsletter, to become Idaho's Salmon Scene in 1995. I have added you to this mailing list, and would appreciate your support on these efforts as well.

Sincerely,

Kathleen Menke

Kathleen Menke

Received
DSC-TWE
DEC 14 1994
cas1-olym-404-0

[redacted]
December 10, 1994

Sarah Braneom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Braneom:

We wieh to make the following commente on the Elwha River EIS:

We support the preferred alternative of dam removal primarily on economic grounde. There ie no eingle investment of eimilar eize that the Federal Government could make that would do more to reetore healthy salmon rune to the Pacifio Northweet. The Elwha watereh ed, unlike the waterehedsof all other rivers in our area, hae been completely untouched by the damaging practicee that have helped to drive our valuable anadromoue epecies cloee to extinotion.

The ehort-term benefite of dam removal and the long-term benefite of re-eetablishment of the hietoric Elwha rune would be enormous for the economically depreeeed Olympio Peninsula area.

Sincerely:

Joseph W. Miller
Joeeph W. Miller

Margaret M Miller
Margaret M. Miller

co: The Honorable Slade Gorton
The Honorable Norm Dicks
The Honorable Jennifer Dunn

Dec. 7, 1994

Received
DSC-TWE
DEC 14 1994
CØ53-01ym-404-0x

Sarah Bransom
National Park Service
Elwha River Project
P.O. Box 25287
Denver, Co. 80225-0287

Dear Ms: Bransom,

I support the preferred alternative of removing the dams. It is the only way to fully restore the Elwha R.ver ecosystem and its salmon runs as required by law.

Sincerely,

Fran Long

Dan Charlson, Esq.
[redacted]

Received
DSC-TWE
DEC 14 1994
CØ53-01ym-404-0x

Sarah Branson
National Park Service
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

December 7, 1994

Dear Ms. Branson:

In the twenty-five years that I have hiked the mountains, rivers and forests of the Northwest, more and more have I come to realize the significance of these magnificent fish. Of course, I am certainly not alone, as evidenced by the great number of threatened species listings for various salmon species, by the great number of groups getting involved in watershed restoration, and by the great number of interested people who will write to you regarding this project.

Dam removal is fully supported by Native American tribes, environmentalists of all stripes, the dam owners, and the pulp mill that uses power from the dams. Removing the dams from the Elwha is the single best opportunity to restore a salmon run anywhere in the country.

Sarah Branson
Elwha River restoration
Dec. 7, 1994
Page 2

Ms. Branson, I implore you and all your colleagues at the National Park Service to do everything in your power to ensure that these dams are removed. Thank you.

Sincerely,
Don Clarkson

Garrett Jackson
[redacted]

Received
DSC-TWE
DEC 14 1994
CA54-OLYM-404-06

Sarah Branson
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Branson,

I enthusiastically support restoration of the Elwha River. To this end, dam removal is the only realistic alternative. Both dams must be removed to fully restore the great salmon runs that once existed there. The dams don't belong in the area, anyway, especially within Olympic National Park.

Please make the preferred alternative the dam (both) removal alternative. This effort also must be funded, I realize. It is time to spend some money to restore at least a small part of the damaged ecosystem of the Pacific Northwest.

Sincerely,
Garrett W Jackson

National Park Service – ELWHA RIVER PROJECT
P.O. Box 25287
Denver, CO 80225

12/8/94

Received
DSC-TWE
DEC 14 1994
C255-olym-404-06

Dear Ms. Branson.

As somebody w/ family between the two Elwha dams, I have a personal stake in the future of the Elwha. My wife's parents, and I, understand the significance of a free-flowing Elwha.

Briefly, please acknowledge my support of the removal of both dams. The would more an incredible investment for future residents and visitors to the Elwha valley.

Sincerely,

Emil Lett

[redacted]

Sarah Branson
NPS, Elwha River Project
P.O. Box 25287
DENVER, CO 80225-0287

Received
DSC TWE
DEC 14 1994
C256-olym-404-06

Ms Branson:

I am writing this letter to demonstrate my support for the removal of 2 dams along the Elwha river, as was authorized by congress in 1992.

The Olympic National Park is one of the largest un-perturbed regions in the lower 48 states. Established relatively early in this country's history, it has provided a stunning example of wilderness which happens to lie close to some fairly populated areas.

To restore the Elwha not will undo one of the few "improvements" that were made to the park area and restore valuable salmon runs.

Thank you

Randy H Smith

RANDY H. SMITH

[redacted]

Sarah Bransom

20729-13th Ave S.
SeaTac, WA 98198

Received
DSC-TWE
DEC 14 1994
C057-olym-404-06

12/7/94

Dear Ms. Bransom,

The preferred alternative of the draft E.I.S. in restoring the Elwha is the one that should be implemented. Removing both dams is not only the best way to restore the river, it is probably the only legally acceptable way.

Sincerely,
Grant Loomer

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, Co 80225-0287

Received
DSC-TWE
DEC 14 1994
C258-olym-404-06

Dear Ms. Bransom:

I am writing in support of the removal of both Elwha River dams. I believe this is the best solution for the Elwha.

David Weaky
8006 11th Ave NE
Seattle WA 98115

[redacted]

Dec. 7, 1994

Received
DSC-TWE
DEC 14 1994
C260-olym-404-06

Sarah Branson
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Branson:

It is extremely distressing to me to hear that the funding for removal of the Elwha Dams may be in jeopardy and that the Park Service may not proceed with its commitment to restore the Elwha. The only way to restore this beautiful river system is to take out these antiquated dams. I hope you will implement the preferred alternative as the most ecologically sound and rational way to save the Elwha.

I have often hiked in the Olympics and treasure these unmatchable + lush river systems. I hope you will work toward this River's restoration.

Sincerely,

Brenda Senturia

[redacted]

Received
DSC-TWE
DEC 14 1994
C260-olym-404-0

December 7, 1994

Sarah Branson
National Park Service, Elwha River Project
P.O. Box 25287
Denver, Co. 80225-0287

Dear Ms. Branson:

I'm writing about my concern over the status of the Elwha River dams. I encourage the process to be continued + completed as planned by the removal of the dams. Also, please support the appropriation of the money required to fund this project. It is important to get on with this endeavor and help restore the Elwha River salmon runs.

Thank-you for your attention to this matter.

Sincerely,
Glenda Carper

TO: SARAH BRANSON
Temporary political changes do not indicate a lack of support for environmental issues. I personally support the preferred alternative in the EIS regarding the Elwha dams. The Olympic penninsula and our National park is one of our nation's most beautiful. Please help restore our Salmon and rivers to their natural state.

ATTN: SARAH BRANSON
Ntnl. PARK SERVICE
P.O. BOX 25287
DENVER, CO 80225-0287

BENNETT HANSAN
8006 11th AVE NE
SEATTLE, WA, 98115

Received
DSC-TWE
DEC 14 1994
C2G1-OLYM-404-06

Received
DSC-TWE
DEC 14 1994
C2G2-OLYM-404-06

7 Dec. 94

Ms. Bransom—

I fully support the findings of the Elwha River DEIS: removal of the two Elwha River dams to provide the best opportunity for full restoration of salmon runs. With the rapid depletion of salmon in the PNW, it's essential that we do not delay in restoring this ~~area~~ habitat.

Jim Allen Ossa

Mark Lawler
[redacted]

Sarah Bransom
Nat'l. Park Service
POB 25287, Denver, CO

Dec. 7, 1994

Received
DSC-TWE
DEC 14 1994
C2064-Olym-404-06

Dear Ms. Bransom:

I wanted to say how important it is that the Park Service make a final recommendation to remove both Elwha River dams in Washington State. I'm pleased that the Park Service is leaning this way, but please come out with a strong final recommendation to restore the Elwha River ecosystem and allow all five species of salmon to be restored to the entire river.

Sincerely,
Mark Lawler
Mark Lawler

December 7, 1994

Received
DSC-TWE
DEC 14 1994
C2063-Olym-404-06

Sarah Bransom
NPS, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

I fully support the removal of both dams along the Elwha River. The restoration of historic salmon runs is only a part of the need. Restoring the Elwha makes good economic sense as well, creating a "win-win" solution for environmentalists as well as providing jobs for Olympic Peninsula citizens.

Please move ahead with this proposal as soon as possible.

Mitch Baker
[redacted]

Received
DSC-TWE
DEC 14 1994
C265-Olym-404-06

SARAH BRANSON
NATIONAL PARK SERVICE, ELWHA RIVER PROJECT
PO BOX 25287, DENVER, CO 80225-0287

REMOVE THE DAM DAMN !!!
FOR THE ELWHA RIVER ECOSYSTEM AND ITS SALMON
RUNS NOW, FOR OUR CHILDREN. THE 75 MILES OF
PRISTINE HABITAT WOULD BE A BIG BOOST TO
THE RESTORATION OF SALMON IN THE STRAIGHTS
AND PUGET SOUND.!

BEN DENNIS
BOARD OF DIRECTORS
RIVERS COUNCIL OF WASHINGTON

Randolph Pierce
[redacted]

Received
DSC-TWE
DEC 14 1994
C266-Olym-404-06

Dear Sarah,
I am in support of the removal of the dams on the Elwha River. This is a unique opportunity for restoring a prime salmon run. An opportunity such as this should not be passed up. There is much to be learned/gained.

Randolph T. Pierce

Received
DSC/PWE
DEC 14 1994
C267-Olym-404-06

December 7, 1994

Sarah Bransom
National Park Service
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Sarah,

I am writting to express my support for removal of the Dams on the Elwha River. I recently co-led a backpack trip with 10 high school students for eight days in the summer. We hiked up the Elwha, over Hayden pass, and down the Dosewallips. The trip was part outdoor expevience and part environmental education. We explained that the removal of dams had been approved but were uncertain as to whether or not they would ever be removed.

Many of the students felt that this was not fair. They thought that when a dam is built, money should be kept in the budget to remove the dam eventually and restore the sight.

I don't know how realistic this would ever be, but I do know that it's too late to go back in time to implement this. We do, however, have the opportunity today to undo man's past interference with nature.

This river is the perfect opportunity to do this. The river is historic salmon runs were incredible, the dams are no longer viable, and the area could benefit from it greatly.

I strongly hope that the removal is seen through to the end. Please advise me if there is anything else I can do to further the cause.

Thanks for listening!

Sincerely,

Mike O'Brien

[redacted]

Marcy Tobin
[redacted]

Dec. 7, 1994

Received
DSC-TWE
DEC 14 1994
C268-olym-404-06

Dear Sara Bransom,

I support removal of the Elwha dams. Congress has mandated the removal of these dams and the full restoration of the Elwha river system. The National Park service also recommends that dam removal is the only way to restore the Elwha river and provide desperately needed ~~the~~ pristine spawning grounds for salmon and steelhead.

The money spent on removing the dams and fully restoring the Elwha will be a wise investment in ~~[illegible]~~ the important natural resources of this region. Restoring the Elwha salmon runs will help promote the economic viability of the Olympic Peninsula.

Please don't let this opportunity to restore the salmon and steelhead runs on this river pass by - by failing to remove the dams.

Sincerely,

Marcy Tobin

Dec. 8, 1994

Received
DSC-TWE
DEC 14 1994
C269-olym-404-06

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom,

I am writing to comment on the draft Environmental Impact Statement for restoring the Elwha River. I strongly support the preferred alternative of removing the dams. This is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law.

Restoring the Elwha is the single best opportunity to restore salmon anywhere in the Northwest, and it would provide tremendous economic benefits for the Olympic Peninsula. Please implement this important project as soon as possible.

Sincerely yours,

Cathy Lin Scott

Cathy Lin Scott

[redacted]

Received
DSC-TWE
DEC 14 1994
C270-olym-404-06

December 9, 1994

Dear Ms Bransom:

Regarding the Elwha River, I strongly support the preferred alternative of removing the dams. I am so glad that the government is proposing removal of the dams and I encourage you to implement the plan.

Sincerely,
Julie Stallman
715-B Summit Ave E
Seattle, WA 98102

Received
DSC-TWE
DEC 15 1994
C272-olym-404-06

December 12, 1994

Ms. Sarah Bransom
National Park Service
Elwha River Project
PO Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom,

I am writing to voice my unequivocal support for the removal of the destructive dams on the Elwha River. The fact that the draft EIS on the project and the Department of Interior report show that the only viable way to restore the endangered salmon runs supports follow through with the project.

The restoration of this Elwha is the best opportunity to restore salmon anywhere in the Pacific Northwest and would provide substantial economic benefit to the hard hit ex-logging communities of the Olympic Peninsula.

Please move forward with the implementation of this important project.

Sincerely,

Scott Kroeker
[redacted]

[redacted]

December 3, 1994

Received
DSC-TWE
DEC 15 1994
C273-olym-404-06

Sarah Bransom
National Park Service
Western Team
P.O. Box 25287
Denver CO 80225-0287

RE: DEIS FOR THE ELWHA

After recently reading an article in the newspaper regarding the bleak outlook of Elwha dam removal due to the outcome of the election, I became angry. Fudging numbers and over-inflating costs of dam removal only prolongs the obvious---that these dams need to be removed either now or in the future as they become less useful and silted in. Will the few who benefit from the dams take the responsibility to remove them then? . . . I don't think so.

A few special interest groups who have some sort of 'profits' to lose from this project will try and be the loodest voice in the political arena. The fish and future generations who will be benefitting from dam removal can't speak up. This makes me sad.

Let's look to the future and stop this selfish tug-of-war and do what everyone knows is right. REMOVE THE DAMS! No amount of hatcheries or fish ladders can make up for 70 miles of lost, pristine habitat.

Gary Korb

Received
DSC-TWE
DEC 15 1994
C274-olym-404-06

December 13, 1994

Ms. Sarah Bransom
National Park Service
Elwha River Project
PO Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom,

I am writing to voice my unequivocal support for the removal of the destructive dams on the Elwha River. The fact that the draft EIS on the project and the Department of Interior report show that the only viable way to restore the endangered salmon runs supports follow through with the project.

The restoration of this Elwha is the best opportunity to restore salmon anywhere in the Pacific Northwest and would provide substantial economic benefit to the hard hit ex-logging communities of the Olympic Peninsula.

Please move forward with the implementation of this important project.

Sincerely,

Pat Buller

Pat Buller

[redacted]

Received
DSC-TWE
DEC 15 1994
C275-Olym-404-06

ARNY STONKUS
[redacted]

December 13, 1994

Sara Bransom
National Park Service
Elwha River Project
P.O. Box 25287
Denver , CO 80225-0287

RE: Draft EIS - Elwha River Ecosystem Restoration

Dear Ms. Bransom:

I am writing to comment on the Draft EIS for the proposed Elwha River Ecosystem restoration project.

The dismantling and subsequeot removal of the Elwha and Glines Canyon Dams provide an unprecedented eovironmental opportunity to restore the ecological and connective integrity of the Elwba River. Most importantly, this initiative underscores our ecological responsibility and obligation to restore and preserve wilderness areas; whether it be to the benefit of indigenous lifeforms or to future generations of people. The numerous intrinsic benefits and values (often difficult to quantify based on pure economics), far outweigh the status quo environmental detriments afforded by the no-action alternative. The restorative goals and objectives of this project , I believe, are in concert with goals and objectives of the National Park Service. I strongly support the Secretary of the Interior's recommendation to remove both dams and restore anadromous fish access to the most productive regions of the Elwha River ecosystem. Thank you.

Sincerely,

Arny Stonkus

Arny Stonkus

Received
DSC-TWE
DEC 15 1994
C276-Olym-404-06

December 7, 1994

To: Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO. 80225-0287

From: Norman C. Kunkel
[redacted]

Norman C. Kunkel

The only way to fully restore the Elwha River ecosystem and its salmon runs as required by law is removal of the dams that block the salmon from getting to their spawning grounds.Dam removal has solid support from native Americans, fishers and environmentalists and even the dam owners.

Restoring the Elwha is a wise investment. This is the single best opportunity to restore salmon anywhere in the northwest. Failure to remove the dams will lead to more litigation and gridlock, extinction for salmon runs, violation of tribal treaty rights and the loss of many jobs on the Oympic Peninsula.

Received
DSC-TWE
DEC 15 1994
C277-olym-404-06

9 Dec 1994

[redacted]

Sarah Bransom
NPS, Elwha River Project
Box 25287
Denver Co 80225-0287

Dear Sarah -

I read the first 1/3 of the Elwha ~~Draft~~ EIS (DAM REMOVAL) and want the preferred alternative instituted. The other options will clearly compromise the goal of returning the Elwha to free flowing, wild and natural conditions.

The Elwha Restoration Act of 1992 has a broad base of support that is rare in environmental issues. This support is a powerful asset to the project, and I fear that any options besides the preferred alternative will weaken that support. Likewise, immediate funding to begin dam removal and restoration of the river is crucial in order to maintain this widespread and diverse support, as well as to prevent further diminishment of fish stocks and degradation of habitat. I wish you every success in completing restoration of the Elwha - as much as humans can undo the harm we've caused - as quickly as possible.

Sincerely,
Catherine Butler

cc: Slade Gorton
Norm Dicks

Received
DSC-TWE
DEC 16 1994
C278-olym-404-06

Dec. 14, 1994

Dear Ms. Bransom,

I am concerned about the decline of the salmon population here in the Northwest. Therefore I urge you to support the removal of the Elwha dam since it is the only way of restoring the salmon runs in that area. Unlike the Columbia, the Elwha drains a wilderness area and habitat would not be so hard to restore. Restoring the Elwha is an excellent investment in the future both ecologically and financially.

Thank you,

Helen Koff

[redacted]

Received
DSC-TWE
DEC 16 1994
C279-Olym-404-06

To Sarah Branson,

12-10-94

I would like to voice my support for the removal of the Elwha Dams. This is the preferred alternative in the EIS produced recently. This alternative is well-supported in the community and by environmentalists, fishermen, Native Americans, business groups and others. This is the best and only option available to restore salmon habitat in the Northwest and is required by the Elwha River Restoration Act of 1992.

Please support this action and avoid additional litigation and the violation of treaty rights. Help to save the jobs in the salmon industry and create new jobs. Most importantly help to save salmon and other species (steelhead) on this ecosystem for their existence.

Sincerely,

Patricia M. Johnson

[redacted]

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

Received
DSC-TWE
DEC 16 1994
Case-Olym-404-06

National Park Service
Department of the Interior

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Branson, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Delbert Copeland

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: I am opposed to removal of these dams as we need the power that they can produce. Since their building and the filling of the lakes behind them there has resulted a new balance of nature with fish in the lakes and

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

owners and other birds around the lakes. The lakes are also available as recreational sites for humans.

In order to be built - if possible - the Salmon population fish ladders or other methods do work and increasing improvements make them work better.

To further increase the number of Salmon other methods down stream must be used. Limiting all types of fishing. Treaties to control fishing in international waters.

Some method of reducing the number of predators that prey on the salmon - especially at choke points such as fish ladders or river mouths. I have heard a suggestion of allowing a certain amount of hunting of some of these predators for food and the use

I would like to see an immediate breaching of these dams to save entities such as the present owners or a PUD. This could be a temporary license with a long term license issued when a plan for the transportation of the salmon around the dams is decided upon. The length of this license should long enough to make it possible for the operator to finance the construction of whatever means of fish passage is decided upon.

These dams are in place - lets leave them there and get the clean power that they produce



Ira Spring

Bob and Ira Spring • photographers

MR. IRA L. SPRING
ROBERT W. SPRING

18819 OLYMPIC VIEW DRIVE
EDMONDS, WASHINGTON 98020
(206) 776-4665

Received
DSC-TWE
DEC 16 1994
C281-olym-404-a

December 12, 1994

Sarah Bransom
National Park Service
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

To restore the fish habitat on the Elwha River, I support the preferred alternative of removing the two dams on the Elwha River.

Sincerely,

Ira L. Spring

SPECIALIZING IN COLOR OF THE PACIFIC NORTHWEST

Received
DSC-TWE
DEC 16 1994
C282-olym-404-06

December 13, 1994

Ms. Sarah Bransom
National Park Service
Elwha River Project
PO Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom,

I am writing to voice my unequivocal support for the removal of the destructive dams on the Elwha River. The fact that the draft EIS on the project and the Department of Interior report show that the only viable way to restore the endangered salmon runs supports follow through with the project.

The restoration of this Elwha is the best opportunity to restore salmoo anywhere in the Pacific Northwest and would provide substantial economic benefit to the hard hit ex-logging communities of the Olympic Peniosula.

Please move forward with the implementatioo of this important project.

Sincerely,

Lynn Bader

Lynn Bader

[redacted]

EDWARD McCRADY HENDERSON, JR.

[redacted]

Received
DSC-TWE
DEC 16 1994
C283-olym-404-06

December 12, 1994

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

RE: Comments on Environmental Impact Statement

Dear Ms Bransom,

I am writing you in support of the preferred alternative of removing the dams from the Elwha River Removal of these dams is the only way to restore the Elwha River ecosystem iocluding the spectacular salmoo runs.

I am a hiker, skier and mountain climber and have enjoyed the Olympics National Park for many years. The presence of the Elwha dams and reservoirs within the National Park is contrary to the purpose and intent of the national park system.

Restoring the Elwha by removing the dams is a very wise investment. It is an opportunity to bring the salmon back to a major watershed in the Pacific Northwest at a minimum cost in lost power generation.

Failure to remove the Elwha dams will continue the sorry history of confusion, violation of Indian Treaty rights, gridlock and extinction of salmon here in the Northwest. Failure to remove the dams is also contrary to the desires of many Americans as expressed in the Elwha River Restoration Act passed by Congress in 1992.

Thank you for your consideration of these comments.

Sincerely,

Ed Henderson

cc: Senator Slade Gorton
Representative Norm Dicks

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

Received DSC-TWE
DEC 16 1994
D284-olym-404-06

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.
Please return your commeot form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): KEN PIRIE
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

- additional clarification of overall BPA energy usage and what effect (if any) the Elwha dam removals will have.
- direct comparison of economic benefits, salmon vs electricity
- what is the cost of inaction — the real costs of keeping a dam, the indirect costs (if possible) to the environment
- will "artificial" salmon take on natural salmon's characteristics?
- can salmon be captured to avoid death at dam's closure/demolition?

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:
Simply to strengthen the arguments FOR dam removal

OTHER COMMENTS:
THIS IS A HIGHLY IMPORTANT SYMBOLIC MOVE THAT COULD LEAD TO A RETHINKING OF OUTDATED POSTWAR ENERGY STRATEGIES. THIS WILL WORK, IF ONLY TO SHOW THE PUBLIC THAT A REVERSAL OF HUMANITY'S

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:
IMPACTS ON THIS PLANET ARE REVERSIBLE.

- AS THE NW SALMON INDUSTRY FACES AN ALMOST CERTAIN DEMISE, ONLY ACTIONS SUCH AS THESE COUPLED WITH A DRASTIC RETHINKING OF THE MAGNUSSON ACT, OFFER ANY HOPE FOR FISHING COMMUNITIES AND THE ECOSYSTEMS OF THE REGION.

- THE NEXT STEP WOULD BE PROTECTING SALMON STREAMS FROM SUBURBANIZATION

Received
DSC-TWE
DEC 16 1994
C285-olym-404-06

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

I am writing with regard to the Elwha River dams. I support the preferred alternative of removing the dams! It is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law.

Sincerely,
Alice L. Montesa

12/13/94

From: Edwin Johnson [redacted]

To: Sarah Bransom
National Park Service
Western Team

Comments on October 1994 Draft Environmental Impact Statement

After reading much of your statement "Elwha River Ecosyetem Restoration", I agree with it exoept on page 26, paragraph 2, the document saye that the sea cliffe west of Ediz Hook "----eroded laterally at a rate of 4 to 5 feet per year providing as much as 290,000 cubic yards of material in a single year"to Ediz Hook. This is impossible. I have submitted a photocopy from a report which shows the cliffe eroded at no more than 1 foot per year. Considering this eroeion rate and the cliff's dimensions (3.3 miles long by less than 200 feet high), the amount of eediment provided by them before the pipeline was less than 100,000 oubic yards per year. Furthermore, over half the Elwha sediment in the lakes is sand and gravel- material whioh oan eettle out to form a spit - see submitted photocopies from FERC DEIS. The cliffs appear to be mostly dirt and clay - material which would stay in suspension in the waves and ooould not settle out to form a epit.

The Elwha provided the great majority of eediment to Ediz Hook before the dams were built and for many years after the dams beoauee it took time for the gravel and sand in the lower river to move to Ediz Hook. Another copy I submit showe the FERC conclusion that rocks would not have to be added to Ediz Hook if dams were removed.

Maybe these comments will help back up your conclusion on page 18 Table 1 that Ediz Hook would be restored in the long term under the proposed action of removing both dams. Ediz Hook is a big reason why the dams ehould be demolished instead of building a fish ladder or trucking the fish. James River earlier proposed trucking for the upper dam before the Elwha bill was paesed.

I agree with your propoeed action to remove both dams. The sooner the removal process begine, the better it will be. Many fish rune are already extinct. As more time passes, more fish runs from the Elwha and other places will probably become extinct. Therefore, the sooner dam removal begins, the easier it will be to get a large variety and quantity of salmon and eea run trout baok to the Elwha River.

Respectfully:
Edwin R. Johnson

Edwin R. Johnson

Received
DSC-TWE
DEC 16 1994
C287-olym-404-06

Received
DSC-TWE
DEC 16 1994
C288-olym-404-06

Stuart E. Mork
[redacted]

December 14, 1994

Sarah Branson
National Park Service,
Western Team
12795 Alameda Parkway
Denver, CO 80225-0287

Dear Ms. Branson:

I was unable to attend the public hearing held recently in Port Angeles, WA concerning the removal of the Elwha Dams and I would like to enter this letter as one of the public comments on this matter.

Others, I'm sure, have commented on the environmental impact of the dams--from the destruction of the salmon runs, changes in water temperature and stream ecology, the flooding of the river gorge, the changing of the delta at the mouth of the river, and even the wasting of the spit at Ediz Hook. Others, I'm equally sure, have discussed the economic impact of the dams, and the economic impact of their removal.

Economic impact analysis is a fairly precise tool with which to measure potential changes in an economy due to some change in one of the components of that economy. Multipliers are well understood and all parties can usually agree on the ripple effect throughout an economy of a particular action.

But what is not well understood in a market economy are the costs that are spread out among the entire population of a community, those costs that don't show on any balance sheet, the costs that everyone must bear, costs such as pollution, or in the case of wildlife, the loss of habitat. Regarding the Elwha River salmon, no one has ever estimated the cost incurred when the salmon run was destroyed by the dams, or the loss in sea lions, killer whales, ospreys or any other species that depend on salmon, because it is so very difficult to put a value on the destruction of life, or even to know the cumulative damage and its cost caused by our decisions.

It is very easy to say that because of the plentitude of salmon in Alaska (At least as of today, but will it always be so? There is talk even now of dam construction that will be every bit as destructive as dams in Washington--contrary to the assurances of the promoters. Salmon in the Columbia River were once said to be inexhaustible.) that there is no shortage of salmon in the world and that we must simply acknowledge the loss of salmon in the Lower 48 and accept that it is "cheaper" to let Alaska fishermen and salmon farmers from throughout the world supply all our fish needs.

What this thinking does not account for is the fact that every salmon run is unique, with a gene pool best adapted for their particular stream and that the salmon have value beyond the simple price of a certain number of cans of salmon . Would we be willing to say that we'll let Black Angus cattle be exterminated because we have so many cows in the world that we can afford to let one type go? I think not.

The Pacific Northwest is at a crossroads. We are attempting to save what is left of the rain forest, plan for anticipated growth in the human population in the region in such a way as to preserve our quality of life while providing jobs and housing for an increased number of people, and to provide for the welfare of non-human life in the region.

One of the ways that these goals will be accomplished is for people to realize that all life is part of a cycle: there is a beginning, a middle and an end, followed by another beginning and that life in the region is not limited merely to human life. It is too easy to think of life as linear rather than circular, that we live like a soda pop bottle where the bottle is formed, filled, consumed and sent to the dump.

Salmon, with their very lives, illustrate the life cycle. The fish are hatched in their natal streams, feed in the ocean and return to enrich the stream, wildlife and the forest, and then spawn to begin the cycle anew. To break the cycle at any point breaks the entire pattern of life with far reaching consequences for the health of all life in the entire region.

With salmon present in our local world we are all better citizens because the salmon help us understand the interconnection we all have, not only with each other (and by extension, with all people of the entire world), but with the physical world around us. We understand that man is not the only living being on earth and that we have a responsibility not only to other forms of life, but to the people who will follow us in later generations.

Salmon help us to understand this.

Preserving salmon helps us to understand this.

Destroying salmon has a cost in our lives that we have not until now addressed. A cost that cannot be measured in dollars, but must still be considered. Salmon, then, are not only symbolic of life on this planet, but they are a cultural factor in our society.

It is very fashionable these days to pontificate about family values, about the breakdown of all values in American society. Destroying life:physical life, moral life and spiritual life, for

the expedience of making money--money eubeidized by the many for the enrichment of the few--will not help us to heal our society. Looking beyond the easy doller, considering all the coste in a decieion, costs simply beyond money, will help us. Salmon will help ue to broaden our thinking end help to make ue a better people, living in a better world.

It ie not my intention to sey the we muet remove the dams and restore the river simply because it is a do-good, feel-good thing to do. What I am saying ie that if we knew enough to quantify the true cost of having those dams in place end knowing all the impacte and their coste we would eay this is not worth it.

If those who are receiving the benefit of those dams had to pay all the coste associated with them they would also say thie is not worth it.

Removing the dams is an opportunity to revitalize the river end the community associated with it. The salmon are en indicator of the health of our region. I think we should do whet we can to restore our good health before we have no more opportunities to do so.

Sincerely,

Stan L Mark

12/20/94

Received
DSC-TWE
DEC 19 1994
C290-olym-404-06

Sarah Bransom
National Park Service
P.O Box 25287
Denver, CO 80225

re: Elwha River recovery

Dear Ms. Bransom:

As you know, salmon recovery is a high priority for many individual and constituent organizations in the northwest. I feel it is essential to demonstrate progress and success in restoring salmon habitat in our rivers and streams.

The National Park Service has an excellent opportunity for salmon recovery in the removal of dams on the Elwha River. I support the preferred alternative in the EIS and urge you to advocate and move forward with dam removal and Elwha recovery.

Sincerely,
Jim Rossit

[redacted]

Received
DSC-TWE
DEC 19 1994
C291-olym-404-06

MARCELLA TVEIT
[redacted]

December 15, 1994

SARAH BRANSOM
NAT'L PARK SERVICE
P.O. BOX 25287
DENVER,CO. 80225-0287

DEAR MS. BRANSOM,

I WOULD LIKE TO EXPRESS MY DISAPPROVAL TO THE PROPOSED REMOVAL OF THE ELWAH DAMS IN CLALLAM COUNTY.

TO EVEN CONSIDER SPENDING THIS AMOUNT OF MONEY ON SOMETHING THAT MAY NOT EVEN WORK IS LUDICROUS.

I AM AWARE OF A NUMBER OF NEW WAYS IN FISH PASSAGE AND RECOMMEND TRYING OTHER METHODS.

UNTIL NET FISHING IN THE MOUTHS OF ALL RIVERS IS STOPPED TOTALLY,WHAT GOOD IS RESTORATION?

THE HABITAT LOSS OF LAKE MILLS AND ALDWELL WOULD BE DEVASTATING.

I THINK A CONSIDERATION WOULD BE TO MOVE THE PARK BOUNDARIES AND GET THESE LAKES OUT OF THE PARK.

I BELIEVE THE DAMS SHOULD BE RELICENSED NOW AT A REASONABLE,FAIR,TIMELY, AND ECONOMICAL COST TO THE OWNERS.

SINCERELY,
Marcella Tveit
MARCELLA TVEIT

Bertha N Berry
[redacted]

Received
DSC-TWE
DEC 19 1994
C292-olym-404-06

Dec 10, 1994

Ms Sarah Branson
Natl Park Service, Elwha River Project
PO Box 25287
Denver, Co 80225-0287

Dear Ms Branson

I have read the Draft E.I.S. dated October, 1994, regarding the Elwha River.

Having read and considered all the alternatives proposed, I'd like to say that only one makes good sense, both ecologically and economically, and that is the Proposed Action of removing both the Elwha and the Glines Canyon Dams, as shown at the top of page ii in said booklet "Draft Environmental Statement — Elwha River Ecosystem Restoration, Olympic Natl Park, Washington." This E.I.S. is well written, clear, and well thought out, and I compliment those who prepared the material and who considered all the pros and cons.

I am hoping that both dams can be

Received
DSC-TWE
DEC 19 1994
C293-04M-404-06

[redacted]

Dec 12, 1994

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms Bransom,

I wholeheartedly support the preferred alternative of the Draft EIS on restoring the Elwha, removal of both dams. Removal of the dams (which are illegal because of the Federal Power Act prohibiting licensing of dams in a National Park) is the only way to restore salmon + steelhead to the Elwha River watershed.

I have kayaked the section(s) of the Elwha below the Cline Canyon and dam. The Elwha is a magnificent river except where it is backed up by the dams. This river needs to run free. Thank you.

Sincerely,
Margie Rockstroh

Received
DSC-TWE
DEC 19 1994
C294-04M-404-06

DENNIS ROSS

[redacted]

SARAH BRANSON
NATIONAL PARK SERVICE, ELWHA RIVER PROJECT
PO BOX 25287
DENVER, CO. 80225-0287

DEAR SARAH,

I SUPPORT RESTORING THE ELWHA RIVER ECOSYSTEM BY REMOVING THE TWO OUT-DATED DAMS THAT BLOCK SALMON ACCESS TO OVER 75 MILES OF PRISTINE HABITAT IN OLYMPIC NATIONAL PARK.

THE NATIONAL PARK SERVICE NEED TO TAKE A LEAD IN OBTAINING FUNDING FOR THIS PREFERRED ALTERNATIVE IN THE DEIS.

DAM REMOVAL WILL ALSO PROVIDE OVER $90 MILLION IN INCOMES TO WORKERS ON THE OLYMPIC PENINSULA.

THE ELWHA RIVER RESTORATION ACT AUTHORIZED FULL RESTORATION OF THE ELWHA AND DAM REMOVAL IS THE ONLY WAY TO FULLY ACHIEVE THIS OBJECTIVE.

VERY TRULY YOURS, Dennis A. Ross

Received
DSC-TWE
DEC 19 1994
C295-olym-404-06

Sarah Bransow
National Park Service
Elwha River Project
P.O Box 25287
Denver Co 802250287

Dear Ms. Bransaw

The dams on the Elwha are Illegal dams and must be removed. These dams were built, contrary to law, and without fish Ladders. These dams have cause the extinction of one of the largest races In size of chinook salmon. These dams must be removed.

The dams should not be relincensed. The national park service should support the preferred alternative to the EIS. The national park service should support the funding for the removal of the dams.

David Van Cleve

Susan Chadd
[redacted]

Received
DSC-TWE
DEC 19 1994
C296-olym-404-06

Sarah Bransom
National Park Service
Elwha River Project
P. O Box 25287
Denver, CO 80225-0287

Dec. 15, 1994

Ms. Bransom,

I am in favor of removing the Elwha Dams. After listening to many people involved in fisheries, I am convinced that this is the only chance we have to restore not only salmon runs, but our whole watershed.

This is an opportunity to take the long view. Those who oppose it would continue to take very short term gains, while ignoring the enormous problems looming in the future.

Sincerley,
Susan Chadd

cc: Slade Gorton
Norm Dicks

Received
DSC-TWE
DEC 19 1994
C297-olym-404-06

DECEMBER 15, 1994

DEAR Ms. Bransom,

I SUPPORT THE PREFERRED ALTERNATIVE OF REMOVING DAMS! IT IS THE ONLY WAY TO FULLY RESTORE THE ELWHA RIVER ECOSYSTEM AND ITS SALMON RUNS AS REQUIRED BY LAW!!

Thank You!

Rock on!

Marie Sackett

MARIE SACKETT

[redacted]

Received
DSC-TWE
DEC 19 1994
C298-olym-404-06

Patrick C. Trotter, Ph.D.
Fishery Science Consultant
4926 26th Ave. S., Seattle, WA 98108
(206) 723-8620

December 16, 1994

Sarah Bransom, Elwha Team
National Park Service
P. O. Box 25287
Denver, CO 80225-0287

Re: Draft Elwha River Environmental Impact Statement

Dear Ms Bransom:

In 1992, Congress passed the Elwha River Restoration Act, mandating full restoration of the Elwha River and its salmon runs. All involved parties, including environmentalists, fishermen, business groups, Native American tribes, and even the dam owners, support this endeavor. A recently issued draft Environmental Impact Statement seems to confirm that removing both dams is the only way to fully restore the Elwha, and lists dam removal as the preferred alternative.

A couple of groups in the above list have called for a letter-writing campaign in support of dam removal, so I am sure you will shortly be inundated with mail. I am not affiliated with any of these groups, nor am I involved professionally in any way with Elwha River fishery restoration (although I would certainly like to be!) But I do believe that the preferred alternative in the draft EIS is the only way to fully meet the mandate required by law. I also think it is important to emphasize that the majority of local people support removal of the Elwha River dams regardless of the political leanings of the new Congress they just elected.

Therefore, please add my name to those who support adopting the preferred alternative.

Sincerely,

Patrick C. Trotter

Patrick C. Trotter, Ph.D.

Dear Sir;

Received
DSC-TWE
DEC 19 1994
C2nn-olym-404
06

I'm writing this letter in support for federal funding to go to the removal of dams on the Elwha river in WA. The removal of dams is supported by fishermen, like myself, who see the benefit for our salmon population. As I understand even the owners of the power plants are supporting the dam removal.

Sincerely
Will Reeves

Will Reeves
[redacted]

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)

National Park Service
Department of the Interior

Received
DSC-TWE
DEC 19 1994
C300-olym-404-06

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Thomas G. Graf

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:
- the effect on the water system of Port Angeles if the dams are removed
- more creative or updated fish passage (fish ladders) systems around the dams
- why other rivers and streams on the Olympic Peninsula and in the northwest also have declining salmon runs, and they don't have dams blocking salmon passage
- why the State Dept. of Fisheries takes only a certain quota of spawning Chinook from the Elwha

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:
I believe that there is a silent majority opposed to dam removal. Those favoring dam removal tend to be more vocal, their position seems to be to just get rid of the dams, no matter what the cost.
Additional study is needed on fisheries management and over fishing as it relates to declining salmon runs, not just habitat and ecosystems.

OTHER COMMENTS:
I am strongly opposed to the removal of the Elwha River dams
The main issue that brought this restoration proposal to the forefront is the declining salmon runs. The deterioration

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

of the salmon runs on the Elwha River is not the result of the dams. It is a well documented fact that in past years, after the dams were built, there have been many very good salmon runs. Other rivers on the Olympic Peninsula and in the northwest are also experiencing declining salmon runs, and they don't have dams on them.

I have talked to the guys in charge of the State of Washington Department of Fisheries' Elwha Channel near the mouth of the Elwha. He was told by the State to take a certain quota of salmon eggs from the spawning Chinook and let the others spawn in the river. In other words, they could have had much larger runs if the State wanted to take more eggs. It makes one wonder about such logic in these times.

Another point of concern is instead of using 200^{+} million dollars to remove this productive power generating dams on an "iffy - no guarantee" fish restoration project, why not use this money to restore the ecosystems of some other undammed rivers in the area. If that restoration project is effective, then we could take a closer look at removing the dams. There is no more cheap power as Dinkins was told they would receive if the dams were removed (power would come from Bonneville).

Why does this impact statement continue to stress "fully restore" the ecosystem and fisheries. Why not go to a more economical route by providing proper and updated fish passage (ladders) around the dams.

Another issue that received very little attention pertains to what effect of tearing down the dams would have on the City of Port Angeles's water system. The City of Port Angeles and its citizens should not be required or asked to shoulder an additional financial burden of upgrading or building a new water system because of dam removal.

In conclusion, the way I see it is that for $300,000,000^{+}$ dollars, we get to lose two beautiful recreational lakes, much needed electrical power and fresh water for over a hundred miles, threaten our city's water system, and lose wonderful wetlands habitat in return for a project in which there are no guarantees that the fish runs will be restored. Somehow, this doesn't seem very cost effective in these tough economic times, especially since it has not been adequately shown that the dams have caused the recent declining salmon runs.

BLAIR SANDLER

December 12, 1994

Received
DSC-TWE
DEC 19 1994
C301-OLYM-404-06

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

The Honorable Mark Hatfield
Appropriations Committee
United States Senate
Washington, DC 20510

Dear Ms. Bransom and Mr. Hatfield,

Last month, a draft environmental impact statement (DEIS) was released by the Dept. of the Interior which proposes that the Glines Canyon and Elwha dams, on Washington State's Elwha River, be removed. Interior determined that complete removal of both dams offers the best opportunity for salmon restoration and access to over 75 miles of pristine habitat within the Olympic National Park.

I support the preferred alternative of removing the dams! It is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law.

Dam removal has broad support from environmentalists, recreationists (the upper Elwha is a great whitewater run, and dam removal will increase access and create a much longer trip), fishermen, Native Americans, business groups and even the dam owners.

Restoring the Elwha is a wise investment — this is the single best opportunity to restore salmon anywhere in the Northwest.

Failure to remove the dams would lead to more litigation, extinction for salmon runs, violation of tribal treaty rights, and the loss of hundreds of jobs.

Sincerely,

80 DUNCAN ST. NO 1 SAN FRANCISCO, CA 94110 415.282.2163 INTERNET: BLAIRS@IGC.APC.ORG

100% RECYCLED POST-CONSUMER FIBER; CHLORINE-FREE RECYCLING PROCESS

DEC 19 1994
C302-olym-404-01

December 10, 1994

Ms Bransom:

I am writing you concerning the Elwha River Restoration Act, which mandates full restoration of the Elwha River and its salmon runs in Washington State. This can only be achieved by fully removing the Glines Canyon and Elwha Dams. Failure to do so will only lead to more unnecessary litigation, and will expedite the extinction of salmon in tha Elwha, not to mention the hardship being suffered by Indian peoples in the region who depend on the salmon. This is a wise investment that can set a precedent for habitat and species restoration in the Northwest and throughout the country As an employee of the National Park Service, the organization that we depend on to protect our national treasures, I urge you to support full removal of the dams.

Very Sincerely,

Steven B. Clyde

Received
DSC-TWE

DEC 19 1994
C303-olym-404-06

December 12, 1994

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms.Bransom:

I support the preferred alternative to remove the dams from the Elwah River [redacted]emoving the dams is the best action we can take to help restore the once legendary Elwah River salmon runs. I hope you will agree with me and support the preferred alternative to remove the dams. We have a chance here to help fix a grave mistake. Let's not miss it.

Thanks for you consideration,

Gregory T. Kulseth

Gregory T. Kulseth

Gregory T. Kulseth
[redacted]

Received
DSC-TWE
DEC 19 1994
C304-olym-404-06

December 14, 1994

Sarah Bransom
National Park Service, Elwha River Project
PO Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom,

I am writing regarding the Elwha River Dams. I support the removal of the dams. It is the best possible way to fully restore the Elwha River ecosystem and its salmon runs as required by law. Restoring salmon runs anywhere in the Northwest is important and removing the dams is a logical and economical solution. Thanks for your consideration.

Sincerely,

Bob Byrd

Bob Byrd

[redacted]

Received
DSC-TWE
DEC 19 1994
C305-olym-404-06

12.14.94

Sarah Bransom
NPS, Elwha River Project
PO Box 25287
Denver Co 80225 0287

Dear Ms Branson

We support removal of the Elwha dams.

This is a great opportunity to restore the salmon runs and help undo the damage we have done here and elsewhere.

Sincerely

Margo Bernard
Mark Wilmes

[redacted]

DSC-TWE
DEC 19 1994
C306-olym-40406

Debi Morrison
[redacted]

Sarah Bransom
National Park Service
Elwha River Project
PO Box 25287
Denver CO 80225-0287

I am writing in regards to the Elwha River Project in order to give my full support of the removal of the dams. I believe that restoration of the salmon habitat and Elwha River ecosystem is incredibly important in a society where so much of nature is manipulated by man's wants. There is a great deal of support for the removal of the dams from all types of agencies, and it is obvious that jobs and income will be generated by the action. Once again - I would like to reiterate my support of the removal of the dams along the Elwha River and restoration of habitat.

Sincerely -
Debi Morrison
Debi Morrison

Received
DSC-TWE
DEC 19 1994
C307-olym-40401

LISA KERR
[redacted]

December 15, 1994

Sarah Bransom
National Park Service, Elwha River Project
PO Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

I am writing to express my support for dam removal on the Elwha River. Not only will removal of the dam bring economic benefits to the Northwest, but it is absolutely essential for the restoration of salmon and steelhead. The Northwest is just beginning to realize the devastation to the salmon that was caused by our all-consuming need for more and more power. This is a chance to do the right thing in an area that is still pristine and relatively unspoiled.

This is a chance for the public to comment on the Draft Environmental Impact Statement issued by the National Park Service. As an active, voting member of the public, I strongly support removing the dams.

Sincerely,

Lisa Kerr

[redacted]

December 11, 1994

Received
DSC-TWE

DEC 19 1994
C308-olym-404-06

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

Hello. I am writing in regard to the Elwha River (WA) Restoration Act and the accompanying DEIS released last month proposing removal of the Elwha and Glines Canyon dams. I wish to inform you that I am in strong support of dam removal for the restoration of salmon runs and the associated ecosystem improvement.

The proposal to eliminate the dams enjoys broad support from environmentalists, recreationists, Native Americans, fishermen, business groups, and the dam owners. Failure to act now will inevitably result in litigation, hundreds of job losses, salmon run decimation, and violation of tribal treaty rights.

For these and other reasons, I urge you to exercise your authority in initiating the dams' removal on the Elwha River, Washington. Thank you.

Sincerely,

James Scarborough

James Scarborough

Received
DSC-TWE

DEC 19 1994
C309-olym-404-06

Michael G. Deckert
[redacted]
December 14, 1994

Sarah Bransom
National Park Service
Elwha River Project
P.O. Box 25287
Denver, CO 80225

Dear Ms. Bransom,

As a kayaker, and a fly-fisherman, I am writing in support of the National Park Service's preferred alternative in the Draft Environmental Impact Statement on the Elwha River.

Removal of both dams presents the chance to achieve the complimentary goals of anadromous fish restoration and whitewater recreation enhancement. The chance to restore the salmon runs is exciting. The possibility of adding to the quality whitewater experience available on the Elwha is intriguing.

This golden opportunity to restore the Elwha salmon runs should not be squandered. Removal of both dams offers the most benefits in the long run. Take 'em out.

Sincerely,
Michael G Deckert
Michael G. Deckert

Received
DSC-TWE
DEC 19 1994
C310-olym-404-06

27716 21st Pl. South
Federal Way, WA 98003

December 2, 1994

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

RE: Elwha River Dam Removal - EIS

Dear Ms. Bransom:

Both dams on the Elwha River must be removed as soon as possible. I understand the need to evaluate all alternatives associated with restoration but feel that the full ecosystem recovery package with all its contingencies is too expensive and unnecessary. It is imperative that dam removal not be bound to other peripheral expenses such as sediment removal and stabilization.

Rumblings in congress about excessive costs associated with the Elwha River restoration plan are a very real threat to carrying out this project. We cannot afford to lose sight of the primary objective which is to eliminate the existing fish barriers. All other aspects of this project are secondary and can be dealt with in the future as funding becomes available.

My message to the Park Service is simply this: trim all costs so that dam removal appears as least objectionable to even the most ardent skeptics in congress. Remove the dams and worry about the other issues later. I don't mean to pass the other issues off as superficial because they aren't. However, if costs are not cut now, we may never have a chance to worry about these secondary issues.

Flood protection efforts will be necessary near the river mouth to protect the tribal community. Relocation of some structures should be anticipated and unopposed. Setback dikes will be necessary to accommodate forthcoming channel migrations and avulsions resulting from the sudden increase in sediment transport volumes. The sooner these setbacks are constructed, the sooner riparian communities can take hold and benefit fisheries resources.

The Toutle River which drains Mount St. Helens in Southwest Washington serves as the most relevant case study in sediment transport and stream recovery. In less than 10 years, fish stocks were able to recolonize stream habitats devastated by sediment volumes many orders of magnitude over that which has settled behind the Elwha dams.

Lets pull the plugs and get on with ecosystem recovery!

Sincerely,

Russ Ladley
Fishery Biologist

cc: Slade Gorton
Norm Dicks
Patty Murray

Received
DSC-TWE
DEC 19 1994
C311-olym-404-06

Ms. Bransom,

I support the PREFERRED alternative of removing dams! It is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law.

Fishermen, Native Americans, Environmentalists, and the dam owners support this alternative.

It is the BEST WAY to restore anywhere in the Northwest.

Failure to remove the dams would be detrimental to salmon runs which are so important.

PEACE

ADREA WEEKS

12/15/94

Heather Logan
[redacted]

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

Received
DSC-TWE
DEC 19 1994
C312-olym-404-00

Dear Ms. Bransom,

I am writing concerning the removal of the Glines Canyon and Elwha Dams on Washington State's Elwha River. I support the preferred alternative of removing the dams! It is the only way to restore the Elwha watershed ecosystem and its salmon runs, as required by law.

Removal of the dams is also supported by all involved parties that I know about.

Best wishes,

Heather Logan

December 14, 1994

DEC 19 1994
C313-olym-404-00

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Sarah:

I support the removal of the dams from the Elwha River. Dam removal is the only way to restore the Salmon and their habitat to their former glory. The removal of the dams is supported by fishermen, the owners of the dam, business groups, Native Americans and environmentalists. Everybody wins with removal of the dams.

Damn the dams; restore the Elwha and the Salmon that swim there.

Sincerely,

Janel E. Martin

[redacted]

Received
DSC-TWE
DEC 19 1994
C315-olym-404-06

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Sarah Bransom,

I support the preferred alternative of removing the two out-dated Elwha River dams. It is the only way to fully restore the Elwha River ecosystem as required by law.

Removing the dams has the following benefits:
- restores native salmon + steelhead runs, generating $5 million in new revenue
- creates hundreds of good paying construction jobs for workers on the Olympic Peninsula
- supported by a broad coalition of environmentalists, fishermen, Native Americans, and even the dam owners.
- ends gridlock and litigation in the courts

Thank you.

Mark L Johnson

MARK JOHNSON
[redacted]

cc: The Honorable Norm Dicks
U.S. House of Representatives
Washington DC 20515

cc: The Honorable Patty Murray
U.S. Senate
Washington DC 20510

Received
DSC-TWE
DEC 19 1994
C316-olym-404-06

December 9, 1994

Sarah Bransom
National Park Service, Elwha River Project
PO Box 25287
Denver, CO 80225-0287

Dear Sarah Bransom,

I'm writing this letter in support of the plans to remove the two Elwha dams on the Olympic peninsula. The limited benefit to the hydropower users does not justify the loss of natural habitat, etc. from the Elwha River basin. We're talking about impacts on a National Park and an old one at that. Unfortunately, many benefits of restoration are intangible and somewhat difficult to quantify. Certainly the reservoir bottom sediments can be dealt with; a geotextile layer could help control storm runoff and native plants could stabilize the soil deposits. The river will just go back to working its way through the earth like it always has. We'll just have to make sure it doesn't happen all at once. Let's hear it for the salmon and all the other critters out there.

Yours truly,

Bill Farmer

Bill Farmer
[redacted]

Received
DSC-TWE
DEC 19 1994
C317-04YM-404-06

Megan Biskaw
[redacted]

NPS, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Sarah Branson,

I would like to express my support for the removal of the two dams on the Elwha river. In light of the recent elections funding seems dificult to obtain. It is however the only way to restore the ecosystem on the Elwha river which is required by law. Please continue your support for the full removal of both dams.

Thank you,
Megan
Megan Biskaw

Received
DSC-TWE
DEC 19 1994
C318-04YM-404-06

Anaka Mines
[redacted]

November 18, 1994

NPS, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Sarah Branson:

I am writing to express my support for the removal of both dams on the Elwha river. It is the only way to fully restore the Elwha River ecosystem as required by law. Restoring salmon in the northwest is an excellent investment, and this project is the best opportunity to begin this process. The dam removal is supported by all parties, including the owners. Please support the prefered alternative to remove the dams.

Sincerely,
Anaka Mines
Anaka Mines

Received
DSC-TWE
DEC 19 1994
C319-olym-404-04

Susan Friedmar
[redacted]

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Hello,

I am writing to you in support of dam removal on the Elwha River. To let the Elwha flow once again would restore the ecosystem (including the legendary salmon populations). I recently visited the Elwha River, and it saddened me to see the dams that I knew only give power to one paper mill - power that the company could easily do without by using more energy efficient methods. I have just started reading Mountain in the Clouds by Bruce Brown, and each page is testimonial for the removal of the dams. I am new to the Pacific Northwest, and slowly I am learning of its environmental concerns and seeing its natural beauty - what a wonderful place!

Today, for the first time, I saw salmon spawning, and it was an incredible experience - big, huge, powerful fish fighting over the female, mocking them, and changing colors like a chameleon (which, I later learned, signified which male was dominating in the fight). In Mountain in the Cloud, I read about many biological and ecological necessities the the great salmon runs provide to the ecosystem, and with every page I shared the author's frustration in the way that the fish are ultimately treated - in an anthropomorphic perspective: "Even at their most successful, hatcheries cannot fulfill the broader purpose of the wild salmon runs. Their effect is to increase the salmon harvest of one predator (man) at the expense of other species ...and the system as a whole....The long term effect of Washington's traditional policy of relying on hatcheries while not enforcing environmental laws has been the reduction of nutrient cycling from the sea, and a rearrangement of those who benefit from the process." (pg. 231).

Page after page, I read clear evidence of expectations for new hatcheries which throughout history have only proved to kill out or drastically reduce the wild salmon runs and not even compensate with a run as large as predicted. It appears to me that as far as hatchery fish go, not once has the Department of Fisheries been able to produce the quality of salmon that is only known in the wild runs. With all this evidence, plus the concern for an ecological balance, I can't understand why hatcheries keep appearing when the real problem seems to be in saving the "biological integrity" of many of the spawning streams and rivers. The only way to explain this negligence is to convict human beings as creatures of greed and selfishness.

Bruce Brown did a wonderful job in recapping the history of the wild salmon runs to the present day. Of course, a definite bias is prevalent, but it is one that comes from a man who seems to feel that he is more a part of the earth than of a technology driven world. The book shows blatant disregard toward state and federal laws, displays of power struggles, bribery, and a general disrespect by many people to the environment which gives us life. Technology often has a positive connotation, built up on the industries that feed off it, yet, to me, the word technology often brings a chilling sense of fear to my mind because each "advance" in technology usually causes a great injustice to the delicate balance of the ecosystem. A good example to me is that of wetlands creation. Hundreds of thousands of acres of wetlands are paved over each year to build another shopping mall or supermarket, and artificial wetlands are often created in place of the natural, irreplacable, recently destroyed ones. Wetlands creation is not an exact science, and, more often than not, the artificial wetlands cannot perform the same functions as the natural preserves once did. Humans constantly try to play "god" without ever realizing that nature cannot be recreated by our technology. Why isn't money spent to preserve the wetlands? Why isn't money spent to save rivers? Why do the supermarkets and

hatcheries and dams keep killing the webs of life when we should know better? Bill Grubb, (a man who had lived his life fishing and working for hatcheries) told of his dispute with the Department of Fisheries in the 1970's: "'I've told them that if they put a hatchery in there...they should go ahead and put the gun in their mouth and get it over with....What we are seeing is a simple case of resource suicide.'" (pg. 145). This, coming from a man who has lived the history of the declining salmon run, he did not have to read it in a book like you and I.

After visiting the dams at the Elwha River and today seeing the chub salmon spawn, I feel more like a part of the history, and I want the history books of the future to show how in 1995 the Elwha dams had been destroyed to directly benefit and restore the ecological values related to the return of the salmon runs to their biological breeding grounds in the Elwha.

Thank you for your time and effort.

Sincerely,

Susan M. Friedmar
11/17/94

Received
DSC-TWE
DEC 19 1994
C321-Olym-404-06

SAMPLE LETTER

DATE

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

RE: Elwha River Draft EIS

Dear Ms. Bransom:

I am writing to comment on the draft Environmental Impact Statement for restoring the Elwha River. I strongly support the preferred alternative of removing the dams. This is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law.

Restoring the Elwha is the single best opportunity to restore salmon anywhere in the Northwest, and it would provide tremendous economic benefits for the region. Please move forward with funding and implementing this important project.

Sincerely,

NAME
ADDRESS

This is an important step — not only for the salmon but to practice removing dams, more and more of which will have to be removed in the future

Gerald Adams
[redacted]
(206) 622-3060

December 15, 1994

Received
DSC-TWE
DEC 19 1994
0522-oym-404-ac

Ms. Sarah Bransom
National Park Service
Elwha River project
P.O. Box 25287
Denver, CO 80225-0287

Subject: Elwha River Restoration

Dear Ms. Bransom:

I have recently rsviewsd the Draft Environmental Impact Statement (DEIS) for the restoration of the Elwha River Ecosystem. The process for developing this assessment has provided a prsferrsd altsrnative of removal of the dams. The DEIS is clear and the alternative of dam removal is sound, clearly supported by sciencs.

I take great interest and pride in the natural surroundings of the Northwest, including the Olympic Peninsula. My interests include passive and active outdoor recreation including fishing, hunting, bird watching, and hands and knees nature studies. I am very familiar with the Elwha River and have led nature field trips to there for The Audubon Society and Ths Native Plant Society.

Restoration of the Elwha River Ecosystem will provide increased benefits for the Olympic Peninsula. The removal of the dams will also include tremendous economic benefits. The return of native Salmon to their historic numbers will increase the use of the Elwha by fishing and nature enthusiasts. The preferred alternative of removing the dams is the most cost effective way to restore the Elwha River Ecosystem.

Removal of the dams is clearly the right remsdy to short sighted errors of past generations. The removal has widespread support of the local community, statewide and national interests.

I strongly urge you to commence the Elwha River Ecosystem Restoration project at its earliest possible time.

Sincerely,

Gerry Adams

cc: The Honorable Slade Gorton
The Honorable Patty Murray
The Honorable Norm Dicks
The Honorable Jennifer Dunn
The Honorable Jim McDermott

Received
DSC-TWE
DEC 19 1994
C323-olym-404-06

Neal J. Philip
Attorney at Law
[redacted]

December 15, 1994

Sarah Bransom
National Park Service
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

I am writing about the Draft Environmental Impact Statement for the Elwha River. I believe that the law, as it pertains to the Elwha's ecosystem, requires the dams on the Elwha to be removed; I fully support their removal. Furthermore, removal of the dams is the only reasonable and practical option, both economically and environmentally. Please do what you can to facilitate the removal of the dams.

Very truly yours,

Neal J. Philip
Attorney at Law

Received
DSC-TWE
DEC 19 1994
C324-olym-404-06

12/13/94

Sarah Bransom
NPS, Elwha River Project
P.O. Box 25287
Denver, CO., 80225-0287

Dear Ms. Bransom,

I support the preferral alternative of removing these two illegally built, non-productive dams on the Elwha River.

I'm not a rabid environmentalist. I'm not a professional letter writer who whiles away his time pestering government types. I am a reasonable taxpayer who thinks these two dams should be removed, and the Elwha River be given a chance for complete restoration.

Don't belive the bareheaded extremists who say dam removal on the Elwha will lead to a spate of similar projects on other rivers! The Elwha situation is unique, in that nearly all of its watershed lies within Olympic National Park, and the Gliner Canyon and Elwha dams produce relatively little power.

OVER ↓

-2-

These dams were constructed illegally without fish passages. They do not provide much flood control, and they have proven to be deadly to what salmon and steelhead runs remain. Warm water (from the top portion of the dam, which is what is used for electricity generation and flows downstream) has for the past several years led to massive fish kills by harboring warm water parasites.

This is the first letter of advocacy I've written. I feel very strongly about this issue, and am asking for federal support in the restoration of the Elwha River and its salmon runs.

Let's give it a shot! Nothing else has worked to this point.

Sincerely,

Douglas H. Williams

[redacted]

Received
DEC 19 1994
C325-Olym-404-06

Dear Sarah Branson,

take out those dams at Elwey River and save the salmon.

Sincerely,

Mike Cichen

Received
DSC-TWE
DEC 19 1994
C326-olym-404-06

Dec. 17, 1994

Attention: Sarah Bransom
Olympic National Park servic

Thru the Forks Forum, Dec. 14, 1994, I read that comments would be recieved by the Park thru Dec. 23, 1994 on the draft Environmental Impact Statement (EIS) on the Elwha River Ecosystem Restoration plan. On Dec. 15, 1994 I phoned for a copy of that draft. Since its a busy time of year for most of us, including me, I'll not have time to go over the draft before the written comment time will expire.... my compliments to your scheduling! Its a mute point at best for what I have to comment.... I'll cut to the core!

YOU HAVE 3 REASONABLE ALTERNATIVES for this developed situation.

1 - Status Quo or as the Forest Service records it NO ACTION.

2 - Offer the owner(s) fair market value for the Dam, Reservoir and Lands that the Park wants so badly.... with the conditions that

the lake be dredge when necessary; that the areas present beauty be maintained and or enhanced for its worth as a public electrical power source, trout fisheries, recreational area.... AND PERHAPS MOST IMPORTANTLY THE WETLANDS NOT BE DESTROYED and the bio diveirsity of area be appreciated.

3 - Annex the (a) corridor below the dam to private lands.... to be extracted from the "Park Lands" so the area will be free of a want-need for the Park to have to obtain!

FOR YOUR INFO

I'm very knowledgeable of the Elwha River from its mouth to its headwaters. It was my play ground from the mid 1950's to about 1965.

As a Engineer with the Forest Service on the Olympic Peninsula - Forks area for 30 years (now retired) I understand both the economics and environmental difficulties of your preferred alternative - not to dwell on the physical appects of it. Frankly it astro-

3

nomically nonsense in its best form.

Your efforts and monies should be directed towards a thousand good things, not meetings and paper games. You have at least 400 miles of trail that need a great amount of attention — most don't (no longer) resemble vaguely what you inherited in 1938. Your high country lake fisheries has gone to hell in a hand basket since the early 60's. There is the matter of a promise not kept when you improved the Sol Duc Hotspring road — to keep it open thru the winter months. Some of your campsites need improvement and even expansion. There are recreational opportunities being squandered — variety of leisurely uses within the Park .... a Park, if less constrained, that could support it with no harm to its flora and fauna.

You should be an educator to how we-you would not be "there" if it were not for the pioneers, loggers, railroads, CCC's — people who understood the land and earned (stead)

4

a living from it by the sweat of their brow — who experienced the taste of its milk being close to its breast each and every day of their lives.

You need to teach and follow-up on back country ethics — especially to those you think of as close allies / best friends — for they are the ignorant users of the interior. I've seen it so many times — these so called "Care for the Earth" people!

Your teachings should not be limited and should be positive about the similarities — likeness of Forest Service and Park .... how the need for timber production and wild lands really overlap — side by side — not as bitter rivals.

The people need to know the truths to make educational decisions about such projects that are put forward to them, or not be brought into the factoring on how that project turns out!

5

In closing, I'm not hopeful — I've followed your track record since the early 1960's — its terrible at best! I mean that constructively! You've not been blessed with the finances you need to manage on all fronts, so you've "pulled in" and managed for those who really don't see the Park, but simply visit its very outer core!! Why you want more lands to not manage is beyond me though! Enough —

Merry Christmas and
Have a good 95'

Stanley R. Fouts
[redacted]

P.S. Holding a meeting in Seattle on this on Nov. 15, 1994 equates to me asking someone in Montana how I should build my home in Forks, Washington without them knowing anything about the situation.... needs, weather, lay of land, but I understand you desires and methods — we had a male lab dog that was that way when it came to bitches — he was

I followed the Mt. Goat situation — you've worked it supremely!

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)
National Park Service
Department of the Interior

Received
DSC-TWE
DEC 19 1994
C327-olym-404-06

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): LEE JOHNSON
MAILING ADDRESS: [redacted]
AFFILIATION (IF ANY):
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: NONE

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: REMOVE ONE DAM A.S.A.P. STUDY RESULTS OF REMOVEL FOR ONE YEAR, THEN REMOVE SECOND DAM

Please continue your comments on the back of this sheet if needed.

Eric Broman
[redacted]

Received
DSC-TWE
DEC 19 1994
C328-Olym-4040

December 13, 1994

Sarah Bransom
National Park Service
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

re: Elwha River Ecosystem Restoration

Dear Ms. Bransom:

I write to comment on the Draft Environmental Impact Statement for restoring the Elwha River Ecosystem. I strongly support the preferred alternative of removing the dams. The science is clear and undebatable; dam removal is the only means to fully restore the Elwha River ecosystem. Dam removal also would provide tremendous economic benefits for the Olympic Peninsula.

The history behind the Elwha dams is tragic and outrageous. Despite its undeniable knowledge of construction of the Elwha Dam, the Washington Department of Fisheries failed to enforce existing state law requiring fish passage facilities. This breach of the State's public trust obligation directly resulted in the decimation of legendary runs of all five Pacific Salmon species. Elwha Chinook Salmon exceeded 100 pounds and spawning runs of Pink Salmon regularly reached 275,000 fish.

The dams, owned by James River Corporation, currently provide only one third of the power needs of the Daishowa Paper Mill in Port Angeles. James River and Daishowa have been on record as supporting dam removal as part of the carefully crafted legislative solution passed by Congress in 1992. Dam removal also enjoys widespread support from the local community as well as statewide and national interests.

There can be little doubt that removal of the Elwha Dams provides the best and most cost-effective opportunity for Salmon restoration anywhere in the Northwest. This is not a project which will require expensive habitat restoration efforts or contentious measures to restrict private property rights or other river uses, because the majority of the Elwha watershed is pristine and protected in Olympic National Park. The fish just need removal of the barriers that block their upstream and downstream migrations: Lake Mills, Lake Aldwell, and the two dams.

Dam removal also provides the only alternative to costly and lengthy litigation over proposals to license the dams. The public interest would be better served by avoiding lawsuits almost certain to prove the federal government's failure to protect tribal treaty rights and the State government's failure to comply with its public trust obligations.

The time clearly is right to remedy the shortsighted errors of past generations and remove the dams. Please move forward with great speed to implement this important project.

Sincerely,

Eric Broman

cc: The Honorable Norm Dicks
The Honorable Patty Murray
The Honorable Slade Gorton
The Honorable Jennifer Dunn
The Honorable Jim McDermott

Received
DSC-TWE
DEC 19 1994
C330-OLYM-404-06

December 8, 1994

Blake E. Smith
[redacted]

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, Colorado 80225-0287

Dear Sarah:

I whole heartily support the removal of the two out-dated dams on the Elwha River. Taking this action will most definitely restore the ecosystem, and salmon runs of the Elwha River.

I have seen the costs associated with the removal of the dams and subsequent sediment removal. Please do not lose sight of the real problem. Funding for removal of the dams must be given the highest priority. Sediment removal (if necessary) should be done only when other funds become available. The Toutle River, after Mount Saint Helen erupted, carried far more sediment than is currently trapped behind both reservoirs. The healing process that has taken place after the eruption has been remarkable. Aquatic insects, fish, and vegetation all have reestablished their communities. The sediment may alter the lower 5 miles of habitat in the river and estuary; however, the benefits of opening up the vast amounts of habitat negate any loss of the questionable salmonid habitat in the lower river. Ediz Hook in Port Angeles was formed by sediment originating from the Elwha River. Natural succession is a powerful tool when left alone.

Removal of the dams will open up 75 miles of pristine salmonid habitat. History has shown that this type of fisheries restoration is extremely successful. Hells Gate Canyon on the Fraser River, is a prime example. Once a fish blockage after a man-made rock slide, it now is host to millions of salmonids which utilize the upper watershed.

Please see that full and complete restoration of the Elwha River's magnificent salmonid runs moves forward so that everyone in the United States can enjoy this unique area. The outcome will be immeasurable by any standard.

Sincerely,
Blake E. Smith
Blake E. Smith
Fisheries Biologist

CC: Slade Gorton
Patty Murry
Norm Dicks

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

Received
DSC-TWE
DEC 19 1994
C330-OLYM-404-06

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your comments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): DONNA JOHNSON
MAILING ADDRESS: [redacted]
AFFILIATION (IF ANY): —
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:
I FEEL DAMNS SHOULD BE REMOVED — $ SHOULD BE SPENT ON RESTORATION NOT END LESS STUDIES. STUDY SILT BUT TRY NATURAL MEANS BEFORE EXTENSIVE DREDGING AND EXPENSIVE REMOVAL —

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:
TOO MUCH IS SPENT ON END LESS STUDY =

OTHER COMMENTS: SAVE AS NATURAL AREA NOT COMMERCIAL DEVELOPMENT

Please continue your comments on the back of this sheet if needed.

December 17, 1993

Received
DSC-TWE

DEC 20 1994
C331 OLYM 404

Ms. Sarah Bransom
National Park Service
DSC-TWE-Planning
12795 Alameda Parkway
Denver, CO 80225-0287

Dear Ms. Bransom:

I am responding to the request for comments on the DEIS of the Elwha Dam removal project:

1) I note that the socio-economic impacts cited in the DEIS are of a very traditional sort - jobs gained or lost, pounds of fish caught, kilowatt-hours of electric power foregone, etc. I suggest there is another order of impact which should be acknowledged: the historic significance of deliberately removing an industrial structure for the sake of enhancing natural values. This is difficult to assess with numbers, ironically, but very real - it is this aspect of the project that is generating heated opposition from the local business community. Decades after everyone has forgotten how many jobs the project generated, people will visit this area - as they do in Saratoga or Appomatox - as a place where it all turned around.

2) In connection with the above, some assessment should be done of the vicarious value of this project, as was done for the Four Corners power generation project several years ago. Many people who will never visit this area, nevertheless place value on a natural restoration of this kind. Techniques have been developed to assess and even quantify this value.

3) Account should be made of the jobs lost when a major employer, Daishowa, closes its doors if the lower dam is not removed, as the company has claimed in several public announcements.

Best regards,

Jim Stapleton
[redacted]

Received
DSC-TWE

DEC 20 1994
C332 OLYM 404-A

Christopher E. Hill
5800 22nd Ave. NW, #104
Seattle, WA 98107

Sarah Bransom
National Park Service
P. O. Box 25287
Denver CO 80225-0287

Dear Ms Bransom,

I am writing to urge you to support the removal of the Glines Canyon and Elwha dams on the Elwha River. I feel that the environmental harm that has been done to rivers by construction of dams very often outweighs the benefits of hydroelectricity and flood control. My perspective is mostly that of a biologist, and I know that in the southeastern part of the country, from which I have recently moved, the disruption of almost all the large rivers in the region by dams has led to the extinction or endangerment of dozens of species which depend on free flowing waters. In the case of the Elwha, there is broad local support from fisherman, environmentalists, and others who love free-flowing rivers for removal of the dam. The dam removal is also supported by Native Americans, business groups, and the dam owners. I believe that removal of the dams on the Elwha will not only be vital to the recovery of endangered salmon stocks (as required by law), it will also set a healthy precedent for evaluating dams, both existing and proposed, in the future.

Sincerely,
Christopher E. Hill

Susan Pulkownik
[redacted]
Telephone (415) 567-5939
Fax (415) 346-8923

November 16, 1994

Received
DSC-TWE
DEC 20 1994
C334 OLYM 404-06

Sarah Branson
National Park Service
Western Team
12795 Alameda Parkway
Denver, CO 80225-0287

RE: Elwha River Dam Removal EIS

To: Honorable Senator Gorton, Senator Murray, State Senator Hargrove, Congressman Kessler, Congressman Buck, Represenative Dicks, Sarah Branson and Park Service People:

The removal of the Elwha River Dams is be proposed effectively in an EIS hearing in which only one side is being heard. This can hardly be called a fair fight. No one would be surprised if an audience, that did not have the benefit of the opposing view, believed the side stating they were "right." Unfortunately, this is what has happened over the last several years, as organized Olympic National Park Officials, fueled by well intentioned environmentalist organizations, and, other groups, (e.i., the S'Klallam Indians and the City of Port Angeles) who hope to profit by this boondoogle . . . have pounded a steady drumbeat for dam removal.

In response, consider the facts drawn from community leaders whose voices must be heard by the Congressmen who will be asked to fund destruction of Lake Mills and Lake Aldwell. But, this may matter little since, our message may never be equally published with the same fervor as the EIS, with it's plans and scenarios, all well financed. For too long Olympic National Park officials have sold us a bogus bill of goods, leading the public to believe that the dams must go to improve salmon runs. Northwest residents do not believe it. Concerned citizens, your constituents, are telling their neighbors, families and friends that the proposal to tear down the dams, drain the lakes and destroy the ambiance of the lovely Elwha Valley is ***WRONG!***

In the document enclosed we revisit the arguments, both in favor and against, removal of the dams, together with the failure of ONP to adequately mitigate the impact of draining these pristine lakes.

Respectfully,

Susan Pulkownik

Susan Pulkownik

SP:dv

Enclosure: Both Sides: The Elwha Dam Removal Proposal

BOTH SIDES:

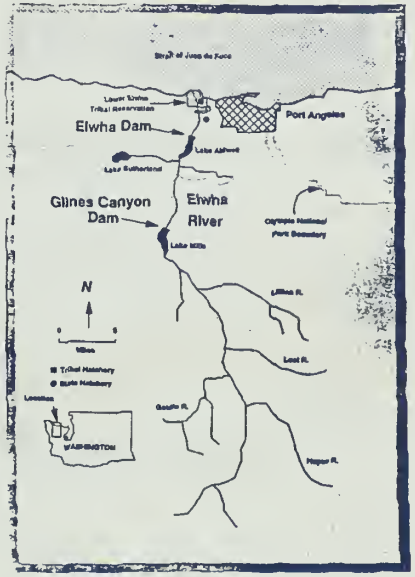
THE ELWHA DAM REMOVAL PROPOSAL

Submitted by:
Susan Pulkownik
November 10, 1994

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WHERE IS THE ELWHA RIVER?



A BRIEF HISTORY OF THE ELWHA RIVER DAMS

1910-1913 -Thomas Aldwell built a utilitarian 100-foot-high dam in a canyon of the lower Elwha River. A power house containing two turbines produced power for Port Angeles, Port Townsend, Poulsbo, Bremerton, and other area communities. The dam is on private land, primarily surrounded by private forest land. No licensing was required and no thought was given to the effect on fish runs.

1914-1920 - Northwestern Power & Light Co. formed to purchase the project from Aldwell, who was apparently beset by cash flow difficulties. They added onto the powerhouse and installed two more turbines in 1920, increasing power generation capability to 13 megawatts. (The two oldest turbines are currently mothballed due to insufficient water flow.)

1920 - Congress adopted the Federal Power Act which required licensing of any new dams.

1925-1927 -Northwestern built a second dam, which was licensed by the Federal Power Commission in 1926, for 50 years. Further up the Elwha at Glines Canyon, it is on private land and was surrounded by national forest. Soaring 200-feet-high, the upper dam's design reflects an interest in aesthetics, but not in fish. It's single large turbine generates 16 megawatts of power.

1938 - Olympic National Park was established. In the early 1940s, the Park was expanded, taking in the land around the Glines Canyon Dam, including part of its reservoir, Lake Mills.

1950s -James River Corporation, owner of the Port Angeles mill that was the dams' major power customer, purchased the dams. (The mill was later sold to Crown Zellerbach, which sold to Daishowa in the 1980s.) Also in the 1950s, records a long-term Fisheries Department employee, a plan for fish passages was devised, but never implemented.

1965-1966 - The Federal Power Commission declared it had jurisdiction over the lower Elwha dam and directed Crown Z to file an application for a license to operate it.

1968 -Crown Z filed the application, but the FPC took no action on it.

1973 - Crown Z filed an application for relicensing of the Glines Canyon dam, three years before its 50 year license was due to expire. That was same year, Orville Camphell, a pulp and paper specialist, came to Port Angeles to work for Crown Z. He was told they owned a couple dams that he would have to keep tabs on. Campbell, who knew nothing about dams, soon found he knew as much as the federal agencies. "Crown Z then had two applications in —one for licensing and one for relicensing," he recalls, but there was no process for licensing.

Shortly after Campbell arrived, he attended a meeting at which Polly Dyer of Olympic Park Associates expressed outrage at having a "concrete monolith in a world heritage park," and called for its removal. It seemed like an impossible idea to Campbell.

In contrast to the Olympic Park Associates which indicated no interest in fisheries, local fishermen and Department Fisheries officials began calling for action to help the salmon. Crown Z participated in construction of a rearing channel at the mouth of the Elwha River. It began rearing Chinook salmon in 1975, and is still working today, although it never achieved the results Fisheries hoped for. During low water periods, water temperatures rise, causing disease problems in the river and affecting young fish in the rearing channel. Also, Fisheries has been unsuccessful in attempts to raise Chinook salmon beyond the normal smolt cycle.

Crown Z also spent about $1 million installing a test Eiker Screen in one penstock at the Elwha dam. The Electric Power Reclamation Institute evaluated and published results which showed excellent survival rates for Coho, Chinook, and steelhead smolts passing through the dams. However, to get those smolts, adult spawning fish have to get above the dams. The company proposed a fish ladder at the Elwha dam and trucking at the higher Glines Canyon site, but neither plan was approved.

June 1976 -The Glines Canyon license expired with FPC having taken no action on the renewal application.

1977-1985 -Nothing happened regarding dam licensing, but Crown Z "spent a lot of money on dam safety issues," Campbell says. "Several million dollars were spent reinforcing the dams to meet new safety standards."

1986 -The FPC became the Federal Energy Regulatory Commission (FERC), part of the Department of Energy. Late in the year, FERC established clear rules and processes for licensing and relicensing hydro projects and started some activity, attempting to resolve the Elwha issues. Scoping meetings were held toward producing an Environmental Impact Statement (EIS). One option Crown Z was asked to consider was dam removal.

1988 - FERC issued a Draft EIS on the Elwha Dams and held hearings in Port Angeles and Seattle. "It was about four to 100 in Port Angeles for taking out the dams," says Campbell. "in Seattle, the company stood alone" while about 400 spoke for taking out the dams.

1991-1992 -Then-Sen. Brock Adams (D-WA) and Sen. Bill Bradley (D-NJ) drafted the Elwha Elwha River Ecosystem and Fisheries Restoration Act. Adopted in 1992, it directed the Secretary of the Interior to determine if removal

A Brief History of the Dams Continued

was required, and to document his conclusion. The act also guaranteed power for Daishowa's mill at market rates; protection of municipal and industrial water supplies for the City of Port Angeles and Dry Creek Water District; and $29.5 million compensation to James River for taking the dams and, presumably, the still-private property on which they are located.

The bill had broad support in Congress and from a coalition of environmental groups, the Elwha Tribe, and federal agencies. The good news for the dams' owner was, "for the first time, we had a process for resolving the matter," says Campbell.

1992 -The Secretary of the Interior said that dam removal was, indeed, required for full restoration of the fishery.

1994 -An EIS was issued supporting the removal decision. It decribes four options for removal of the dams, nine scenarios for managing the accumulated sediments, and a process for ayalyzing the options.

Sen. Slade Gorton (R-WA) has introduced a bill that would send the issue back to FERC if money to purchase the dams is not issued within two years. That is not an option James River looks forward to.

"Our concern is that getting a license to operate the Elwha hydro projects would be extremely difficult," Campbell says, "and if we get a license there's no question that the environmental community would file suit —they already have filed suit, challenging FERC's authority to relicense Glines Canyon."

The Elwha Report, dated January 1994, estimates removal as a 20-year project, lasting from 1994 to 2012, with a total cost of $161.08 million. However, there are no solid numbers as to actual costs of removing the dams and sediment which has accumulated in the reservoirs behind them.

The first volume of the latest EIS, which the November workshops will review, makes a case for removal. The second volume, which is yet to be issued, will identify a "preferred option" and "more credible numbers" based on the preferred removal plan. Actual removal time could be as little as 10 years and actual cost could be half the original estimate, or double it.

"We have to bring the cost down," says Rep. Norm Dicks (D-Bremerton). "If it's a couple of hundred million dollar project —no way. It has to be done more economically if this is to be done at all."

Conversely, Dicks says removal "would create a lot of jobs — destruction jobs— it would be a tremendous public works project."

Dicks sees the Elwha controversy as a "Hobbesian choice." He says, "All who care about the economy up here have to think through this — relicensing could be catastrophic to Daishowa—it's crucial to Daishowa to resolve this issue —if they were to go out of business it would be terrible."

Expressing concern about the "effect on the BPA power grid," Dicks says, "I don't want it to become a precedent for taking out all the other dams. We're trying to be even-handed and take a good, close look at that. It's a big tough problem. We'll take it one year at a time."

CASE IN FAVOR OF DAM REMOVAL

The Elwha River Dams

Since 1911, the Elwha and Glines Canyon dams have blocked anadromous fish passage to more than 70 miles of the Elwha River and it's tributaries, limiting anadromous salmon and trout production to the lower 4.9 miles of the river below the Elwha Dam. They have also prevented the flow of substrate material essential to spawning fish from reaching the lower 4.9 miles of river. As a result, all 10 native Elwha River anadromous fish runs (i.e. Spring, and summer/fall chinook, coho, pink, chum and sockeye salmon, winter and summer runs of steelhead, sea-run cutthroat trout, and native char) have been severely reduced and the ecosystem altered, especially within a large portion (19%) of Olympic National Park. Numerous wildlife populations within the basin are suspected to have declined.

The goal of the Elwha River Ecosystem and Fisheries Restoration Act is the, "full restoration of the Elwha River ecosystem and native anadromous fisheries" (Section 3(c)). The Act authorized the Secretary of the Interior to acquire the Projects (Elwha Dam and Glines Canyon Dam) and remove the dams if he concluded that their removal is necessary to meet this goal.

Public Law 102-495 directed the Secretary to include in his report a "definite plan" for removal of the Elwha and Glines Canyon dams. Removal of the dams would constitute a major Federal action, thereby requiring compliance with the National

Environmental Policy Act (NEPA). The Secretary's report demonstrates that dam removal is feasible and is necessary for full restoration of the river and it's habitat.

The report describes plans consisting of 4 options for removal of the dams, 9 scenarios for managing the accumulated sediments, and a process for analysis of the alternatives consistent with full restoration of the ecosystem and native anadromous fisheries. A preferred alternative would be selected during the Environmental Impact Statement (EIS)/advanced planning stage. The EIS/advanced planning report would be initiated following submittal of The Elwha Report to Congress.

Retention of either or both dams, even with the provision of fish passage facilities and other measures, would not allow for the full restoration of native anadromous fisheries, in particular chinook, pink and chum salmon. Additionally, retention of either or both dams would prevent the restoration of natural sediment transport processes, resulting in continued degradation of the river below the dams, the estuary, and near coastal areas. Retention of either or both reservoirs would prevent the restoration of important bottom land and riverine habitat for wildlife and anadromous fish, as well as prevent full nutrient transport, thus impacting freshwater organisms.

The removal of both dams would involve eliminating most if not all of the existing auxiliary structures, returning the river to a free-flowing condition, and set in motion plans for restoring

habitat and fisheries.

The electrical energy supplied by the dams and consumed by the mill would be replaced by power provided by the Bonneville Power Administration, guaranteed for a set length of time, and measures to protect water users would be implemented.

The primary steps involved in removing the structures would include diverting the river around the dams, remove the structures, and manage the sediments that have accumulated in each reservoir.

There are 4 plans for diverting the river and demolishing the dam structures being investigated, including diverting the river (1) in tunnels, (2) around the dams in a surface channel, (3) through the dam structures, and (4) over the dams by creating a notch through the structure.

II. **OBJECTIONS TO O.N.P. EIS REPORT RE: ELWHA RIVER DAMS**

The report fails to adequately mitigate the following factors and issues affecting the entire North Olympic Peninsula Community, to wit:

1. **Hydroelectric Energy.**

The Elwha and Glines Canyon dams were built in 1911 and 1927 on the Elwha River. The paper mills which employ approximately 500 Port Angeles residents rely on a third of their power generated from these dams. The U.S. Taxpayers will have to foot this bill also, to pay for the short fall and the additional expense to the mills to obtain the loss of power from another source. The Elwha river is the fourth largest river by draining area on the peninsula, with a drainage area of 321 square miles, with 83% located with the Olympic National Park. It has an average instantaneous discharge of 1,507 cfs. The Elwha Dam, completed in 1912, is about 105 feet high. It creates a 267-acre reservoir called Lake Aldwell. The Glines Canyon Dam, which was constructed in 1927, is 210 feet high and it impounds a 415-acre reservoir, Lake Mills. (See corresponding articles from local newspapers on the following page.)

Report sees rate jump if Elwha dams remove

By The Associated Press

The Federal Energy Regulatory Commission and General Accounting Office audit released Wednesday estimate about $16.5 million worth of electricity would be lost annually if the Elwha River dams are removed.

That estimate assumes replacement power costs of 9.6 cents a kilowatt-hour rather than the 2.4-cent rate the Bonneville Power Administration currently is charging the Daishowa America paper mill as the source of the remaining 60 percent of its power.

The dams are owned by James River Corp. of Richmond, Va., are used only to generate electricity for the Port Angeles mill. Taking out the dams would result in the loss of roughly a third of the mill's power.

The Federal Energy Regulatory Commission predicts the cost of getting fish around the dams would raise the cost of dam-generated electricity to about the rate charged by BPA.

New hatchery facilities will be needed to restore fish upriver from the dams regardless of whether the dams are removed or fish passages are built, the GAO said. It would cost about $3.1 million to build the hatcheries and another $240,000 annually to operate them, the audit said.

The James River wants to build a fish ladder at the Elwha dam and a barge-and-haul facility at the Glines Canyon dam to help fish get upstream. That proposal also calls for spillway improvements and use of experimental screens at the Elwha dam to protect fish from the turbines.

FERC estimates the James River plan would cost about $20 million. It has determined it would be more effective to build a fish ladder and install conventional turbine screens at both dams at a cost of about $4.4 million.

"However, FERC staff did not recommend the most effective measures be used at the Glines Canyon dam because of their high cost relative to the potential increased fish survival rate," the GAO said.

The Glines Canyon blanks in Lake Mills casts a clear reflection, is centered in Olympic Power's nearby image.

Record continued on page 10-11

Hydro's 'terrible image' complicates dam relicensing

Hydro electric power does not create air pollution like coal-fired generators. It does not produce radioactive waste like nuclear power plants. It does not use up the water that powers its turbines.

For decades, hydro was considered "clean energy" that created lakes which were seen as a recreational asset. But today, hydro has a terrible image.

There is "some justification" for that negative image, says Orville Campbell, Elwha Dam project manager for Daishowa and James River. "The first hydro projects in the '20s to '50s were power generation," he explains. "There was little consideration given to any other impact. It was energy for industrial development, jobs, increasing the standard of living, irrigation water that created a bush truck garden area. Electric was a form of energy that was cheap."

Building they began to push for removal of existing dams. "The whole ballgame for hydro started to fall apart" when Congress passed the Electric Consumer Protection Act of 1987, says Campbell. That act "so complicated and limited FERC's (Federal Energy Regulatory Commission) ability to relicense that FERC is going to require some dam removal or, at the very least, study of the option of dam removal."

Interior Dept. dams relicensed, Michigan Power Co. recently started into as agreement with FERC to establish a funding mechanism for removal at the end of the licensing period.

"Congress has made such a mess of power dam relicensing, it turned the whole hydro world upside down," Campbell charges. "In negotiating with Congressional staff, we learned hydro has a terrible image in the country and is the butt of Congress. ... It's an uphill battle getting projects relicensed and it's getting more difficult every day."

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2. **Pork, Not Water, is a Real Issue.**

Section 16 of the enabling legislation spells out how one third of Ediz Hook will be transferred to the Elwha S'Klallam Tribe "for the purpose of tribal economic development." In 1976, Port Angeles signed an agreement to reinforce Ediz Hook against erosion, spent $424,000, plus yearly maintenance since. Ediz Hook will be controlled by the Indian tribe as part of the "expense" of dam removal. Politics at work. Is there something fishy about this pork barrel grant? It makes one wonder when you consider that "The S'Klallam Indians ceded land, including Ediz Hook, to the federal government in 1855." Subsequent claims by the tribe for inadequate compensation for the cession were adjudicated by the Indian Claims Commission in 1976. According to former Mayor Hallett, "full compensation has already been awarded." Is this legislation about return of salmon runs or does it seek to remedy a social injustice long ago created by the federal government?

The EIS fails to consider impacts likely to the following uses of the Ediz Hook, including but not limited to: picnicking, fishing, boat launching, scenery watching and the Waterfront Trails, salmon club, local mills and the fact that the hook forms the harbor itself. Furthermore, Royce Daniel, general manager of the ITT Rayonier, Inc. Port Angeles pulp mill, stresses the importance of Ediz Hook to the mill's log handling and log storage operations. Illustrative of the popular perception relating to Ediz Hook, the following news article appears as follows:

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PA digs in over Hook

Elwha River/dams

Wednesday, June 17, 1992

By Logan Harris
Peninsula Daily News

PORT ANGELES — The city will oppose an Elwha River restoration bill if the legislation includes the transfer of federal property on Ediz Hook to the Lower Elwha S'Klallam Tribe.

Mayor Jim Hallett and city manager Jeff Pomeranz said the city will stand firm on that point in a response Tuesday to a series of written questions from the Senate Committee on Energy and Natural Resources.

The committee is reviewing the Elwha River Ecosystem and Fisheries Restoration Act, which could lead to removal of two fish-blocking dams on the Elwha River.

Hallett and deputy mayor Joan Sargent testified to the Senate committee in Washington, D.C., this month regarding the city's water-quality concerns and its opposition to the provision providing the tribe a chance to acquire surplus Ediz Hook land.

Tribal Council Presideot Carla Elofson declined comment on the issue. The tribe has said it has strong historical and cultural ties to the Hook.

U.S. Rep. Al Swift, a key player in getting an early consensus on the bill, said it's important for both the city and the tribe to support the legislation.

Members of the Northwest congressional delegation want to sit down with city and tribal representatives and try to iron out the differences, Swift said.

"I don't think we are going to permit this legislation to flow through without this being addressed both ways," Swift said today.

The city leases the property from the federal government and has a heavy investment in shore stabilization, storm repair, utility services and roadway, parks and the Waterfront Trail.

In a letter mailed to the Senate committee today, Hallett responded to three questions from Sen. Frank Murkowski, R-Alaska.

The first asked how the city's support for the legislation would change if the provision remains as written — with the land transfer provision.

"The city of Port Angeles would be opposed to (the bill) if Section 16 remains as currently written," Hallett said in the letter.

Murkowski also asked that the city send a copy of its response to a letter sent by the tribe in May suggesting it would continue certain subleases, agree to a planned extension of the Waterfront Trail and otherwise be good neighbors should it receive the federal lands as suggested in the bill.

In addition to sending a copy of the city's response, Hallett wrote: "The city cannot agree to losing control of Ediz Hook forever in exchange for continuing the present subleases for less than 20 years. The long-term economic and recreational vitality of the city of Port Angeles depends upon the continued existence and availability of Ediz Hook for all our citizens."

Murkowski introduced his final question by recalling that the Department of Interior's position relative to the restoration of the Elwha River basin is that the cost of the project should be borne by the beneficiaries of the project.

Murkowski asked: "As a beneficiary of this proposal, what do you think your share should be?"

But the city disagrees with the premise.

"The city of Port Angeles respectfully submits that it is not a beneficiary of the proposed legislation," Hallett's letter states. "(The bill) would maintain the status quo as far as protecting the quality of the city's water supply is concerned. The city has not asked for, nor does the proposed legislation include, any 'benefits' for the city of Port Angeles beyond what the city already has. All that the city asks is that it not lose the excellent quality of its water supply as a result of removal of the Elwha River dams."

The Elwha and Glines Canyon dams were built in 1911 and 1927 on the Elwha River near the northern border of the Olympic National Park. Since then, the native fish have been unable to migrate upstream to spawn and have been eliminated from the river above the dam.

Removing the dams and restoring the fishery, as proposed by Washington lawmakers, is estimated to cost the federal government as much as $110 million.

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3. **Opponents Make Their Points Clear**

"We would be very unhappy about (dam removal) to say the very least," said Donald Rudolph, chairman of the Olympic Peninsula economic Research Association. "With electrical energy a known shortage we are being faced with, we can't understand why we would be taking out power dams that could produce more power at very little expense. Our personal position is that fish won't come back to any great levels, anyway." Other opponents lament the loss of Lake Aldwell and Lake Mills, two dam-caused recreational lakes that would be drained if the structures are removed. Loss of flood control is another concern.

Opponent of dam removal: No guarantees it will help

PORT ANGELES — An opponent of a plan to remove two Elwha River dams urged the Port Angeles Chamber of Commerce Monday to join his fight.

J. Marvin Chastain, a member of a group called Rescue Elwha Area Lakes, told chamber members at a luncheon at Hsguewood's Restaurant that the plan will do more environmental harm than good and will create "economic mayhem."

He said the elimination of Lake Aldwell will harm trumpeter swan habitat with no guarantees that the salmon population will be rejuvenated.

Park officials have said the trumpeter swan population on the Pacific Coast is growing and that the Trumpeter Swan Society will participate in ways to lessen any harm caused by the loss of Lake Aldwell.

A federal study coordinated by the National Park Service states that the two dams must be removed to fully restore native fish runs.

"It's time to fish or cut bait," Chastain said. "This will harm your business."

He also said, "Right now there is an ongoing program to eliminate all industry on the Olympic Peninsula and turn it into one big park with nearly all evidence of human activity obliterated."

The group is considering a legal challenge once an environmental impact statement is prepared.

The study was drawn up under the Elwha River Ecosystem and Fisheries Act, federal legislation ensuring all parties involved must negotiate a solution. The legislation is a settlement of existing and potential lawsuits connected with relicensing the dams.

The dams, owned by James River Corp., supply power to the Daishowa America paper mill. Daishowa officials support removal.

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Support at meeting runs deep to keep 2 Elwha River dams

Elwha Rivilams

Wednesday, Jan. 26, 1994

By Christine Carlson
Peninsula Daily News

PORT ANGELES — If the people filling the Hide-Away Room at Aldge's Restaurant Tuesday had the power to decide whether to remove two fish-blocking Elwha dams, the dams would stay.

The meeting, sponsored by the Port Angeles chapter of United We Stand, America, attracted 150 people to talk about dams, see a speaker video and hear a short stump speech on dam removal by U.S. congressional candidate Lloyd Phillips.

Phillips, who is running against U.S. Rep. Norm Dicks, D-6th District, urged the audience to contact the state's congressional delegation to oppose allocation of funds for the project. Cost estimates have ranged from $160 million to $300 million.

Speakers also expressed various theories as to why salmon stocks on the Elwha River have become depleted over the years, including a belief that other factors besides the dams are to blame.

Some called the plan a "land grab" by the National Park Service, which was accused of having little concern for fish.

Chastain, a member of a group called Restore Elwha Area Lakes, folded tents of his speeches and warned the audience that the Park Service and large environmental groups with political muscle are backing dam removal.

"There's a powerful group in this country that's going to trash this Peninsula as a place to live unless we get excited and do something about it," he said.

The crowd wasn't unanimous. About six people raised their hands when asked whether the dams should go.

Kounrad Albaugh, who lives near the river, said salmon have trouble spawning because of the lack of fine gravel in the lower river. Dam removal would help. When salmon spawn better, eagle populations will improve, Albaugh said.

Chastain often referred to a federal study that suggests two Elwha River dams would be removed to restore the river's ecosystem and the native runs of chinook, pink and chum salmon.

In his video, he questions the study and talks about potential effects of drawing Lakes Mills and Lake Aldwell, for example, he said trumpeter swans on Lake Aldwell would be displaced and the habitat of ducks, beaver, muskrat and osprey would be destroyed.

Barbara Mossman of Forks said the lakes hold back 1.5 million cubic yards of silt.

"What other ecosystems are we going to destroy to get rid of that silt?" she asked.

While the meeting was informational and presented by residents, the public process is continuing. Public comments made on the Elwha report will be taken by the federal Elwha report, which must be submitted to Congress by Monday.

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Citizen group wants to save Elwha dams

By Bunky Koonce
Peninsula Daily News

PORT ANGELES — A group has formed to oppose removing two dams along the Elwha River.

Called Local Rescue Elwha Area Lakes, or REAL, the group says removing the dams would make two lakes disappear and eliminate a source of electric power.

REAL spokesman Don Rudolph of Port Angeles said the group's aim is to save those lakes.

Elwha Dam Glines Canyon dams.

"The basic way to attack out of the gate, but we're going to do what we can to stop those headwaters we can to save those beaut-

ful lakes."

Rudolph said an advisory group of locals had been meeting for about a month and that a newsletter is planned for later this month.

He said REAL intends to pack as

Rudolph Oct. 18 workshop with dam sup-

porters. That workshop, sponsored by a research team that recommended dam removal to restore salmon runs, takes place from 4 to 8 p.m. at Port Angeles High School.

REAL is also collecting photographs and information on why the bases above the dams should remain, Rudolph said.

"We've got a notebook about half-an-inch thick filled with sightings of trumpeter swans, all kinds of muskrat and osprey would be destroyed. public," he said. "Those bases have been there to long that they've become part of our natural habitat."

Rudolph said that salmon runs are in danger over on North Olympic Peninsula rivers that have no dams, and "300 million would do a lot to enhance the habitat there."

Cost to remove the dams is estimated to be at least $300 million.

Rudolph led the Olympic Peninsula Economic Research Association, a group that backed a 1992 proposal for to ski Hughes near Joyce. He said his organization with that group made him familiar with organizing for political purposes.

"This group has a completely different membership, though," he said. "Of the people I've been talking to, they seem to support the about three to one."

REAL will be contacting civic groups like Rotary and chambers of commerce for support, Rudolph said.

"I have a real good feeling about this," he said. "Once people realize what's going on we'll be able to put a stop to this."

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Grange passes resolution on the Elwha Dams

The 62,000 members Washington State Grange, at i annual state convention, passed a resolution to suppo saving the Elwha Dams. Other resolutions passed dea with opposing outcome based education and parenh control of children.

Grange members also voted to oppose pica barium ing for criminals and to seek more stringent sentences f convicted drunk drivers and the Second Amendmen right to keep and bear arms.

Also passed was a resolution demanding that th State of Washington adhere to R.C.W. 75.36.030 Whic states:

"The people of the State of Washington declare for conservation, enjoyment, and property utilization o the state's natural resources including but not limited t lands, waters, timber, fish and game are responsibilitie of the state of Washington and shall remain within th exclusive domain of the State of Washington.

"while fully respecting private property rights, all r sources in the state's domain shall be managed by th state whose such management, conservation, an proper utilization are the primary consideration. N citizen shall be denied equal access to the use of an resource on the basis of race, sex, origin, cultural pre lage, or by and through any treaty based upon the same Resolutions concerning the formation of the Interna tional Peace Park and the introduction of grizzly bears in wolves were also passed.

4. **WEC Seeks Instream Flow Mandates While O.N.P. Plans to Drain the Lakes.**

The Washington Environmental Council expresses it's concerns, as follows: "Why are the rivers running out of water? Washington's water is governed under laws written in 1917, a time when our natural resources were thought to be inexhaustible. Back then, it was unimaginable to fathom the amount of water used in today's industrial society. Now, decades later, we find that our rivers and aquifers are being depleted and we can no longer indiscriminately remove large amounts of water from the rivers without paying a price. Without enough water left in the rivers, any efforts to bring back the salmon will be useless."

Concerned citizens recall that as part of our history, "Years ago, millions of salmon returned from the ocean to their spawning grounds in Washington and Idaho. Those days are long gone. The rapid decline of the salmon and other native fish populations is an environmental and economic catastrophe. For years scientists, environmentalists and fishers have warned that habitat destruction was leading to this disaster. Now it's here--thousands of people are out of work in the fishing and tourism industries because of fishing closures. In addition, wildlife are suffering immeasurably as this vital link in the food chain diminishes to near extinct levels.

Although there are several factors contributing to the crisis, over appropriation of water has played a major role. In many parts of the state, rivers run low and streams dry-up, due to over-allocation of water for use in agriculture, municipal

water supplies and industry. It does not take a scientist to figure out that fish need water flowing in streams to survive!

The demand for water is increasing, and appears to never-ending. With 5.2 million residents, 1 million more than a year ago, Washington is the seventh fastest growing state in the nation. By the year 2010 we can expect to have more than 6.5 million people living here. Population growth, along with increased trading opportunities with the Pacific Rim will bring even greater demands upon our streams and aquifers."

5. **EIS Silt Removal: Nine Different Scenarios No Clear Path.**

The more than 15 million cubic yards of silt that have piled up behind the Glines Canyon and Lower Elwha dams in six to seven decades is another hurdle.

"When you talk about dam removal, you're really talking about sediment removal."

About 40% of the power needed to run Daishowa's Port Angeles pulp and paper mill is generated by the two dams.

Environmental studies estimate that there are at least 11.3 million cubic yards of sediment behind the Glines Canyon dam and 4.18 million cubic yards behind the Lower Elwha dam.

Removing the dams would also take away a source of electricity at a time when there is less power to go around in the Northwest.

For nearly 80 years the reservoirs have acted as large settling basins, slowing the river flow and trapping sediment behind the dams. Most of this material has been trapped in the

upstream reservoir, Lake Mills. The trapped sediment can be roughly divided into 2 categories: coarse material ranging in size from small sand to large gravel has been deposited at the heads of the reservoirs to form deltas. And fine material consisting of smaller clay and silt sized particles is fairly evenly deposited throughout the beds of the reservoirs.

Three major options for managing the sediments have been identified: (1) the material could be removed from the flooded areas and relocated to a terrestrial or saltwater site; (2) the river could be allowed to erode a new channel through the trapped material, and carried downstream to be deposited in saltwater; and (3) only the material in the path of the river would be relocated and stabilized adjacent to the new channel leaving the remaining material in place for revegetation. Nine different scenarios involving combinations of each of the sediment management options described above have been recommended for further review during the EIS/advanced planning stage.

Illustrative of the popular perception relating to the concern over silt behind the dams, a news article reported the situation on the following page.

Elwha dam silt a major concern, official says

Elwha River/dams

By GEORGE ERB
Peninsula Daily News

PORT ANGELES — The more than 15 million cubic yards of silt that have piled up behind the Glines Canyon and Lower Elwha dams in six to seven decades is the biggest hurdle to taking the dams out, an official with the Daishowa America Co. said Tuesday.

"When you talk about dam removal, you're really talking about sediment removal," Joe Michalczik, the company's hydroelectric operations manager, told about 30 members of the group Bay Watchers.

About 40 percent of the power needed to run Daishowa's Port Angeles pulp and paper mill is generated by the two dams, which are owned by the James River Corp.

However, the dams were built without fish passages in the early 1900s and are now widely blamed for devastating runs of wild fish in the 35-mile-long Elwha river and its feeder streams.

Tribes, environmental groups and some federal agencies appear to have the momentum in the long drive to tear down the dams and make the Elwha a free-flowing river again.

But Michalczik told a gathering of the volunteer water quality group in the Clallam County Courthouse that dealing with the sediment won't be easy.

Environmental studies estimate that there are at least 10.9 million cubic yards of sediment behind the Glines Canyon dam and 4.18 million cubic yards behind the Lower Elwha dam.

Digging up the muck and hauling it away would take three years of around-the-clock work and add millions to the cost of removing the dams, Michalczik said.

Another scenario calls for leaving most of the sediment in place, stabilizing it with vegetation, and letting the river cut its own course.

But Michalczik said that plan could put lots of silt into the river, making it less habitable for fish and the water less suitable for public water systems and industry.

Removing the dams would also take away a source of electricity at a time when there is less power to go around in the Northwest, said Mike McInnes, manager of the Clallam County Public Utility District.

The utility has no stake in the dams. But its officials have followed the issue closely and urged careful study of all of the effects of removing the dams before a decision is made, McInnes said.

Peninsula Daily News
Wednesday, Dec. 18, 1991

6. **Clallam County Will Lose Millions in Tax Resources**

County Commissioner Lawrence Gaydeski noted that the dams presently account for some $252,000 per year in tax revenue to Clallam County.

7. **Is the US Taxpayer more Concerned Over Pressing Social Issues?**

All agree restoring the Elwha River ecosystem is a laudable goal. The concern for many is whether spending at least $100 million on dam removal represents the best stewardship of federal tax dollars, considering domestic problems such as crime, health care, housing and the national debt.

Marijo Olson, North Olympic Peninsula's Administrator of the State Department of Social and Health Services office in Port Angeles, remarks, "Removing the dams (with $100 million in federal money) is kind of like buying a Nintendo before you buy food, shelter or medication for your family."

Experts doubt fish will return in great numbers at all because the dams are only one of a myriad of human-related effects on diminishing salmon returns. If the dams come out, "the impact is going to be negative unless ths use some drastic msasures to get net fishing off the ocean, control sea lions and (tribal) netting of the river."

8. **Water Quality and Quantity Rebuilding.**

Former Port Angeles Mayor Joan Sargent warned "...dam removal could...adversely affect the city's drinking and water supply." Taxpayers will foot the bill, even with the dams in place, for the cost of building and the continual maintenance of

an alternate supply and/or water treatment plant.

* The price of water in the Puget Sound region is projected to triple or quadruple by the year 2000.
* It will likely be 15 to 20 years before the region's next water supply is brought on line.
* Dam removal is likely to eventually require local government to deliver "brown water" in place of the present pristine Elwha drinking water at a price not presently either contemplated or calculated.
* It's easy to be complacent about our water supply. Current water shortages are limited. There is no immediate sign of a drought, and the price of water remains relatively reasonable. Don't be fooled. For those doing business in Washington state, the future is certain: water will soon cost a lot more and there may not be snough to go around. (Reproduced from the Washington CEO, August, 1994, "Water Supply Wake-Up Call" by Leslie Lloyd, co-chair of the Joint King County Chambers Water Supply Committee). Ms. Lloyd warns; "Without sound policies and practices, Washington businesses and homeowners face the specter of paying dearly for a necessary but dwindling resource: water."
* Port Angeles city officials opposed dam removal until congress agreed to underwrite a new water system.
* Port Townsend's water is in short supply, the mill could shut down, salmon are struggling as Little and

Big Quilcene rivers need replenishing and Lords Lake reservoir gets even lower.

* Taxpayers will foot the bill for the interruption of the water supply caused by the introduction of fines from the discharge of silt? Former Port Angeles Mayor Jim Hallett gives these facts:

A. "Currently, we obtain our drinking water from the river indirectly through what is known as a Ranney well located next to the river. The Ranney well pumps out ground water that originates with the river. Currently, the water that comes out of the well is high quality and requires no treatment."

B. The city is under contract to provide surface water from the river to the two major mills, Daishowa and ITT Rayonier, which provide "vital employment to approximately 800 of our citizens and forms a vital portion of our tax base. That water is high quality and need not be treated before use by the mills".

C. Removing the dams will release into the Elwha River millions of tons of sediments that have been building up behind the dams since their construction. Much of the sedimsnt would become suspended in the river, so that the river would become turbid for years into the future.

D. In Summary, Hallett says that, "The result could be that Port Angeles would have to start treating it's water supplies, both drinking and industrial." The taxpayer will foot this bill.

The city's domestic water supply comes from a Ranney well located adjacent to the river, providing high quality water to city residents without the need to treat it. An engineering firm said that if the dams were removed built up sediment would bs released and diminish the quality of the water. It said the increase in sediment would require the city to build a treatment facility that could cost more than $10 million and require annual operating costs of $500,000. There are also concerns the city might have to construct industrial water supply treatment facilities and a landfill for disposing of the sediment at a cost of more than $20 million.

The General Accounting Office said in a May report the bsst way to restore the fisheries is to remove the dams at a cost of $61 million to $124.6 million.

Taking out the dams would result in the loss of nearly 40% of the mill's power, the GAO report said.

9. **Federal Agencies Oppose Dam Removal.**

Secretary of energy James D. Watkins filed a notice of intervention April 26, 1993 to the Federal Ensrgy Regulatory Commission to intervene in the licensing process for the Glines Canyon and Lower Elwha dams.

Lawrence Gollomp states that, "The Federal Energy Regulatory Commission decision should recognize the significant benefits of retaining the capability of the Glines Canyon and Elwha projects to provide clean, economical electric power."

The Federal Energy Regulatory Commission and General

Accounting Office audit release Wednesday estimated about $16.5 million worth of electricity would be lost annually if the Elwha River dams are removed.

That estimate assumes replacement power costs of 9.6 cents a kilowatt-hour rather than the 2.4-cent rate the Bonneville Power Administration currently is charging the Daishowa America paper mill for being the source of the remaining 60% of its power. The following news article confirms and elaborates:

Energy secretary wants dams

By LOGAN HARRIS
Peninsula Daily News

Enviroomentalists say the U.S. Secretary of Energy's new status as an interveoer io the Elwha River dams' licensiog process should oot affect current litigatioo.

Secretary of Energy James D. Watkins filed a notice of intervention April 26 to the Federal Energy Regulatory Commission to intervene in the licensiog process for the Glines Canyoo and Lower Elwha dams.

But unlike other federal interveners advocating dam removal, such as the departments of Interior and Commerce, the Secretary of Energy is on the side of dam retentioo.

Oo Friday, four environmental groups flied an appeal in federal court challeoging FERC's jurisdiction to license Glioes Canyon Dam.

"I don't believe the Secretary of Energy would have the option to become party to this litigetioo because of failure to show standing," said Jim Baker, assistant Northwest representative for Friends of the Earth. "When you become an intervener has as much to do with which portion of the proceeding you can litigate."

The Secretary of Energy's notice, sigoed by attorney Lawrenee Gollomp, states that, "The Federal Energy Regulatory Commissioo decision should recognize the significant benefits of retaining the capability of the Glines Canyon and Elwha projects to provide clean, econcmical electric power."

The notice goes on to recommend that FERC: "Consider the National Energy Strategy . . ." and "include a plan to develop the additional economical capacity and generation available at the Glines Canyon Dam as an alternative to be evaluated in the final environmental impact statemeot."

It also asks that FERC "update the analysis of the needs for project power to reflect the current need for energy resource acquisition in the region."

Baker said environmentalists are "mystified" by the iotervention because, "We don't have a National Energy Strategy, we have a proposal from the administration, but no law — no energy plan in the country in place."

Baker said FERC's draft statement answers environmetal impact questions and contends "there would be no possibility of increasing generation beyond current levels without severe impacts on the park which would not be permissible."

River hydropower manager Orville Campbell said: "It's hard to know what his (the secretary's) objective was other than to be a party to the proceedings. And he certainly stated his sympathies in that intervention letter.

"To the extent that he is in favor of keeping the dams and retaining the power from it, hopefully he is also in favor of making a restoration of the Elwha River fishery as well. That continues to be the most sensible outcome."

10. **Does Dam Removal Guarantee Return of the Salmon Runs?**

New hatchery facilities will be needed to restore fish upriver from the dams regardless of whether the dams are removed or fish passages are built, the GAO said. It would cost about $3.1 million to build the hatcheries and another $240,000 annually to operate them, the audit said.

The James River Tribe would like to build a fish ladder at the Elwha Dam and a trap-and-haul facility at the Glines Canyon Dam to help fish go upstream. That proposal would also call for spillway improvements and use of experimental screens at the Elwha Dam to protect fish from the turbines.

Tribe says dams killing off fish

By Mike Dawson
and Logan Harris
Peninsula Daily News

PORT ANGELES — Lower Elwha S'Klallam Tribe officials aod biologists are blaming two Elwha River dams for warm water parasites they say could wipe out an entire run of chinook salmon this year.

The dams' operator disagrees.

"They didn't offer any evidence to show the dams were (at fault)," said Orville Campbell, project manager at Daishowa America. "It is a speculatioo on their part."

The mill takes electric power from the two dams, which are owned by James River II Corp. Most of the fall king salmon run below the dams has been killed this year by parasites.

"There is a very real potential for 100 percent mortality of the run this year," said Pat Crain, the tribe's fisheries manager.

State Fisheries salmon counters found 327 live kings Tuesday and 42 egg nests, said Bill Tweit, manager of Fisheries run assessment program.

About 5,000 kings were expected to return. The run will be less than 1,000, Tweit said.

At the state salmon rearing channel, upstream from the tribe's hatchery, workers have gaffed 90 female chinook and 60 males, manager Greg Travers said Tuesday.

A rack was erected in the river to guide salmon into the rearing area, where cold water was to be pumped. That never happened because of mechanical problems, but the department is working to set up wells to use for that purpose in the future, Travers said.

Meanwhile, several hay bales showed up in the river this week, he said, adding that bales are often used by vandals to sabotage tribal gill nets. It is unclear if the bales were intended to damage the rack at the state rearing channel, he said.

The goal was to gaff fish and take 5 million eggs, he said. So far, they have taken 379,000 eggs.

The run was smaller than expected anyway, he said, even before the parasites killed about half the returning fish.

The parasites cause cysts to form on the gills and body of salmon. There is no cure for fish that remain wild.

The parasites occur naturally but are given a boost by warm water, biologists say. The water in Lake Aldwell, behind the Lower Elwha Dam, and Lake Mills, behind the Glines Canyon Dam, is warmed by the sun, Crain said.

Unseasonably dry weather has also reduced the flow in the river, making the dams' impact on water temperature greater, Crain said.

But that is all guess work, Campbell said.

The company has commissioned scientific studies that show the parasites do not exist above the dams, he said. So, the problem must be in the lower river, where the Elwha tribal hatchery and the state Fisheries rearing channel are located.

However, he said, the company is volunteering to do its part to help the salmon by letting more water over the dam and by paying for drilling for colder water in the river bed.

Cathy Emery, who lives between the dams, said the dams are getting a bad rap. She said she wants the dams to stay because they provide flood control.

"I want to see the fish protected as much as anybody else," she said, but the dams are not the enemy. Further, she said, she does not want her tax money paying for dam removal.

State Fisheries officials will not comment on the dams. Under a 1974 mitigation agreement under which the dam owners paid for the rearing channel, Fisheries agreed not to speak critically of the dams.

12. **Tourism**

Just as sound science and economic principles are being overlooked in favor of politics in the battle over funding the removal of the dams, the EIS report is all but silent on the impact to tourism, which is the state of Washington's third largest industry. New state figures add credence to what many in the North Olympic Peninsula tourism business already suspect: the summer of 1994 was a slow one for visitor traffic. Visits to Clallam County were down 37.5% from the year before, Port Angeles did 31.5% less business and Port Townsend fell by 25%. With this downturn, can we afford to eliminate two of the tourist attractions, namely Lake Mills and Lake Aldwell?

12. **Other Rivers, Other Dams: What Solutions are Available?**

Unlike the spotted owl and it's impacts on the Pacific Northwest timber industry, the Columbia-Snake river salmon is a cultural and economic icon of the region. From Native American religion to regional art, from food to the names of taverns, salmon is common to all. The war is being waged on many fronts. One only has to examine the cross-border salmon war with Canada, the diminishing salmon stocks in south Alaska, the National Marine Fisheries Service (NMFS) listing of Idaho chinook and sockeye salmon as endangered under the Endangered Species Act(ESA), meaning that the federal agencies could be required to protect these species of salmon as they navigate the Columbia and Snake rivers. Despite protection under the E.S.A., salmon runs

on the Snake and Columbia continue to collapse. As recently as two years ago, more than 8,000 spring-chinook had returned to the river system to spawn. In 1994, fewer than 600 are expected back. To help improve the survival rate of spawning salmon, federal agencies are experimenting with diverting water over the 8 federal dams on the rivers in an attempt to guide migrating juvenile salmon, commonly known as smelt, safely past the power generating turbines thought to kill large amounts of fish. Will this plan work? Would it be wise to carefully monitor this experiment witb the hope of employing it on the Elwha River?

Although, to date the role of science and economics in salmon recovery planning has been diminished by the presence of more vocal players, this has not prevented university and industry researchers from conducting key studies and making conscientious observations about how to proceed with salmon recovery actions for the Idaho salmon. Foremost among these technical evaluations is the Snake River Salmon Recovery Team Plan prepared by 7 independent scientists. This team was appointed by N.M.F.S. to guide the recovery effort, and it has spent the past 2 years reviewing a wide range of relevant technical data and studies. The recovery team's approach focuses on a comprehensive set of measures to increase salmon runs, including hydroelectric system operation changes, habitat restoration measures, and new ocean and in-river harvest management regimes. Still, the recovery team recognizes that much of the debate focuses on the reservoir draw down issue versus smelt transportation. The scientists have reached the

conclusion that the single most important method for salmon recovery is the smelt transportation system. The past approach to salmon recovery planning is something that one might expect to witness in theater, where reality is often vague and the destiny of those on stage is fictitious. But in real life, we can surely do better than this - the salmon resources are real, the economic stakes a

by Barbara Koeman

Strategy used by environmentalists in timber mirrors Elwha issue

"(The) ultimate goal is to delay the harvest of old growth forests so as to give Congress a chance to provide specific statutory protection for those forests."

--Andy Stahl, Sierra Club Legal Defense Fund.

"Congress recognized that the licensing process had become contentious and costly ... As a result, in 1992, Congress legislated a solution that is supported by (Park, Daishowa, Jamoa River, S'Klallam Tribe, environmentalist)." Sept. 4th article; "Dams draw both sides" Peninsula Daily News.

Here we see a distinct similarity in the tactics used by government and the environmentalists in forcing their will on an unsuspecting public. If the agencies involved do not succumb to pressure, they call on the courts. If the courts do not provide the weapons needed to propel their agenda; they call on Congress to circumvent existing laws.

Note, there has been no mention of citizen involvement in the process; only environmentalists, industry, government agencies and tribal concerns have been "at the table." Only after these entities have concluded their "negotiations" (i.e. secret meetings, bribes and payoffs) will the common people be able to make comment on the issue; sometime in the fall of 1994.

Point: Congress has appropriated $6.3 million for an EIS (environmental impact statement), which according to the PDN article has essentially been completed. So where will all the money be spent?

Zero tolerance: Nowhere in the report does the Park estimate what level of losses they refer to in the declaration that fish ladders will not provide adequate measures to restore anadromous fish; 10 percent? 5 percent? 01 percent?

This is the same method used to shut down the American tuna fisheries. The 1993 incidental take of dolphin, was 0.04 of the volume catch. The dolphin population is estimated at 9.6 million. This is a sea mammal that is not even considered threatened. Because the law reads that there must be sequential improvement in decrease of incidental takings, the fisheries are barred from fishing in 1994 because the take for 1992 was even less.

The PDN article also states unequivocally, that if Congress does not fund the removal of the dams, the "spoiled brats" will return to the courts to try and get judicial relief. In other words, "play by our rules or we will take your marbles and leave."

As for the elimination of recreational activities associated with the two beautiful ecosystems that would be destroyed by dam removal, the Park states that: "Slack water activities would be available elsewhere in the county."

In other words, "this is ours, you can't have it; go play somewhere else." The arrogance and indifference of these people is astounding.

Also contained in the article is a claim of temporary employment benefits to Clallam county. BUT, if you read between the lines, the Park says employment would affect Clallam County workers "and adjacent region (s)."

This supports the theory that most of the economic benefits of dam removal would be directed to the I-5 Corridor; there are no companies on the Olympic Peninsula that could provide the huge earth moving equipment needed for sediment removal.

The Park continues to downplay the significance of flooding that will result from dam removal and refuses to address the problem of ground water saturation and effects on individual landowner water systems.

AND, according to the article, there are plans to "phase out hatchery production in the (Elwha) river." Where will all these phantom fish come from? The Park states that the anadromous fish are extinct. There is no existing gene pool to re-establish the original population. So much for the lure of 100 pound bunkers.

"We believe the cost will be closer to $145 million to $200 million....However, we can say, that the one-time effort of dam removal in the Elwha to be a cost-efficient solution to fish restoration." (-Park). Anyone foolish enough to believe that this is a "one-time" effort might consider booking passage on the next air freighter to the moon. These "projects" are deliberately written with no sunset clause. Historically, we have "projects" which have outlived the original architects by generations.

One of the most interesting revelations is the fact that the Commissioner of Reclamation, Dan Beard, has found some mysterious treasure chest laden with riches to pay for this deplorable scheme.

Is this the same Mr. Beard who was Superintendent of the Olympic National Park from 1960 to 1961?

Is this the same Mr. Beard who attended a Forks Chamber of Commerce meeting in 1961, at which former Mayor Warren Faul asked the question: "Just how much of this Peninsula do you (the Park) want?"

Is this the same Mr. Beard that answered: "All of it."

13. **How Does the Public Feel About Restoring Wild Salmon Runs?**

The optimistic: That salmon levels can be restored, Washington voters express a willingness to try solutions, albeit difficult ones, to the salmon crisis. Eighty-one percent of Washington voters believe that the salmon can be restored to fishable levels, according to a survey conducted by the Elway Poll. Dispensing blame for diminished stocks produces less resounding numbers, as voter response indicates a complex issue. In an unaided question, 58% volunteered "over fishing" as one of the major causes of decreased salmon runs. Dams and pollution were the next most cited reasons, both suggested by only 29% of respondents

By Christina Cazaara
Peninsula Daily News

Questions flooding in

PORT ANGELES — The high school library was filled with the sound of squeaky felt pens Monday night, as Olympic National Park officials hurriedly recorded dozens of questions on a report calling for removal of two fish-blocking dams on the Elwha River.

Some examples: Why spend all this money with no guarantee that fish will come? Have elevator systems been discussed for fish passage? Will it set a precedent for other dams? What will happen to Ediz Hook with the change in river dynamics?

The report said the dams must go for the recovery of native fish, such as chinook, pink and chum salmon.

Brian Winter, leader of the Elwha Restoration Interagency Team, said support for razing the dams ran about 50/50 among about 200 residents attending the workshop.

One comment read, "Rip those suckers out," while another person called the multimillion-dollar price tag for removal "insane." Estimates have ranged from $160 million to $300 million.

Buck Adamire of Port Angeles said he came to the meeting to question the Olympic National Park's priorities. He said the Park had a budget shortfall this year that led to a cutback in funding for trails maintenance and law

salmon-eating seal population.

In addition to gauging support for dam removal, the meeting also gave federal officials a good idea of where the report had holes.

Bob Hamilton, an engineer with the Bureau of Reclamation, said officials were able to meet people who live along the river and identify their worries about the project.

He said less is known about how dam removal would affect residents than is known about the effects on Port Angeles and the mills.

Dennis Gathard, an engineering consultant with Summit Technology of Seattle, said it's one thing to sit in an office, but hearing public concerns "makes you start to rethink the process again."

Winter said many of the questions could not be answered, but will be addressed in an environmental impact statement that will be completed if Congress authorizes funding next year.

It would take more than removing dams to restore salmon, Winter said. Plans call for adjusting fish harvest levels and controlling the millions of cubic years of sediment trapped at Lake Mills and Lake Aldwell.

The report also calls for protecting the municipal and industrial water supplies.

The report, completed by the Lower Elwha S'Klallam Tribe and an array of federal agencies, was completed as a result of congressional action last year.

Congress authorized dam removal, but only if removal is necessary to restore salmon runs and the river's ecosystem. The comments received Monday will be included in the final report given to Congress by Jan. 31.

The report can be reviewed at the North Olympic Library System. Comments can be mailed to Winter at Olympic National Park, 600 E. Park Ave., Port Angeles, WA 98362. Deadline is Nov. 8.

14. **Salmon Runs Return to the Rogue River**

The Grants Pass Mail Tribune reports more, bigger salmon this year in the Rouge river. 18-pounder, 22-pounder, even a chubby 38-pounder that towed 3 men in a drift boat for several minutes before falling to the net - only to be followed minutes later by another big, tough chinook. Salmon are returning to some rivers and boycotting others. Apparently there is no correlation between dammed and undammed rivers.

15. **Pollution is the Real Culprit**

The Columbia Intertribal Fish Commission wants pulp and paper mills to stop releasing a cancer-causing chemical into the Columbia River in light of a new Environmental Protection Agency report affirming the dangers of dioxin. The discharge from the Daishowa, the ITT and the Port Angeles pulp mills contain dioxin. Dioxin emissions are regulated by the EPA under the Clean Water Act, which limits releases to 0.013 parts dioxin per quadrillion parts water. In 1991, the EPA allocated dioxin-effluent levels to each of the mills. Repeatedly, the state Department of Ecology has cited these Port Angeles mills for violation of dioxin emissions. The following news articles state the problem clearly:

INDIANS QUESTION SEFETY OF FISH DUE TO DIOXIN

Columbia River: *Pulp mills targeted for releasing the chemical, which is used to reduce air emissions.*

YAKIMA (AP) — The Columbia Intertribal Fish Commission wants pulp and paper mills to stop releasing a cancer-causing chemical into the Columbia River in light of a new Environmental Protection Agency report affirming the dangers of dioxin.

Pulp mills along the river have switched from chlorine to chlorine dioxide bleaching since the 1980s in an attempt to address the problem. Use of chlorine dioxide greatly reduces dioxin emissions.

Llewellyn Matthews, executive director of the Northwest Pulp and Paper Association, said the industry has reduced dioxin on the Columbia River about 95 percent since the late 1980s.

But commission spokeswoman Aane Watanabe said that isn't good enough, and the only answer is a "zero discharge."

Matthews said that is impractical.

"You'd basically be looking at rebuilding entire mills, which would render them noncompetitive with all the other mills in the world and the United States," Matthews said. "It's not really clear that anything from the dioxin standpoint would be accomplished because (dioxins) are at non-detect levels now."

The EPA dioxin-reassessment study released Tuesday reiterated that dioxins — *produced mostly by burning materials* containing chlorine compounds, including plastics and a variety of wastes — are a probable cause of cancer in humans.

"The implications this data has on human health, especially for ceremonial and subsistence fishers living and consuming fish from dioxin-laden waters such as the Columbia and Snake rivers, is truly dumbfounding," Watanabe said.

The Inter-tribal Fish Commission — which oversees fishing issues for four tribes, the Yakama in Washington, the Nez Perce in Idaho and the Umatilla and Warm Springs in Oregon — believes the EPA report should be taken as a warning, though the commission did not issue a fish advisory for the Columbia River, Watanabe said.

"We have a chemical that is very toxic and very prevalent in the environment," she said. "We have a regional waterway that is violating the water-quality standard as it is, and we have a lot of people consuming fish from that waterway, and so it is a warning."

Dioxin emissions are regulated by the EPA under the Clean Water Act, which limits releases to 0.013 parts dioxin per quadrillion parts water. In 1991, the EPA allocated dioxin-effluent levels to each of the mills.

In 1992, the state Department of Ecology — citing excessive dioxin levels in fish tissue — said the Columbia River mainstem, downstream of the Priest Rapids Dam, was violating EPA and state dioxin water-quality standards.

But while the EPA has issued stricter dioxin guidelines, technology has trouble measuring such minute amounts, a Ecology Department industrial engineer said.

"The pulp and paper mill industry criticized the Department of Ecology because we were asking them to control a pollutant to levels over a thousand times lower than could be possibly measured with the best scientific equipment available," said Kim Sherwood of the agency's water-quality division.

"But animal tissues are more sensitive to this."

16. **Some Fish Studies Spawn Success**

Canada's Department of Fisheries have isolated the growth hormone gene from sockeye salmon. They then fused it with a genetic "promoter" to make the gene overactive. The genetic material was injected into more than 3,000 coho salmon eggs in the laboratory. A year later, the fish that hatched from the injected eggs were on the average 11 times heavier than normal coho.

The EIS report contains conclusions but little technology. The Eicher screen has passed smelt over the dam with a 94% to 97% survival rate. This Eicher screen should be in use to get salmon into Indian Creek and up to Glines Canyon Dam. Fisheries are installing a similar screen on the Wynoochee Dam. This makes one think that all of the alternatives have not been adequately explored.

III. **WHAT WILL BE THE MONETARY COST TO REMOVE THE DAMS AND DRAIN THE LAKES?**

What is the tab as far as the National Park Service is concerned? The park says it will only cost about $27 million to remove the dams, but nowhere is it detailed as to how the dams will be removed. It is reported that one of the dams contains over 20,000 cubic yards of cement. It is elementary physics that when a mass is fragmented it's size increases at least 7 times. Simply stated, when the cement is broken up it becomes awkward to handle and requires more space to be transported. O.N.P. presents 9 scenarios for removal of cement and silt. It is suggested that trucks be employed to transport the debris along the narrow and winding Olympic Hot Springs Road which lacks sight distance, shoulders, and a surface adequate to carry the burden of the thousands of truckloads required to export the debris and silt out of the Elwha River valley. Just how great a burden will be placed on this existing secondary country road? Each truck carries ten yards. Each truck can pull a trailer carrying an additional ten yards. Each loaded truck weighs 42.5 tons. It will be necessary to travel over the Altaire Bridge which was built 50 years ago, the road is narrow and the bridge is weak.

Thousands of truck loads will be required. Experts in road construction state that both the road and the bridge must be rebuilt BEFORE and AFTER the dam removal. One solution would be to erect a cement recycling plant at the site of the dam, and use the crushed cement to both improve and extend Olympic Hot Springs Road further into the Park. Senior citizens and the disabled

would be afforded an opportunity to see the park. Has anyone investigated the cost of rebuilding Olympic Hot Springs Road? For comparison, consider the Sol Duc road reconstruction costs. The length of the roads are about the same. The Sol Duc road reconstruction costs approximated $8 million. Today, the cost is estimated at at least $20 million.

Removal of the cement is estimated by the Park at $27 million. Added to this sum is a cost of sediment management which is estimated to cost as much as $194 million dollars.

How Accurate are These Cost Projections?

The costs are estimates only. Representative Norm Dicks has been quoted in meetings before local citizen groups to place the cost at $70 million; a few months later, at $150 million; and even more recently, at $300 million. The cost of removing the dams is growing like the national debt. Proponents of the dam removal, with their tunnel vision, refuse to consider the expenditure of this money on all of the other rivers which do not have dams. Environmental proponents have been quoted as follows "We don't give a damn how much money is spent on it."

We All Want the Salmon Back, is there an Alternative?

Enlightened representatives including Slade Gorton, Washington state's senior U.S. Senator, are in favor of keeping the dams in place. Senator Gorton advises, "...we save $200 million to $300 million scarce federal dollars. We can still implement an aggressive and cost-effective salmon enhancement

program on the peninsula and along the Washington coast. And the owners of the dams will participate in salmon enhancement through the installation of fish passage facilities on the dams."

Senator Gorton, when questioned, "Can we build up salmon by tearing down dams?" cut to the quick with this reply, "I do not believe this kind of expenditure makes sense. For a dramatically smaller amount of money, we can do as much or more to enhance salmon runs on the Elwha and throughout the Olympic Peninsula, while at the same time protecting jobs, the local water supply, a renewable energy source, and Port Angeles' economy. We can do this by relicensing the dams, and mandating that the owners install fish passage facilities and fund other reasonable enhancement measures. We must also invest in salmon enhancement projects that will help the Peninsula's other salmon runs at least as much as dam removal."

Other commentators point out the wide disparity in cost estimates, for example, does the cost mean merely removal of the dams or does it contain fish mitigation? It is clear that no bids have been taken to either build or rebuild the only road available to transport the rubble and the sediment.

The reports favoring dam removal are curiously silent on both, the need and the cost of channelization flood control should the lakes be drained and the dams removed.

IV. UNANSWERED QUESTIONS

While the formal Judicial atmosphere of an E.I.S. determination intimidates many of us, others have made their

points in letters to the editor, a few of which follow on the next pages.

Respect rivers and the flag

Congratulations to the *Peninsula Daily News* on your coverage Sept. 4 of the proposed removal or retention of the Elwha dams. This project will have a big impact on Port Angeles and the surrounding area. We need all the coverage, facts, information on hearings, budget proposals, environmental damage while removal is in process, and costs.

From the government report I've read, we are hearing only pro-dam removal or "We don't know what the results may be." All this expense, which taxpayers must pay without much certainty of positive results. For instance, what will the sediment removal do to the present wildlife, and will the fish runs be restored after all the expense? If the government bureaucracy knows how to restore the fish, why don't they show us on another Peninsula river without dams?

Please continue to keep us informed; just because the Federal government wants a project doesn't make it a wise decision. The recent article on the drawdown of Dworshak Dam Reservoir in Idaho is a good example of decisions made by the National Marine Fisheries Service.

On another subject, I'd also like to compliment Penny Pitts as parade chairperson of Derby Days. This is a difficult job. The idea of having the Veterans' organizations grouping the flags at the beginning of the parade was well thought-out. A 100 percent pat on the back for all those who stood and saluted the American flag by putting their right hand over their heart; to the rest of you who just stood, you are only halfway to the proper respect to Old Glory. Let's all be 100 percent next year.

Jerrine Main, *Port Angeles*

What was vote on dams?

In your Sept. 4 article, "Both sides of the dam" you stated that the federal legislation authorizing the study of the dams required votes from our congressional delegation. What was the count on the vote? Have any of the delegates changed their positions on the dams since the vote took place?

Where do our elected officials stand on the dam issue? Where do the citizens of Clallam County stand? Let's find out.

Edward Winstead, *Port Angeles*

Save fish and the dams

Your presentation of the pros and cons on the Elwha dams was excellent and informative *(Peninsula Daily News*, Sept. 4). I learn something new each time I read it.

If you'd asked me five years ago what to do I would have said, "Take them out." During the past year, I've spent much time studying the issue. Today I would say, "Keep them at any cost!"

Why? The Park said dams represent 80 years of elimination and degradation of the ecosystems' natural processes and populations that were historically present. The anadromous fish runs continue to decline, wildlife continue to be deprived of food sources and habitat, the habitat below the dams and into saltwater continues to degrade.

But reasons were strictly political. Why were fish passages not built? No agency has tried to maintain fish runs.

In the 1940s it was not uncommon to catch 40- to 50-pound salmon in the Elwha, but as spawning gravel disappeared, so did salmon. A few loads of gravel below each dam annually could have kept the run productive.

Now, new technology has been developed. The Elcher screen passed smolts over the dam with a 94 percent to 97 percent survival rate, depending on size. This should be in use to get salmon into Indian Creek and up to Glines Canyon Dam. Why not? Politics. Fisheries is installing a similar screen on the Wynoochee Dam. Sounds fishy, doesn't it?

Now they have developed a "fish-friendly" generator that will pass fish with good survival.

What we need is fish-friendly politicians and perhaps to delete Lake Mills from the Park; then we can raise salmon affordably. Dam removal would be an expensive gamble with no guarantee of results. The river would be unproductive for years, eliminating recreation and increasing flooding. By leaving the dams and adding fish passages and gravel, we should have a viable return within four years with no disruption of recreation.

Chuck Townes, *Sequim*

Dams are not to blame

Remember when our Olympic National Park wiped out the trailer park at Storm King? Remember LaPosa? Remember the big wipe-out of Olympic Hot Springs? Remember what the Park wanted to do to Fairholm Store?

Now our Park wants to wipe out the dams. Sure funny the Park isn't concerned about all the waterfowl on the lake, yet the spotted owl is so favored. Are the dams so strong they deplete the fish on all the rivers on the Olympic Peninsula? Will it be, remember the dams in a few years? Then later, will it be, remember the Olympic Peninsula?

I can remember the fish were so thick in the rivers they advertised in the papers, come to the Peninsula and fish. There was too many fish to go up to spawn, even the rivers with dams. Remember how long ago the fishing ceased being good? Blame it on the dams!

I think not.

Marjorie A. Lester, *Sequim*

Be wary of cheap power

I was surprised when a headline in the Oct. 25 *Peninsula Daily News*, said "Mill wants dams out." That's difficult to understand as the Elwha dams were constructed around the turn of the century to furnish power for the mills and other uses.

It also seemed surprising that a spokesman for Daishowa America, Robert Hartley, would have the same ideas, also U.S. Rep. Norm Dicks.

We all must question the obtaining of cheap power from Bonneville.

Petrus Pearson, *Port Angeles*

More questions on dams

Your Sept. 3 article, "Dams draw both sides," is misleading. The *Peninsula Daily News* casts Mary Chastain in the role of spokesman for all who question spending $200 million to $300 million to drain Lake Mills and Lake Aldwell. Most of us prefer to make independent judgment about such serious matters as our water supply and cost of hydroelectricity.

The spin put on dam retention distracts attention from real issues. Your article, viewed in its most favorable light, depicts a self-appointed activist in a 5-by-8-inch picture overshadowing a 1-inch picture of Park superintendent Maureen Finnerty, hat and all, defending the return of salmon runs.

The second obvious spin is the critique offered by your staff which characterizes opposition to dam removal as based on conflict between salmon and trumpeter swans.

Reminiscent of your handling of other issues, the article is heavy on opinion and light on facts. Here is a short list of questions our elected representatives need to answer before voting to spend $200 million to $300 million in taxpayer dollars.

- What scientific evidence supports the Park's contention that dam removal will automatically restore salmon runs in the Elwha River?
- What jobs, for how long, will be produced by dam removal? Are local workers trained to do the work?
- What are the results of the silt tests the Park performed on Lake Mills and the mouth of the Elwha?
- What facts support the $65 million windfall the government proposes to pay dam owners?
- What is the plan to remove the mountain of silt accumulated behind each dam?
- What is the plan and cost for disposal of 20,000 cubic yards of dam cement? What will be the cost both in dollars and in destroying access by the estimated 9,000 truck trips required to remove the cement?

I hope ONP has the answers to these questions.

Terri Chiles, *Sequim*

Dams help environment

I've been following the salmon depletion situation, and the reasons given for it.

All reasons seem to have merit: pollution, predators, over-harvesting, loss of breeding grounds, etc. But I can no longer remain quiet on the issue that hydro-electric dams are the major villain.

In all the debate, there's been no mention of the more globally important benefit that hydro dams provide — limiting air pollution.

Hydro-electric power is the most environmentally safe method of massive power production. Because of the sun's involvement in the water cycle, it's a renewable, energy source that's solar powered, with no harm to the water. As long as we have the sun, water and mountains, it will be available.

Another "indirect" solar power source is windmill power. But large windmill farms are considered ugly and impact birds. Nuclear plants endanger the environment. Trash and fossil fuel burners have a limited life expectancy tied directly to the availability of something to burn. They produce by-products animals can't tolerate.

But hydro power is ideal. It's inconceivable that state and federal organizations and politicians wish to decrease the production of this power. It's backward thinking. We should be pursuing ways to safely increase its production.

Yet, state and the federal government have factions: Fish and Wildlife, Parks department, fishing community, Indian community, Norm Dicks, Patty Murray, to mention a few, who think hydro power should be compromised. Is the state going to turn its back on the much larger environmental problem of national and global pollution for the sake of a local fish problem, when there's no certainty dams removal will help fish?

If Elwha dams are removed, and others as well, it would be a selfish act by Washington state. The state cannot ignore environment issues outside of its own area and only be concerned with smaller internal ones. Global air quality is far more important. When attempting to fix environmental problems, we have to make sure the fix doesn't negatively impact other environmental issues.

Dicks is in favor of the Elwha dams removal, which has all the appearances of a public works boondoggle purchased by the taxpayer. For that reason, I'll not vote for him this fall.

R.D. Coffan, *Sequim*

Look over Park's shoulder

Some of us visit only once a year, others on weekends, and there are the chosen few who work, live and play in the Elwha Valley. We see the river and its ebb and flow both at high water and now with the bottom rocks showing waiting for winter rain. We are vitally interested in preserving the way of life in magnificent Clallam County with more marine shoreline than any other county in the nation.

Just what are the risks that may threaten the way of life from the proposed draining of Lake Mills and Lake Aldwell by the Department of the Interior? What studies of similar situations have been made? Were the studies independently made or were they made by persons who have an economic interest to justify a goal of the National Park System?

Admittedly little is known of the underlying aqua fissures. Among significant impacts is the disruption of 70 years of silt built up. Disrupted soils are particulary prone to erosion since they are loose and void of vegetation cover.

The opinions expressed by Olympic National Park should be carefully weighed. One only has to drive and park in the designated area at the toll booth entrance to the Park, walk a few feet to the high river bank to witness the erosion, see the old growth that has toppled into the River, see the ancient trees now being threatened by lack of river flood control.

We are all judged by our records. Let's be sure that Olympic National Park realizes that we all have a real interest. Is it time we started looking over Olympic National Park's shoulder?

William Hansen, *Provo, Utah*

Dam removal helps Hook

Geologists hired by the Federal Energy Regulatory Commission found that over half the sediment in Lakes Aldwell and Mills is gravel and sand — over 8 million cubic yards of gravel and sand that would have moved into the lower river and Strait over the last 80 years. Most of this would have moved towards Ediz Hook by the prevailing west wind and wave action.

The FERC in their draft environmental impact statement concluded that eventually Ediz Hook wouldn't need expensive artificial beach nourishment with the big rocks, if the dams were taken out. Otherwise, the rocks will always have to be replenished.

FERC was never biased in favor of dam removal. In fact they argued with dam removal supporters for the right to license the Lake Mills dam inside the national park. It would've gone to court if it weren't for the Elwha Ecosystem and Restoration Act. FERC has always been favorable toward licensing dams. Despite this their geologists were honest enough to show us another reason for removing the Elwha dams. They should be removed for Ediz Hook restoration as well as fish restoration.

Edwin R. Johnson, *Port Angeles*

Why drain Lake Aldwell?

We had a lovely Labor Day water skiing and fishing on Lake Sutherland. I read your article, "Both sides of the dam" (*Peninsula Daily News*, Sept. 4), and though I do not live here any more, I did live here for 10 years and I still enjoy frequent vacations and am concerned over what is happening with the dams.

Please, take a moment to consider that Olympic National Park wants to drain Lake Aldwell. The lake is outside of Olympic National Park. Lake Aldwell covers 320 acres. The Bureau of Interior wants to reach out and drain this lake. This will affect everyone. It would be unthinkable to drain Lake Sutherland, but Lake Sutherland is only 40 acres larger than Lake Aldwell.

With approximately 200 miles of marine shoreline, Clallam County has the largest amount of shoreline of any county in the nation. I guess you can afford to drain a couple of lakes. Will Sutherland be next?

Michael Gardner, *Kent*

What about Elwha trout?

I recently read in your paper than in 1944, 22,800 rainbow trout, two to four inches long, were planted in the Little River near where it enters the Elwha River, and that it was the second planting in that year. What has happened to all the fish? If this practice of planting trout were continued, there should be plenty of fish in the Elwha.

With all the talk about removing the Elwha dams, can anyone tell me if planting fish in the river is continued today, and if so, how frequently and how many are planted each time? How will the removal of the dams affect the trout population in the river? And are the trout at risk because of the silt that will be released into the river once the dams are removed?

In other words, are we tearing out the dams to supposedly rejuvenate salmon runs, just to destroy the trout? If anyone can answer these questions, I would appreciate it.

Deborah Volt, *Forks*

Protect Elwha dams, lakes

I am against removal of the Elwha River dams. The public would foot the bill for it. There are only hatchery fish left, and they die when they come into fresh water. And the Indians net them in the river and catch them with gillnets. What chance do the big super-fish have?

Dam removal would cost from $200 million to $300 million. The fish would be worth their weight in gold, and our beautiful lakes and electric power would be gone.

Why don't Eloise Kailin and her son Harvey speak out against the removal of the dams? They have spent a lot of money in the last several years fighting the Sequim outfall. They are supposed to be great environmentalists. And you don't hear a peep out of them about the dam removal.

Gordon Holman, *Port Angeles*

Success with dam removal

As a writer from the other side of the Pacific, I have found the Olympic Peninsula to be stunningly beautiful, and I will be directing friends this way when they visit North America.

The main attraction for me, however, has been the proposal to restore the Elwha River salmon fishery by removing the two old dams on its lower reaches. This is one of the most exciting proposals for the wise re-use of a water resource anywhere in the world. The economic and employment advantages for the region will flow not just from the deconstruction project itself, but from the revitalized salmon run, increased local tourism and, as I understand it, beneficial effects to the shoreline and Ediz Hook when the Elwha's natural flow returns.

The project has strong parallels with the proposal to restore Lake Peder, flooded for a small hydroelectric scheme in Tasmania's World Heritage Wilderness in 1972. In Tasmania's case, there are estimates that the return of the lake's famed original beauty may benefit the island's tourism industry by (Australian) $24 million per annum, and the creation of up to 600 jobs in the service industries.

I wish those working for the Elwha every success and look forward to returning when this great migratory salmon run resumes.

Bob Brown, *Hobart, Tasmania*

V. THE ELWHA RIVER DAMS, RELICENSING: A Quagmire of Conflicting Governmental Agencies and Laws

The Elwha Dam does not have a Federal license to operate. The previous owner, Crown Zellerbach Corporation, filed a license application in 1968. January 1976 the FPC issued notice of the Elwha license application, but in March of 1976, Crown Zellerbach Corp. requested a declaratory order that the FPC is without jurisdiction to license the Elwha project, and sought permission to withdraw it's application. In Septembsr of 1976, the Secretary of the Interior was granted intervenor status in the Elwha proceedings.

The Glines Canyon Dam was licensed by the Federal Power Commission for a period of 50 years in 1926. Relicensing applications were filed by Crow Zellerbach Corporation in 1973, and has received an annual license since 1976.

In March of 1979, the Federal Energy Commission issued an order finding Glines Canyon and Elwha dams hydraulically, electrically and operationally interconnected. At this point, the two license applications were to be processed together.

Crown Zellerbach Corp. filed an updated licsnse application in 1979, and the FERC accepted it in 1980.

During the 1980's, the FERC licensing process became extremely litigious and drawn out, primarily due to national policy implications of licensing a project within a National Park, the inability to design fish and wildlife mitigation measures that meet Federal, State, and Indian Tribe resources, and legal challenges by conservation groups (i.e., Seattle

Audubon Society, Sierra Club, Friends of the Earth, and Olympic Park Associates). To continue attempts to settle FERC licensing issues were certain to result in prolonged litigation, and considerable delay and expense for all concerned, including the Federal Government.

In 1990 the General Accounting Office determined that FERC did not have the authority to license the Glines Canyon Dam because it was within the boundaries of the Olympic National Park. That same year, the Department of the Interior filed a Motion to File Late Intervention, Motion to Intervene, and Petition for Declaratory Order that FERC did not have the authority to license the Glines Canyon Dam.

Failure to reach any agreement would lead to the courts deciding vital issues without the opportunity for rational compromise. Verdicts would be narrowly defined by the issues taken before the courts, resulting in a piecemeal approach to the problem when an overall solution was needed.

In an attempt to settle these conflicts, Congress enacted a legislative settlement of the issue. The Elwha River Ecosystem and Fisheries Restoration Act was signed into law as Public Law 102-495 by President Bush on October 24, 1992. This law represents a negotiated solution that provides a way to alleviate lengthy and costly litigation, protect 300 jobs at the Daishowa America Mill, to create jobs in the region through the restoration process, increased commercial and recreational fishing and tourism, support economic development for the Lower Elwha S'Klallam Tribe, restore a National Park ecosystem, help to

understand and improve restoration techniques, and assure the protection of water supplies for municipal and industrial users. Restoring the ecosystem by removing the dams and the return of native anadromous fish would also promote tribal fisheries and the Federal trust responsibility to affected Indian Tribes.

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

Received
DSC-TWE
DEC 20 1994
C335 OL9M 4446

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): BENJAMIN LONN
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): U.S. CITIZEN, NATIVE BORN WASHINGTONIAN, CLALLAM COUNTY RESIDENT.
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: (1) IMMEDIATE RELICENSING OF ELWHA DAM AND GLINES CANYON DAM AT FEDERAL GOVERNMENT EXPENSE. (2) PROMPT DEVELOPMENT, CONSTRUCTION & OPERATION OF UPSTREAM AND DOWNSTREAM FISH PASSAGE FACILITIES FOR BOTH DAMS AT FEDERAL EXPENSE.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: (1) IN CONJUNCTION WITH FISH PASSAGE FACILITIES DEVELOPMENT, NEED ANALYSIS OF FISHERY ENHANCEMENT OPPORTUNITIES IN THE EXISTING ELWHA ECOSYSTEM. (2) NEED EXPERIMENTAL DREDGING AND DEPOSITION TO RESTORE DOWNSTREAM SILT AND GRAVEL MIGRATION BELOW BOTH DAMS TO A DEGREE BENEFICIAL FOR FISHERIES. NOTE: MIMICKING NATURE WITH MAXIMUM BED LOAD MOVEMENT DURING PEAK FLOWS MAY NOT ALWAYS BE BENEFICIAL FOR FISH EGG OR ALEVIN SURVIVAL. BY THE SAME TOKEN, EXCESS DEPOSITION DURING LOW FLOW PERIODS MAY ACCUMULATE TO EXAGGERATE IMPACTS OF BED LOAD MOVEMENT DURING SUBSEQUENT PEAK FLOWS.
OTHER COMMENTS: SEE ATTACHED LETTER

Please continue your comments on the back of this sheet if needed.

December 14, 1994

Dear Sarah,

Re: Comments on Elwha River Ecosystem and Fisheries Restoration EIS's

Both EIS's and the Elwha River Ecosystem & Fisheries Restoration Act of 1992 are fatally flawed by tbeir unsubstantiated basic premise that such restoration cannot be satisfactorily accomplished unless both dams are removed. With taxpayers footing the bill, the DOI study team and the Elwha S'Klallams talk about restoring huge fish runs, with no concern about cost effectivenees. You can bet none of the proponents of dam removal would risk a nickel of their own money on such an economically suicidal investment.

Thank God we've finally elected a fiscally responsible Congress so we can stop the pork barrel largesse with which incumbents buy reelection using our tax dollars. Now, perhaps we can look at fish restoration in practical terms of getting the most for our money. That means selecting the investment alternative that provides the highest rate of return over the long haul. Alternatives must be compared in real financial terms, where costs include paying going interest rates on unamortized amounts outstanding, just as any business would have to do for money borrowed.

Now then, unless the Elwha S'Klallams can borrow the money for dam removal from their wealthy enviro friends on the strength of their ability to repay the loan with the huge gains in fisheries they've dreamed up, let's get on with relicensing the dams. Inasmuch as the federal government dawdled on this issue for some 25 years, the relicensing should be provided at no cost to the owner. Also, inasmuch as the National Park Service has used public funds to lobby for Elwha Dams removal, Congress should immediately divert funds from those allocated to Olympic National Park, to pay the cost of immediate action on relicens-

ing the Elwha Dams.

Peninsula Business Journal Editor, Martha Ireland, stated in her December 1994 PBJ editorial, "Status quo won't work", that the greatest danger is... agency people will refuse to move on to the next question, "If not removal, then what?" As Martha concluded, "It is time to go back and give serious consideration to non-removal fishery restoration strategies." "The status quo is not a viable option." See that editorial with cartoon and two news items re dams, from December PBJ, enclosed.

One thing we all agree on is restoring the Elwha fishery. In that interest, development of upstream and downstream fish passage facilities for both Elwha Dams is absolutely essential. The fact the Federal Government failed to require such facilities when construction of the Elwha Dams began some 85 years ago, and has done nothing to correct that grievous defect in all the years since, is clear evidence of the United States gross neglect of the Elwha fisheries. Therefore, the United States has a moral obligation to develop satisfactory fish passage facilities for both dams at its sole expense, without unreasonably inconveniencing the owners operation of the dams.

By copies of this letter to Senator Slade Gorton and Representative Norm Dicks, I'm requesting Congressional support for prompt re-licensing of the dams and development of fish passage facilities on the Elwha Dams for their economic benefits to the tax payers of the United States.

Sincerely,

Ben Lonn

Ben Lonn

c.c.w/attachments
Senator Slade Gorton
Representative Norm Dicks
James River
Daishowa America
REAL
FERC
Elwha S'Klallams

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

Received DSC-T
DEC 20 1994
c936 OLYM 404-06

COMMENT FORM

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Jerrine & Earnest Main

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

Are we destroying one ecosystem to possibly restore another? The results of the destruction of the Elwha Dams is unknown as far as restoring the salmon runs but the present ecosystem will be destroyed. What will be the impact on electric power if Government policy continues to be dam destruction?

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

We believe these studies to be a wasteful expenditure of federal funds. The local people showed by the results of the last election that removal of the dams was not what they wished. Norm Dicks who was pro dam removal lost while Slade Gorton won by a large margin. The Elwha is not the only river in the area having a shortage of salmon return. The fish spend 80% of their life in the oceanmaybe the other elements could be the cause of the shortage.

OTHER COMMENTS: The people who will pay by their taxes and power bills are not impressed with the number of "We don't knows" in the report. Could these ideas be used more effectivly on rivers that don't have dams to destroy. Other Peninsula Rivers also lack fish. The sediment when released will raise the river bed thus causing

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

~~flooding of bridges, lowland and water systems.~~

Wouldn't a less wasteful solution be to relicense the dams and build fish ladders. The figures being released along with the local impact makes us believe there must be a less expensive wasteful solution.

CDR & Mrs. R.J. Evans
[redacted]

Received
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DEC 20 1994
C 337 OLYM 404-06

13 December, 1994

Sara Bransom
National Park Service
Elwha River Project
Denver Service Center
P.O Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom;

Enclosed find Fifty-One letters strongly supporting removal of both the Elwha and Glines Canyon dams as soon as possible.

Congress should not be allowed to forestall approval of the necessary appropriations to accomplish the fact.

Sincerely yours in conservation;

R.J. Evans

Carl Hansen
[redacted]

Received
DSC-TWE

DEC 20 1994
C338 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: **Draft Environmental Impact Statement**
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

Carl Hansen

Sean Holland.
[redacted]

Received
DSC-TWE

DEC 20 1994
C339 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: **Draft Environmental Impact Statement**
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

Sean Holland

Adam Cato
[redacted]

Received
DSC-TWE
DEC 20 1994
C340 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosyatem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

Adam Cato

DENISE RIVERA
[redacted]

Received
DSC-TWE
DEC 20 1994
C341 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosyatem Restoration

Dear Ms. Bransom;

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Sincerely;

Denise Rivera

John N. Nelson
[redacted]

Received
DSC-TWE

DEC 20 1994
C342 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

John N. Nelson

Eugene Hale
[redacted]

Received
DSC-TWE

DEC 20 1994
C343 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

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Sincerely;

Eugene Hale

Barbara Schneider
[redacted]

Received
DSC-TWE
DEC 20 1994
C344 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms Bransom;

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Sincerely;
Barbara Schneider

Richard Evans
[redacted]

Received
DSC-TWE
DEC 20 1994
C345 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety

Sincerely,

WILLIAM P. EVANS, SR
[redacted]

Received
DSC-TWE
DEC 20 1994
C346 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms Bransom;

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Sincerely;



Dorothy V. Evans
[redacted]

Received
DSC-TWE
DEC 20 1994
C347 OLYM 404-06

December 12, 1994

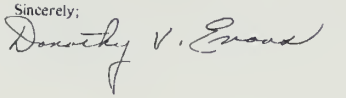
Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms Bransom;

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Sincerely;



Ron Evans

[redacted]

Received
DSC-TWE

DEC 20 1994
C348 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms Bransom;

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Sincerely;

Ron Evans

Danny L Lovelace

[redacted]

Received
DSC-TWE

DEC 20 1994
C349 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

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Sincerely;

Danny R Lovelace

Noel F Thompson
[redacted]

Received
DSC-TWE
DEC 20 1994
C350 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

Noel F Thompson

Paul Nee
[redacted]

Received
DSC-TWE
DEC 20 1994
C 351 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom,

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

Paul Nee

Robert F Kennedy Jr.
[redacted]

Received
DSC-TWS
DEC 20 1994
C 352 OLYM 4644-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;
Robert F Kennedy Jr

William J LUCAS
[redacted]

Received
DSC-TWS
DEC 20 1994
C 353 OLYM 4644-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;
William J Lucas

Alisa Nee

[redacted]

Received
DSC-TWE
DEC 20 1994
C354 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecoaystem Restoration

Dear Ms Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;
Alisa M. Nee

EDWIN E. CASSIDY

[redacted]

Received
DSC-TWE
DEC 20 1994
C356 OLYM 404-06

Received
DSC-TWE
DEC 20 1994
C355 OLYM 404-06

December 12, 1994

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;
Edwin E. Cassidy
Sandra L. Cassidy

Lynn Kaiser
[redacted]

Received
DSC-TWE
DEC 20 1994
C357 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE. Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety

Sincerely;

Lynn Kaiser

GLENN E. MATTISON
[redacted]

Received
DSC-TWE
DEC 20 1994
C 358 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosyatem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

Glenn E. Mattison

Candace J. Nelson
[redacted]

Received
DSC-TWE
DEC 20 1994
C 359 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Reatoration

Dear Ms Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

Candace J. Nelson

MARK G EBERLEIN
[redacted]

Received
DSC-TWE
DEC 20 1994
C 360 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

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Sincerely;

Kevin M Martin

[redacted]

Received
DSC-TWE
DEC 20 1994
C361 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

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Sincerely,

Kevin M. Martin

Frank Nino

[redacted]

Received
DSC-
DEC 20 1994
C 362 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecoaystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely; Frank Nino

Alice Nino
[redacted]

Received
DSC-TWE
DEC 20 1994
C363 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely,
alice Nino

FRANK MOORE
[redacted]

Received
DSC-TWE
DEC 20 1994
C364 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

Francis Moore

MAGDALENA Cathcart

[redacted]

Received
DSC-TWE

DEC 20 1994
C365 OLYM 464-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom,

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

Magdalena Cathcart

GEORGE W. CATHCART

[redacted]

Received
DSC-TWE

DEC 20 1994
C366 OLYM 464-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

George W. Cathcart

CHARLES R. LEACH
[redacted]

Received
DSC-TWE
DEC 20 1994
C367 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely; Charles R. Leach

Patricia L. Hyzer
[redacted]

Received
DSC-TWE
DEC 20 1994
C 368 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

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Sincerely;

Patricia L. Hyzer

Rosalie T. Marcantonio
[redacted]

Received
DSC-TWE
DEC 20 1994
C369 OLYM 404-06

December 12, 1994

Sara Bransom
Nationsl Parks Service
Elwha River Project
Denver Service Cenier
P O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms Bransom:

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Sincerely:

Rosalie J. Marcantonio

Lawrence E. Hyzer
[redacted]

Received
DSC-TWE
DEC 20 1994
C370 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

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Sincerely;

Norman E Keppler
[redacted]

Received
DSC
DEC 20 1994
C371 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

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Sincerely; Norman E Keppler

Marc Marcantonio
[redacted]

Received
DSC-T
DEC 20 1994
C372 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE. Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom,

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

Marc Marcantonio

David Tucker [redacted]

Received
DSC-TWE
DEC 20 1994
C 373 OLYM 4041-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: **Draft Environmental Impact Statement**
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

David Tucker

Sandie R. Tucker [redacted]

Received
DSC-TWE
DEC 20 1994
C 374 OLYM 4041-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: **Draft Environmental Impact Statement**
Elwha River Ecoayatem Restoration

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I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

Sandie R. Tucker

[redacted]

Received
DSC-T
DEC 20 1994
C 375 DLPA 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

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Sincerely;

Marianne Austin

D. Larson

[redacted]

Received
DSC-T
DEC 20 1994
C 376 DLPA 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecoaystem Restoration

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Sincerely,

D. Larson

Virgil Lawson

[redacted]

Received
DSC-TWE

DEC 20 1994
C 377 OLYM 4A1-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms Bransom;

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Sincerely,

Virgil Lawson

DOLORES M. SELBY

[redacted]

Received
DSC-TWE

DEC 20 1994
C 378 OLYM 4A1-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

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Sincerely; Dolores M. Selby

GARY R. SELBY
[redacted]

Received
DSC-TWE
DEC 20 1994
C 379 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely; Gary R. Selby

Dolores Plemons
[redacted]

Received
DSC-TWE
DEC 20 1994
C 380 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;
Dolores Plemons

JOHN L. DAHLL

[redacted]

Received
DSC-TWE

DEC 20 1994
C381 OLYM 4of-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms Bransom:

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

[redacted]

Received
DSC-TWE

DEC 20 1994
C382 OLYM 4of-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecoayatem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

Shirley A. Madison
[redacted]

Received
DSC-TWE
DEC 20 1994
C 383 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

Shirley A. Madison

BARTLEY N. MADISON
[redacted]

Received
DSC-TWE
DEC 20 1994
C 384 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety

Sincerely,

Evelyn M. Krizek
[redacted]

Received
DSC-TWE
DEC 20 1994
C385 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom,

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

Evelyn M. Krizek

Jerry P. Krizek
[redacted]

Received
DSC-TWE
DEC 20 1994
C386 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE. Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

MARIANNE KRIZEK

[redacted]

Received
DSC-T
DEC 20 1994
C 387 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

Marianne Krizek

BRIAN KRIZEK

[redacted]

Received
DSC-T
DEC 20 1994
C 388 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms Bransom,

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety

Sincerely;

Bob Spear

[redacted]

Received
DSC-TWE

DEC 20 1994
C389 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely;

Bob Spear

Mary Soehnlein

[redacted]

Received
DSC-TWE

DEC 20 1994
C390 OLYM 404-06

December 12, 1994

Sara Bransom
National Parks Service
Elwha River Project
Denver Service Center
P O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula and the State. I strongly support the Secretary's recommendation to remove both dams as quickly as possible and to restore the ecosystem within and without Olympic National Park in its entirety.

Sincerely,

Mary Soehnlein

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)

National Park Service
Department of the Interior

Received
DSC-TWE
DEC 21 1994
C.393 OLYM 404-06

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): David King

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): Owner, Olympic Raft & Guide Service

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: From Draft Staff Report Vol. 1 : pg. 3-32, last paragraph; last sentence should read: spring & summer or Apr.-Sept. for commertial float trips. pg. 3-83, 2nd paragraph, last sentence should be updated to approx. 1,400 in 1994. Next paragraph: rec. usage numbers seem very low. pg. 4-144, sec. 4.2.6, last sentence: states that

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

whitewater boating will offset the loss of reservoir boating. This is not true due to the fact that the reservoirs are above Altaire boat launch and below the state boat launch at the end of Lake Aldwell road. These are the only public launches on the river system. To make the new river areas available to whitewater boating there needs to be new launches established above Lake Mills and below Lake Aldwell.

Pg 4-145, second full paragraph: "Since both Elwha..." This seems to say that Altaire campground would be closed for at least 3 years. This would close boating opportunities on the mid section of the river and put my employees and me out of business.

There is no reason to believe that the narrow, steep areas where the dams are now will be safe for boating. We cannot assume the the removal of dams will create additional whitewater opportunities especially if there are no launch areas available and new river features are unknown.

No one seems to want to give an answer when posed the question "what will happen to the businesses affected by dam removal?" Should my employees expect long term employment or should they start thinking of other employment? Should I start making fundamental changes to my business or should I expect to continue uninterrupted service to my clients? Is the Nat'l Park Service going to revoke my concession permit to do business on the Elwha? Will my base of operations at the Elwha Store (on James River Corp. land) be displaced?

No one has shown that there has been any consideration to the business affected by dam removal

Rec'd
DSC
DEC 21 1994
C394 OLYM 404-06

December 14, 1994

Sara Bransom
National Park Service, Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

I AM IN FAVOR OF REMOVAL OF ALL DAMS ON ELWA

Jay Nilla

[redacted]

Received
DSC-TWE
DEC 21 1994
C395 OLYM 404-06

December 14, 1994

Sara Bransom
National Park Service, Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

It's time for the illegal dams on the Elwha to come down. Doing this will provide tremendous benefit [economic, environmental] for the Olympic Peninsula and the Pacific Northwest.

I strongly support the Secretary of the Interior's recommendation to remove both dams and to restore the entire ecosystem.

Marc Shaver

Marc Shaver

[redacted]

Dec 15, 1994

Received
DSC-TWE
DEC 21 1994
C396 OLYM 404-06

SARA Bransom
NATIONAL PARKS Service
Denver Service Center
Denver, Co.

RE: Draft EIS
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

I would Like to Request that the Elwha River be Returned to its Natural state. This can only be done by removal of the Elwha River and Glines CANYON dams. This Ecosystem must be Restored in its entirety, this can only be done by removal of the DAMS.

Sincerely
Rod Fredrickson
[redacted]

December 14, 1994

Received
DSC-TWE
DEC 21 1994
C397 OLYM 404-06

Sara Bransom
National Park Service, Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

I would like to see the removal of the two dams on the Elwha River

Yours truly
Kenneth E Lamm
[redacted]

December 14, 1994

Received
DSC-TWE
DEC 21 1994
C398 OLYM 404-06

Sara Bransom
National Park Service, Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

I STRONGLY AM IN FAVOR OF REMOVING THE ELWHA & GLINES CANYON DAMS ON THE ELWHA RIVER.

Walt Sum

SALTWATER ANGLERS OF MUKILTEO

my address on 2nd page

December 15, 1994

Received
DSC-TWE
DEC 21 1994
C399 OLYM 404-06

Ms. Sara Bransom
National Parks Service
Elwha River Project
P.O. Box 25287
Denver, CO. 80225-0287

Dear Ms. Bransom:

I would like to provide my input on the draft Environmental Impact Statement for the Elwha River Ecosystem Restoration proposal in Washington state.

Simply stated, I completely support the removal of both dams.

Sincerely,

Roy W. Chittenden

C.W. Chittenden

[redacted]

Dec. 15, 1994

Received
DSC-TWE
DEC 21 1994
C400 OLYM 404-06

Sara Bransom
National Parks Service
Denver Service Center
Denver, CO

Re: DEIS Elwha River Ecosystem Restoration

Dear Ms. Bransom:

I urge your serious consideration for the removal of the dams on the Elwha River. This would help restore the Olympic Peninsula salmon fishery to what it once was. Please – remove the dams.

Sincerely,

Bill Bergsma

[redacted]

Sara Bransom
National Parks Service
Elwa River Project
Denver CO. 80225-0287

Received
DSC-TWE
DEC 21 1994
C401 OLYM 404-06

I support the secretary's recommendation to remove the dams. Restore the watershed!

William J Conley

[redacted]

12/15/94

Received
DSC-IWE
DEC 21 1994
C402 OLYM 404-06

Sara Branson
National Park Service, Elwha River Project
Denver Service Center P.O. Box 25287
Denver CO 80225-0287

Re: Draft EIS
Elwha River Ecosystem Restoration

Dear Ms Branson:

I would like to comment on the draft EIS for the Elwha River ecosystem restoration. Seems this is an important project for the Pacific Northwest and the economic health of the Olympic Peninsula. I strongly support the Secretary's recommendation to remove both dams and restore the ecosystem totally.

Sincerely,
J.C. McRoberts
[redacted]

Dec 15, 1994

Ms Sara Branson
National Park Service
Elwha River Project
PO Box 25287
Denver, CO 80225-0287

Received
DSC-IWE
DEC 21 1994
C403 OLYM 404-06

Dear Ms Branson:

I would like to give you my input on on the Elwha Dam.

Please remove both dams

Sincerely,
Ron Romig
Ronald Romig
[redacted]

Received
DSC-TWE

DEC 21 1994
C404 OLYM 404-06

December 14, 1994

Sara Bransom
National Park Service, Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

As a sportsman and a citizen concerned with the environment, I strongly support removal of the Elwa dams. These obsolete dams have destroyed one of the premier salmon runs in the Northwest. Removal would help the enhancement of salmon population in the Puget Sound area.

Sincerely
Joseph D. Zimmerman

no additional comments -

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225 - 0287

Received
DSC-TWE

DEC 21 1994
C405 OLYM 404-06

3795 Moorhead Ave.
Boulder, CO 80303

I am writing to express my support for the Glives Canyon Dam and Elwha Dam removals as part of the Elwha River Restoration Act. This will cost the taxpayers a considerable amount of money, but I think it is worth the cost. The gain to the salmon population, as well as the added recreational value are immeasurable.

Sincerely.

D Christian Cope

Christian Cope

Received
DSC-TWE
DEC 21 1994
C406 OLYM 404-06

December 14, 1994

Sara Bransom
National Park Service, Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

I support the removal of the Elwha River dams.

The Elwha dams have damaged the salmon habitat and eco-systems in the upper river drainage for too many years.

Now is the time for the removal of these illegal dams and the restoration of this river system!

John L. Somers

[redacted]

Received
DSC-TWE
DEC 21 1994
C407 OLYM 404-06

Sara Bransom
N.P.S. Elwha River Project
P.O. box 25287
Denver, CO 80225-0287

Re: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

I am writing to you to express my support of the draft environmental impact statement for Elwah River ecosystem restoration. This project is very important for the Pacific Northwest. It will restore six major salmon runs and provide overwhelming economic benefits for the Olympic Peninsula and the state of Washington. I strongly support the Secretary's recommendation to remove both dams and restore the ecosystem in it's entirety.

Sincerely,

Don Thomas

[redacted]

[redacted]

Dec 15, 1994

Received
DSC-TMS
DEC 21 1994
C 408 OLYM 404-06

Ms. Sara Bransom
National Park Service, Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom

My message is short and simple: Please remove the dams on the Elwha system. This decision, while very controversial, will ~~the~~ send a clear message to the 104th Congress — to protect and restore our environment.

Thank you
Logan J. Bennett

Received
DSC-TMS
DEC 21 1994
C 409 OLYM 404-06

December 15, 1994

Ms. Sara Bransom
National Parks Service
Elwha River Project
P.O. Box 25287
Denver, CO. 80225-0287

Dear Ms. Bransom:

I would like to comment on the draft Environmental Impact Statement for the Elwha River Ecosystem Restoration proposal in Washington state.

I strongly support the Secretary of the Interior's recommendation to remove both dams and to restore the ecosystem in its entirety.

Sincerely,

Colleen K. Shannon

[redacted]

Received
DSC-TWE
DEC 21 1994
C 410 OS/M 404-06

December 14, 1994

Sara Bransom
National Park Service, Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

It is a must that the Elwha dams be ~~not~~ removed to do otherwise is to continue to destroy the environment

Please

[redacted]

Received
DSC-TWE
DEC 21 1994
C 411 OS/M 404-06

December 16, 1994

Sara Bransom
National Parks Service
Elwha River Project
P.O. Box 25287
Denver, Co. 80225 - 0287

Re: Elwha Rivsr System Restoration

Dear Ms. Bransom,

I would like to add my name to those who support removal of the Elwha River dam. It seems unconscionable to lsave an outdated obstacle in place which blocks the restoration of the river to a productive salmon & steslhead habitat. In today's environment, we need all the spawning areas we can muster and the Elwha River is a wonderful opportunity to reclaim some prime habitat. Lets do something FOR the fisheries environment for a change instsad of doing it TO it!

I appreciate your taking the time to read my letter and hope that you will support the restoration of the Elwha River.

Thank you in advance for your support.

Best regards,

George S. Fiehnat

[redacted]

December 14, 1994

Received
DSC-TWE
DEC 21 1994
C412 OLYM 404-06

Sara Bransom
National Park Service, Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

Save the Elwha Salmon Runs.

Thank you

Bert R. Carlson
[redacted]

MRS. LARRY TVEIT
[redacted]

Received
DSC-TWE
DEC 21 1994
C413 OLYM 404-06

NOVEMBER 27,1994

SARAH BRANSOM
NAT'L PARK SERVICE
P.O. BOX 25287
DENVER, CO. 80225-0287

DEAR MS. BRANSOM,

I AM WRITING TO EXPRESS MY OPPPOSITION TO THE POSSIBLE REMOVAL OF THE ELWAH DAMS.

I RECENTLY ATTENDED A PUBLIC MEETING ON THIS IN PORT ANGELES, WA. AND WAS QUITE APPALLED AT THE LACK DIRECT ANSWERS TO QUESTIONS. WE WERE ALSO REMINDED SEVERAL TIMES THAT SECRETARY OF THE INTERIOR BABBIT HAD THE FINAL POWER OF DECISION REGARDING DAM REMOVAL.

MANY PARTICIPANTS COMPLAINED THAT THEIR COMMENTS WERE NOT TAKEN DOWN CORRECTLY BY SOME OF THE "SUBJECT EXPERTS".

ALL AROUND PORT ANGELES THAT DAY WERE SIGNS IN BUSINESSES AND VEHICLES SAYING "LICENSE THE DAMS NOW". I AGREE WITH THIS AND FIND IT APPALLING THAT A RELICENSING SYSTEM HAS BEEN CREATED TO BANKRUPT APPLICANTS RATHER THAN ISSUE PERMITS.

THE DAILY NEWSPAPER IS FILLED WITH LETTERS TO THE EDITOR AGAINST REMOVAL OF THESE DAMS WITH PROBABLY THE RATIO FOR REMOVAL ABOUT ONE IN FORTY LETTERS.

I AM ACTIVE IN OUR LOCAL CHAMBER OF COMMERCE AND WE RECEIVED A COPY OF THE JANUARY 1994 ELWAH REPORT AND THEN A SHORT TIME LATER A LETTER CONTAINING ALL THE MISTAKES TO INSERT OR CORRECT IN THE REPORT, SOMETHING LIKE THIS MAKES ONE QUESTION THE ACCURACY OF THE ENTIRE REPORT.

NO DOUBT THE LOWER ELWAH TRIBE HAS BEEN PROMISED LOTS OF GOODIES ALONG WITH HALF OF ANY SALMON WHILE THE REST OF US PAY THE WHOLE BILL. IT WILL DO NO GOOD TO RESTORE THESE FISH RUNS UNTIL RIVER NETTING IS BANNED AND THE BOLDT DECISION OVERTHROWN.

FOR THE AMOUNT OF MONEY ESTIMATED TO RESTORE THESE DAMS YOU COULD HAND CARRY THESE SMOLTS FOR MANY YEARS TO COME.

DAM REMOVAL WOULD ALSO MAKE THE OLYMPIC PENINSULA MORE DEPENDENT UPON THE BONNEVILLE POWER CO. WHICH HAS ITS OWN PROBLEMS.

I THINK IT WOULD BE BETTER TO MOVE THE NATIONAL PARK BOUNDARIES AND GET BOTH OF THESE DAMS OUT OF THE PARK.

THE VERY IDEA OF DESTROYING LAKE ALDWELL AND MILLS WHICH ARE TWO BEAUTIFUL LAKES AND THEIR ECOSYSTEM IS DISGUSTING.

AT A TROUT UNLIMITED INTERNATIONAL SYMPOSIUM LAST AUGUST BABBITT BABBLED ABOUT WANTING TO GO AFTER A REALLY BIG DAM!

THE ELWAHS TODAY AND WHO KNOWS WHICH ONE NEXT! WE CAN NOT LET THIS HAPPEN.

SINCERELY,

Mrs. Larry Tveit

MRS. LARRY TVEIT

Sara Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, Co. 80225-0287

Received
DSC-TV
DEC 21 1994
C 414 0430 4x1-06

Dec. 18, 1994

Dear Ms. Bransom

RE: Elwha River restoration.

I fully support dam removal as the only way to rsstore any meaningful wild fishery at all in the Elwha River.

I have been an observer of the fisheries of the Elwha for 57 years, have researched many pertinent documents on the subject, and have sscured the opinions of many fishery managsrs, ranging from field personell to persons possessing a doctorate in fisheriss biology.

I submit the following as documentable facts that support dam rsmoval.

1. There are no wild sslf propagating runs of pinks or chums above impoundments or lakes.
Reason: Pinks and chums do not feed upon smsrgence, but immediately out-migrats to salt water and becoms lost and starvs in impoundments.

The middls and lower Elwha has virtually no gravel due to inability to pass thru the impoundmsnts.

This has almost completsly nullified natural spawning in this arsa and will only become worse.

There is little doubt that between 60% and 75% of the total anadromous salmonids in ths Elwha spawned and reared in the area from Rica Canyon to the mouth of the river. Without gravel restoration this will rsmain a sterile rock pile.

Upstream passags for the Elwha.
Fish ladders such as propossd for Aldwsll don't always work, particularly at this height. Adsquate attracting water, particularly at high flow timss is another chronic problsm. Wild fish, which have a migratory "clock", many times have their run interrupted by ladders resulting in failure to arrivs at their destination at the proper stage of maturity. There are lots of other problsms with ladders, such as trash blockage, poaching, and loss of skin and scales whils ssarching for laddsr entries, resulting in pre spawning mortality.

Upstream passage for Gline
The trap and haul syetem for putting upstream adults over Gline canyon dam has been notorioue for decades for deecaling and there upon bringing about pre-epawning death thru dieease and fungus of the upstream components of several stocks, euch as spring chinook, summer steelhead, early coho, and early winter steelhead

Down stream paeeage: Gline
Studiss on Gline in 1953-54 by Schoeneman and Junge ehowed that coho and chioook emolte dropping into the plunge pool had very little mortality.
The problem, though, ie two fold.
1. Dam owners have beon very etingy with the amount of water necessary to attract fieh to the epill way.
2. Subsequent teets have ehown that a good percentage of chinook out migrants prefer to go deep in to the turbine in take, where there is a heavy mortality.
Down stream Elwha:
The Eicher ecreen has ehown iteelf to be effective in paseing a high percentage of emolts 3-4" and eome 6-7" under what must be described as lab conditions. It has ehown a very significant deecaling problem which was not evaluated for long term mortality, which is the time frame that it normally takes place. It appeare that the ecreen will not pass down stream adulte, such as steslhead, cutthroat and dollies, without injuries leading to death later.

There will never be another eetuary in the Elwha River unlese the dams come out and gravel is allowed to naturally migrate down the river.

The estuary hae a vital role in acclimation of out migrant smolts to the marine environment and of adults to the fresh water.

It aleo servee an important function in feeding for juvenile ealmonids and other epeciee.

Dermoeyetidium, a diseaee that appeared in the lower Elwha in 1981 and is deadly to pre-epawning chinook and less so to trout and summer steelhead will always be with ue as long ae the dams are there and the back watere continue to warm the water going into the lower river.

Some very eminent biologists have concurred in the opinion that the on set of thie diseaee is precipitated by high water temperaturss and crowding.

In closing, I feel that there ie an excellent chance that the Elwha will respond very well to reetoration with dam removal and no chance of any thing except a few token fieh in the upper river without dam removal.

We need only look at the rivere with dams in Washington, many with state of the art paseage, and we find virtually no wild stock of salmoind that ie not in deeperate trouble.

Sincerely,
Dick Goin
Dick Goin
[redacted]

December 17, 1994

Received
DSC-T...
DEC 21 1994
C415 04/M 404-06

Sara Bransom
National Park Service
Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

Re: Draft EIS, Elwha Ecosystem Restoration

Dear Ms. Bransom:

This is to add support to the Interior Secretary's recommendation to remove the Elwha River and Glines Canyon dams. The Northwest needs its free-flowing, salmon-producing rivers back. This is a most appropriate place to start!

Thank you for keeping the issue alive!

Sincerely, David A. Bailey
Sheryl D. Bailey

David A. Bailey
Sheryl D. Bailey
[redacted]

[redacted]

Rec...
DSC...
DEC 21 1994
12-18-94
C416 04/M 404-06

Dear Ms. Bransom-

Just a quick note to say:
REMOVE THE DAMS ON THE ELWHA.
I want 'em gone for many reasons
However, one of the better reasons is
for the practice of removing these
things. It's all theory now. Will
the sediment be contaminated + overwhelm-
ing? How long will it take fish to return?
What are the down-side to the environ-
ment? Let's see!!
Work hard vs. the Republican
anti-environment folks. Thanks.
Marla Marvin
- Marla Marvin

12. Dec 1994

Received
DSC-TWE
DEC 21 1994
C417 OLYM404-06

Sarah Bransom
National Parks Service
Elwha River Project
P.O. Box 25287
Denver, CO. 80225-0287

Re: Elwha River Draft EIS

Dear Ms. Bransom,

I'm writing to comment on the draft Environmental Impact Statement for restoring the Elwha River. I strongly support the preferred alternative of removing the dams. This is the only way to fully restore the Elwha River ecosystem and its salmon runs.

Restoring the Elwha is the single best opportunity to restore salmon anywhere in the Northwest, and it would provide tremendous economic benefits for the Olympic ~~Area~~ Peninsula. Please move forward to implement this important project.

Sincerely,

Kari Sythe

Kari Sythe
6203 20th Ave NW
Seattle, WA 98133

Printed on tree-free hemp paper

cc. your members of Congress

Received
DSC-TWE
DEC 22 1994
C418 OLYM 404-06

December 14, 1994

Sara Bransom
National Park Service. Elwha River Project
Denver Service Center
P.O. Box 25287
Denver, CO 80225-0287

RE: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

PLEASE REMOVE THE DAMS
ON THE ELWHA RIVER

no address on envelope

Received
DSC-TWE
DEC 22 1994
C419 OLYM 404-06

December 19, 1994

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

Dr. Bransom:

As fly fishers and scientists, my wife and I would like to express our support for the preferred alternative of removing the dams in the Elwha River ecosystem. It seems to be the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law. Dam removal has broad support from environmentalists, recreationists (the upper Elwha is a great whitewater run, dam removal will increase access and create a much longer trip), fishermen, Native Americans, and business groups. Restoring the Elwha is a wise investment -- this is the single best opportunity to restore salmon anywhere in the Northwest. Failure to remove the dams would lead to more costly litigation, extinction for salmon runs, violation of tribal treaty rights, and the possible loss of hundreds of jobs.

Please give careful consideration to committing the resources to the removal of the dams.

Thank you for your consideration.

Sincerely,

Leon H. Parker IV
Ronda L. Little
[redacted]

Sara Bransom
Nat. Park Service
Elwha River Project
Po Box 25287
Denever CO
80225-0287

Received
DSC-TWE
DEC 22 1994
C422 OLYM 404-06

Reference draft environmental impact statement
Elwha River Ecosystem Restration System.

Dear Mrs Bransom
I fully support the Secretarys decision to remove both dams on the Elwha river to return the river system to full productivity of our salmon & steelhead.

J.R. Ware
[redacted]

Received
DSC-[illegible]
DEC 22 1994
C423 OLYM 404-06

Sara Bransom
N.P.S. Elwha River Project
P.O. Box 25287
Denver, CO. 80225-0287

Re: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom:
This is an important project for the Pacific Northwest which will provide great economic benefits for the Olympic Peninsula and the State of Washington. By itself the project will restore the fish runs of all 6 Pacific Salmon Species.

I strongly support the Secretary's Recomendation to Remove both dams and restore the ecosystem in it's entirety

Sincerely

[redacted]

[redacted]
18 December 1994

Sarah Bransom
National Park Service, Elwha River Project
Po Box 25287
Denver CO 80225-0287

Received
DSC-TWE
DEC 22 1994
C424 OLYM 404-06

Dear Ms Bransom:

I support removal of the dams. I vote. I am willing to pay more taxes and higher electricity bills if that's what it will take to restore salmon runs.

Not only is such removal mandated by laws already passed, it's the right thing to do economically and morally. I'd much rather have my NPS budget spent that way than on more litigation. And who can put a price on the extinction of a salmon run?

As a frequent enjoyer of the area — I spend about half my year in the Port Angeles area and am considering moving there for good — I'd like my voice to join those of the dam owners (!), many business groups, and others in saying "TAKE 'EM OUT!"

Sincerely,
John Henderson

D

DANICA

Received
DSC-TWE
DEC 22 1994
C425 OLYM 424-06

12-19-94

Sarah Bransom
National Park Service
Elwha River Project
P.O. Box 25287 Denver Co. 80225-6287

As a former and returning resident of Port Angeles, and a full-time volunteer at the Rivers Council of Washington, I must support the preffered alternative of removing the Dams. It is the only way to fully restore the Elwha river Eco-System and its salmon runs as required by law.

Restoring the Elwha is a wise investment. This is the single best opportunity to restore salmon anywhere in the Northwest! The jobs created are much needed. Keep moving forward.

Sincerely,

[redacted]

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)
National Park Service
Department of the Interior

Received
DSC-TWE
DEC 22 1994
C426 OLYM 424-06

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Roberta T. Mantooth

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: I believe the dams must be removed. They have cost the public throughout their history. Now it is time to pay some of the costs. The dams provided cheap electricity, subsidizing one industry

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

and the jobs it provided. But we taxpayers have paid to keep Edgewater from washing away. And there is no way to calculate the true cost of the lost fish to our area's economy and to the culture of the Native Americans as well as the entire ecosystem.

I think your public hearings and literature have been outstanding. Thank you.

Received
DSC-TWE
DEC 22 1994
C427 OLYM 4of 06

[redacted]

December 18, 1994

Sarah Bransom
National Park Service, Elwah River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

This is a letter in support of the National Park Service's proposal to remove the two Elwah River dams on the Olympic Peninsula.

Dam removal is the best way to restore endangered salmon runs in the Pacific Northwest. It makes good economic sense. It would provide $90.4 million in new income to construction workers in Clallam county, and projected related spending will generate an additional $21.1 million. Removing the dams will generate at least $5 million per year in new revenues from increased tribal, commercial and sports fishing.

Removing the dams is required by the following laws: Federal Power Act, the 1992 Elwah River Restoration Act and Native American treaty rights, Treaty Point No Point.

I am afraid that failure to remove the dams would lead to more gridlock and litigation, endangered species listings and extinction of salmon runs on the Elwah River. It could also cause closure of one of the largest employers on the Olympic Peninsula.

As a native Washingtonian, I feel strongly that we must maintain our natural heritage for the future. Removing the dams is essential in restoring a healthy environment on the Peninsula. Thank you for considering this testimony.

Sincerely,

Lauri Vigue

Lauri Vigue

cc: The Honorable Patty Murray
The Honorable Slade Gorton
The Honorable Jennifer Dunn
The Honorable Norm Dicks
The Honorable Jim McDermott

[redacted]

11/17/94

Received
DSC-RIVE
DEC 22 1994
C428 OLYM 404-06

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom,

I urge you to help bring back a freeflowing Elwha and its salmon by supporting dam removal. Removing these outdated dams without fish ladders offers an important opportunity for salmon restoration in the Northwest. These dams block access for salmon and steelhead to over 75 miles of pristine habitat produced inside Olympic National Park.

I realize that there is a substantial dollar amount for removal of the dams. However, allowing the dams to remain will cost us far more in losses in tourism, and fishing industries, as well as, in the loss of these fish as a valuable food resource. The cost of destruction to the natural ecosystem has no dollar value and is not reversible.

It is up to all of us to find a creative way to reduce the dollar amount and to still accomplish the dams removal. I challenge you and other officials to take a stand now that will affect all of our futures and the futures of our children.

Please support dam removal now. Thank you.

Sincerely yours,

Terry Walsh

(Ms.) Terry Walsh

cc: The Honorable Norm Dicks
The Honorable Jennifer Dunn
The Honorable Jim McDermott
The Honorable Slade Gorton
The Honorable Patty Murray

[redacted]

December 15, 1994

Received
DSC-RIVE
DEC 22 1994
C429 OLYM 404-06

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

I support the preferred alternative for removing both dams from the Elwha River.

Removal of the dams has been studied and discussed since 1992 when Congress passed the Elwha Restoration Act mandating full restoration of the once plentiful salmon runs.

The Act is supported by Native American Tribes, the dam owners and most other parties. The implementation of the act will help the economy and in the long run repay the cost of removal. It is a good plan.

Yours sincerely,
Mrs M.E. Covert

copies to: Senator Patty Murray
Senator Slade Gorton
after Jan 1995 Rep. Linda Smith

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)

National Park Service
Department of the Interior

Received
DSC-PAM
DEC 22 1994
C431 OLYM 404-06

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, ~~CO 80225-0287~~.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Elden Bussell

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): A Concerned Individual

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: Very few people know of the original Elwha River ecosystem but many people know the existing ecosystem.
Further study is needed for constructing modern fish passage to restore the salmon runs
Reduce the red tape and relicense the two power producing dams.
Study the Ocean conditions and cause the poor returns.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: We know what the Elwha River ecosystem is now and if the dams are removed we really don't know what it will be for years. We need to know for what fish passage around the dams should accomplish at a less expense than removing the dams. We need to know how BPA can replace the power removed. Latest reports are not good of near future surpluss power at existing rates.

~~OTHER~~ COMMENTS:

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED: Nov 18, 1994

We not remove the two dams on the Elwha River. Please embrace the existing Elwha River ecosystem with salmon runs by a fish ladder system around the dams. Freight Forces Inc., since 1979, have been collecting salmon below their Baker River dams and with tank trucks they transport the fish around the dams to spawning areas on Baker Lake and Streams. Also spawning beds were installed to help Mother Nature.
How can the expenditure of 300 to 400 millions of dollars be justified on a projected that is questionable even by those expensive Study.
If your are bound to spend our tax dollars freely, please spend it for constructive needs of restoring the fish runs by alternative methods at one tenth the cost.

Elden Bussell

Received
DSC-TWE
DEC 22 1994
C433 OCVM 407-06

12-17-94

DEAR SARAH BRANSOM

I wish to voice my support for the National Park Services proposal to remove the two Elwha River dams.

I live in the Olympic Peninsula area & know how devastating the dwindling fish runs have been to all communities

Anything short of removing the dams will not be adequate.

Sincerely,
Barb Gardner
[redacted]

Received
DSC-TWE
DEC 22 1994
C433 OCVM 407-06

19 December 1994

1415 North 40th Street
Seattle WA 98103-8135

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver CO 80225-0287

Dear Ms. Bransom,

I write to you regarding the Elwha River and the importance to its - and the people of the northwest's - future.

As the debate on how save salmon fisheries continues, you know that the Elwha project is the best opportunity to save salmon.

Allow me to appeal to an economic basis for promoting the project. In the short term the project will create hundreds of high-wage construction jobs. In the long run, the dam removal and restoration of the river will create a bountiful fishery and income for those involved in fishing.

Here is an opportunity to move forward in building a future for a sustainable and self-replenishing source for the local economy, with no losers.

The Dam owners, the users of the river, and I all agree to restore this river's strength and wealth-producing power.

I appreciate the opportunity to comment on the future of the Elwha and in urging the Park service to bring it into the modern era.

Sincerely,

Patrick Hewes

cc: The Honorable Patty Murray
The Honorable Norm Dicks

Sara Branson
N.P.S. Elwha River Project
P.O. box 25287
Denver, CO 80225-0287

DEC 22 1994
C434 D&PM 4of-06

Re: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Branson:

I am writing to you to express my support of the draft environmental impact statement for Elwah River ecosystem restoration. This project is very important for the Pacific Northwest. It will restore six major salmon runs and provide overwhelming economic benefits for the Olympic Peninsula and the state of Washington. I strongly support the Secretary's recommendation to remove both dams and restore the ecosystem in it's entirety.

Sincerely,

George Langf

[redacted]

DEC 22 1994
C435 D&PM 4of-06

Bill Cummings

[redacted]

18 Dec 94

Sarah Branson
Elwha River Project
Denver, CO
80225

Dear Ms. Branson:

My wife and I visited the Elwha area this past summer and were overwhelmed by its beauty and enormity. Living in an agricultural region of the country, we are very appreciative of the remaining wild habitats in the U.S. We ask that you work to remove the dams on the Elwha and to encourage the return of salmon and steelhead to its tributaries.

Thank you,
Bill & Laura Cummings

Received
DSC-TWE
DEC 22 1994
C436 OLYM 404-06

B.D. Newman
[redacted]

December 14, 1994

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

Dear M. Branson;

I want you to know that I support the preferred alternative of removing the dams on the Elwha River and expect you to do so as well. It is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law.

Dam removal has broad support from environmentalists, recreationists (the upper Elwha is a great whitewater run, dam removal will increase access and create a much longer trip), fishermen, Native Americans, business groups and even the dam owners.

Restoring the Elwha is a wise investment, this is the single best opportunity to restore salmon anywhere in the Northwest.

Failure to remove the dams would lead to more litigation, extinction for salmon runs, violation of tribal treaty rights, and the loss of hundreds of jobs.

I expect you to support this action.

Brain Newman

December 17, 1994

Received
DSC-TWE
DEC 22 1994
C437 OLYM 404-06

Dear Ms. Bransom:

I would like to go on record as totally supporting the removal of the dams on the Elwha River. I have hiked all up and down that beautiful river and see it as a national treasure. I have heard and read many times that it once supported runs of one hundred pound chinook. The studies recommend removal of the dams. A broad base of citizen groups support it. The law requires that the salmon runs be restored.

I believe it is of utmost importance to take the opportunity now to provide a little of what once was, for future generations.

Thank you,
Thomas Lilly

[redacted]

Henry B. Burton
[redacted]

Received
DSC-TVR
DEC 22 1994
C439 04/04-06

December 19, 1994

Sarah Bransom
National Park Service
Box 25287
Denver, CO 80225

Dar Ms. Bransom,

I'm commenting on the draft EIS for restoring the Elwha River. I strongly support the preferred alternative of removing the dams. This is the only way to fully restore the river and its salmon runs. Please give this project full funding and begin it soon. Thank you.

Sincerely,

Henry Burton

12/22/94 11:38 FAX 206 821 0087 NCAC 001/001

Fax Transmittal Memo

To Sarah Bransom
Company NPS, Elwha River Project-Denver
Fax # 303/969-2236
Telephone #

76/2 No. of Pages 1
Date/Time 12-22-94
From Jim DiPeso
Company
Location
Dept. Charge
Address E-Mail-pmtk.lwb@nwlink...
Telephone # 206-859-2748
Original Disposition: ☐ Destroy ☐ Return ☐ Call for pickup

Received
DSC-TVR
DEC 22 1994
C440 04/04-06

Dec. 22. 1994

Ms Sarah Bransom
National Park Service, Elwha River Project
PO Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom,

I am writing to urge that the National Park Service vigorously support full implementation of the Elwha River Restoration Act, which can only occur through removal of the Elwha and Glines Canyon dams.

It's high time to move away from the dead-end political rhetoric that equates environmental gain with economic loss. Removing these dams will have enormous economic and environmental benefits for the Olympic Peninsula, the state of Washington and for all the people of the United States. Dam removal will restore the integrity of Olympic National Park, an environmental asset of global value. Removal will create many well-paying jobs during the removal and watershed restoration phases. Restoration of the breathtaking salmon runs that an intact Elwha watershed is capable of supporting will create a clean, sustainable and secure economy on the peninsula. Imagine the economic infusion that the peninsula will enjoy as sport fishermen from far and wide come for a chance to catch 100-pound chinook salmon.

Salmon are an irreplaceable natural heritage and are central to the culture of peninsula Indian tribes. Restoring the Elwha is a one-of-a-kind opportunity to put right the biological and social damage that building these dams caused. The 19 megawatts of power that the dams generate can easily be made up through energy efficiency. Last year, for example, the Bonneville Power Administration saved nearly three times that amount at a cost well below that of even the cheapest gas-fired power plants.

In closing, I urge the National Park Service to support the preferred alternative of complete dam removal. For the sake of our national parks, the Northwest environment, the peninsula's economy, and our treaty obligations to the people who were us. America first, the dams must come down.

Sincerely,

Jim DiPeso
419 Hazel Ave. N
[redacted]

cc: Senator Patty Murray
Senator Slade Gorton
Rep. Jennifer Dunn
Rep. Norm Dicks

Received
DSC-TWE
DEC 22 1994

Dear Ms Bransom,

For the sake of the habitat in Olympic National Park, the economy of the Olympic Peninsula, and tribal treaty rights, I am writing to urge you to implement the preferred alternative of the EIS and remove the outdated dams from the Elwha River. This clearly is the logical, practical, right choice!

Sincerely,
Rene Kehrwald

[redacted]

Received
DSC-TWE
DEC 22 1994
C442 OLYM 4014-06

Ms. Branson:

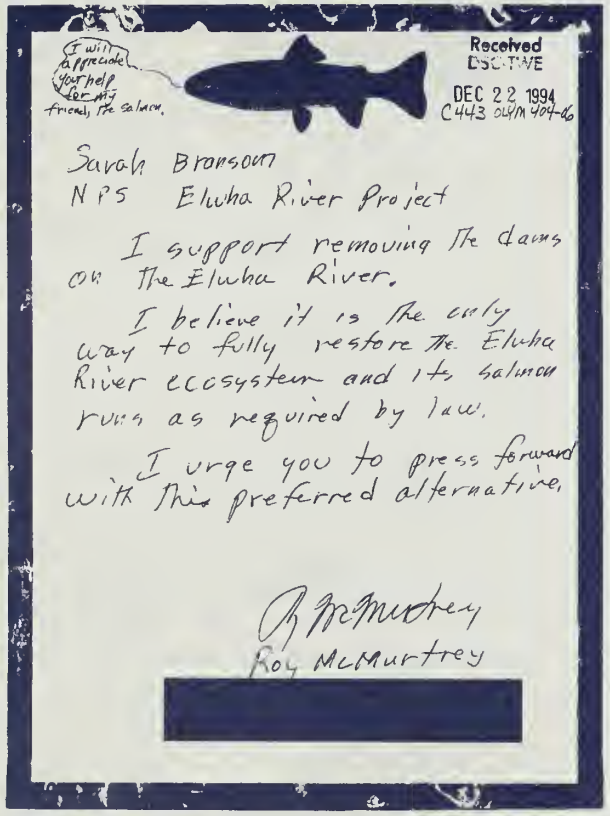
I strongly support the act of removing the dams on the Elwha river to restore the ecosystem as well as the salmon pop. I grew up in Wa. state and look forward to visiting the Elwha river with my daughter. Please use your brain and think of the big picture, instead of short term situations.

Thank you, very much.

Kevin Cantrell

Mr. Kevin Cantrell

[redacted]



[redacted]

November 17, 1994

Received
DSC-TWE
DEC 22 1994
C444 OLYM 404-46

Sarah Bransom
National Park Service, Elwha River
P.O. Box 25287
Denver, CO 80225-0287

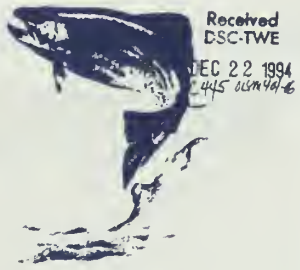
Dear Ms. Bransom:

I am writing in regards to the restoration of the Elwha River.

I wholeheartedly support the preferred alternative of removing the two dams. It seems the only way to fully restore the Elwha ecosystem as required by law. It says a lot that dam removal is supported by a broad coalition of environmentalists, Native Americans, fishermen, and even dam owners that an exciting opportunity to restore salmon to at least one place in the Northwest

Thank you.

Sincerely yours,
Susan Henderson



Received
DSC-TWE
DEC 22 1994
C 445 OLYM 404-06

SARAH

Please, DO NOT Touch
THAT Elwha Dam!
IT IS A TERRIBLE idea—
LEAVE IT Alone!
Please—

Charles Porter

[redacted]

Dec 20, 1994

Received
TWE
DEC 22 1994
C 446 OLYM 404-06

Sarah Bransom
National Park Service
Elwha River Project

Dear Ms. Bransom:

I am writing you to express my support of the preferred alternative of removing the dams. In my view it is the best and only way to restore the Elwha River ecosystem and its salmon runs as required by law.

Sincerely,

[redacted]

cc: The Honorable Slade Gorton
The Honorable Norm Dicks
The Honorable Patty Murray

Received
DSC-TWE
DEC 22 1994
C447 OLYM 4A1-06

To: Sara Branson
National Park Service
Elwha River Project
PO Box 25287
Denver, CO 80225-0287

Reverence Draft Environmental Statement
Elwha Ecosystem Restoration.

Dear Miss Branson
Sir writing regarding the above mentioned — Please remove the two dams on the Elwha River to restore the Six species of Salmon. These were illegally built & must be removed.

Sincerely,
Cynthia Thomas
[redacted]

Received
DSC-TWE
DEC 22 1994
C448 OLYM 4A1-06

Dear Ms. Bransom — 12/17/94

We would like to register our support for early implementation of dam removal on the Elwha River. We believe that this action should be taken as soon as possible, before the native salmon stock is depleted.

We think that time is of the esscence!

[redacted]
Darrel R Witmer
Judith M Witmer

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)

National Park Service
Department of the Interior

Received
DSC-TWE
DEC 23 1994
C450 ALM Cod. 06

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, implementation EIS.

Turn in your comments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Joan K. Sargent
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): City of Port Angeles
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:
There is no record of anadromous salmon + trout in Elwha Rivers 84 years ago. Only hearsay.
Dramatic reduction in fish population is evident everywhere — dams are not the culprit.
Olympic National Park not in existence 56 years ago
Federal Govt should acquire the dams for historic purpose — this is how power was supplied to the area.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:
No scientist can prove imaginary species will suddenly appear in the Elwha River — prove it in some other river first that has no dams — there are several to chose from.

OTHER COMMENTS: Consider the total cost of dam removal + consequences — protecting + maintaining good water quality to City of Port Angeles, local paper mills, Dry Creek Water System should + will be an ongoing cost.

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

How much more land will Olympic Nat'l Park acquire?

Leave as is - acquire dams + use as historical site of the pioneering of the area.

[redacted]

Dec. 21, 1994

Received
DSC-TWE
DEC 23 1994
C452 OLYM 404-06

Sarah Branson
Nat. Park Service, Elwha River Project
P. O. Box 25287
Denver, CO 80225-0287

Dear Ms. Branson:

When I was growing up and the Columbia River dams were being built, and for a long time afterward, I understood there would continue to be salmon in the river and its tributaries, because fish ladders were being provided. Only belatedly did I realize that various schemes for getting young salmon past the dams have not yet proved effective. We have a serious salmon crises, which cannot be easily solved with Alaskan fish. Small farm-raised fish are not a satisfactory substitute either.

I was happy to hear about the Elwha Project, but again surprised to learn the Elwha dams had no fish laddors. Now there is also a problem with a lack of spawning gravels on the lower river, because dams stop the natural flow.

Removing these dams will restore migratory fish to the river system, provide needed jobs on the Olympic peninsula now, and provide longterm economic benefits. A large part of the river basin lies within Olympic National Park, so is in natural conditinn except for dams and impoundments. If this is not done soon, small remaining wild stocks will become extinct. I understand that expert fisheries biologists who have analyzed the situation think the prospects for success through dam removal are excellent.

Because this is such a good opportunity to restore Northwest salmon, I urge adoption of the preferred alternative in the Elwha River EIS: removal of both dams.

Respectfully,

Mary A. Fries

Mary A. Fries

Received
DSC-TWE
DEC 23 1994
C453 OLYM 404-06

P. O. Box 303
Centralia, WA 98531-0303
December 21, 1994

Sare Branson
National Parks Service
Elwha River Project
Denver Service Center
P. O. Box 25287
Denver, CO 80225-0287

Re: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Branson:

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympia Peninsula. I strongly support the Secretary's recommendation to remove both dams and to restore the ecosystem in its entirety. The restoration of the ecosystam and the economic benefits gained will out weigh the cost of removing the dams.

Sincerely,

Denny L. Patterson

Denny L. Patterson
Lewis County Chapter #195
Trout Unlimited
Centralia, WA

Charles Wright Academy

Received
DSC-TMS
DEC 23 1994
C454 OLYM 404-06

December 21, 1994

Sarah Bransom
National Park Service
Elwha River Project
Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

I am an avid kayaker and fisherman. I support the preferred alternative of removing the dams! It is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law.

Dam removal has broad-based support from environmentalists, fisherman, Native Americans, business groups and even dam owners. Restoring the Elwha is also a wise investment-this is the single best opportunity to restore salmon in the Northwest. Furthermore, failure to remove the dams would lead to more litigation and gridlock, extinction of salmon runs, violations of tribal treaty rights, and the loss of hundreds of jobs on the Olympic Peninsula.

Sincerely,

CW Clark

C.W. Clark
Director of Admissions
CWC/le

Phone. (206) 584-2171. 7723 Chambers Creek Road West. Tacoma, Washington 98467-2099

Received
DSC-TMS
DEC 23 1994
C455 OLYM 404-06

Dec. 20, 1994

Sarah Bransom
National Park Service, Western Team
12795 Alameda Parkway
Denver, CO 80225-0287

To Whom It May Concern:

As a native of Port Angeles and a lifelong resident of the Olympic Peninsula, I would like to state my approval for the removal of both dams on the Elwha River: the Elwha Dam and the Glines Canyon Dam.

Having grown up in Port Angeles, I have enjoyed backpacking in and around the Elwha River watershed for many years. I've followed the matter of removal of the dams for many years. I've also read the Draft Environmental Impact Statement.

In my experience, I have noticed a deficiency of a number of animal species and varieties in the Elwha watershed compared with other similar watersheds on the Olympic Peninsula. Compared with the Soleduc and Bogachiel rivers, the Elwha is almost void of freshwater otter, kingfisher, crayfish, and migratory bald eagles. Goodness knows what other bugs, animals and plants are also struggling in the Elwha watershed.

I know that much of the Olympic Peninsula is deficient of many minerals and elements that are critical in the life cycles of plants and animals. I know that via uphill migration — whereby the dead carcasses of spawning salmon recharge a watershed — many of those necessary minerals and elements are made available to an ecosystem.

With the removal of these two dams, the National Park Service has a chance to remake an ecosystem that is unparalleled. Ultimately, a healthy Elwha River will mean a healthy Port Angeles. Further, National Parks belong to the citizens of the United States. Not to private industry.

Once these dams are removed, I would hope the National Park Service would give every effort to maintain a natural response by returning runs of anadromous salmon. In other words: Don't start pumping sockeye fry into Lake Sutherland or chum egg incubation tubes into Little River. I'd like to see everybody stand back and watch the natural recovery of all five Pacific salmon species. We have enough test tubes. The Elwha could be a model for natural recovery.

Sincerely,

Leland Smith
[redacted]

12/15/94

Received
DSC-TWE

DEC 23 1994
C456 OLYM404-06

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

Dear Sarah,

I would like to extend my support for the removal of the Glines Canyon and Elwha Dams on the Elwha River in Washington State. It is the wisest strategy to recover our declining salmon runs, which may well become extinct without such measures.

I believe Congress acted appropriately in 1992 when it passed the Elwha River Restoration Act.. It has broad base support from recreationists to Native Americans, business groups, environmentalists and even the Dam owners.

This is an important issue. I appreciate whatever support you can give to ensure the removal of these Dams.

Sincerely,

Allan A. Kitzman

[redacted]

December 20, 1994

Received
DSC-TWE

DEC 23 1994
C457 OLYM404-06

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom,

I support the Elwha River Restoration Act for the following reasons:

--Last month, a draft environmental impact statement (DEIS) was released by the Dept. of the Interior which proposes that the Glines Canyon and Elwha dams, on Washington State's Elwha River, be removed. Interior determined that complete removal of both dams offers the best opportunity for salmon restoration and access to over 75 miles of pristine habitat within the Olympic National Park.

-- Removal of the dams is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law."

--Restoring the Elwha is a wise investment -- this is the single best opportunity to restore salmon anywhere in the Northwest.

--Failure to remove the dams would lead to more litigation, extinction for salmon runs, violation of tribal treaty rights, and the loss of hundreds of jobs.

Sincerely,

Ernest Ezis

[redacted]

[redacted]

Received
DSC-TWE

DEC 23 1994
C459 OLYM 404-06

Re: Draft EIS
ELWHA RIVER

December 21, 1994

Sarah Bransom
National Parks Service
Elwha River Project
PO Box 25287
Denver, Colorado 80225-0287

Dear Mrs. Bransom:

It has come to our attention that the National Park Service has released its draft Environmental Impact Statement on restoring the Elwha River on the Olympic Peninsula in the state of Washington. The proposal states that the preferred alternative is to remove the dams.

My wife and I have visited the Peninsula, seen the Elwha and walked over one of the dams. I remember looking down and actually seeing a salmon swimming below the lower dam.

Seldom in my memory is there an instance where so many of the effected parties agreed on a solution. The owners of the dams, the Native American Community, the pulp mill that gets a third of its power from the dams, conservation organizations, the local community, fishermen, state & national interests, all support the solution to remove the dams.

But the most compelling reason, in our mind, to restore the Elwha to its historic free flow is the Salmon. This is part of the habitat of 5 species of Pacific Salmon. Migration upstream and downstream is essential in their life cycle.

We applaud the careful science that supports this proposal. Please do whatever is necessary to carry out the proposal to remove the two Elwha River dams.

Sincerly,
Betty and Ron Broman

cc: Senators Bob Graham
Connie Mack
Representatives: Peter Deutch
E. Clay Shaw

RONALD J. WILSON

[redacted]

Received
DSC-TWE

DEC 23 1994
C459 OLYM 404-06

December 21, 1994

Elwha Team
National Park Service
Box 25287
Denver, CO 80255-0287

Re: Elwha River EIS

As a frequent user of Olympic National Park and the Olympic Peninsula, I urge the Park Service to adopt the preferred alternative of dam removal as set forth in the EIS.

I have long followed the controversy over these dams, and am convinced that only the preferred alternative can restore the anadromous fisheries in a way that will enable the Park to eustain the populations of wildlife that it should. Dam removal will have the added benefits of assisting the Lower Elwha Klallam Tribe and restore Ediz Hook.

In general, I believe the EIS is a good job that appropriately describes the best action for the Park.

Sincerely,
Ronald J. Wilson

Received
DSC-TWE
DEC 23 1994
C460 OLYM 404-06

Sonya Bramsen
Natl. Park Serv.
Elwha River
PO Box 25287
Denver, Colo. 80225-0287

"Ref." Draft Env. Impact
Elwha River ECO syst. Res

Please remove the two dams on this river in order to save six species of salmon that are very important to the Washington State fisheries.

Ralph W. Rothrock
[redacted]

Received
DSC-TWE
DEC 23 1994
C461 OLYM 404-06

12/4/94

To whom it may concern,

I support the preferred alternative of removing the dams! It is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law.

Sincerely,
Rodney Thurston
[redacted]

Received
DSC-TWE
DEC 23 1994
C462-OLYM 404-06

GARY TVEIT
[redacted]

December 15, 1994

SARAH BRANSOM
NAT'L PARK SERVICE
P.O. BOX 25287
DENVER,CO. 80225-0287

DEAR MS. BRANSOM,

I WOULD LIKE TO EXPRESS MY CONCERNS ON THE PROPOSED REMOVAL OF THE ELWAH DAMS IN CLALLAM COUNTY.

TO EVEN CONSIDER SPENDING THIS AMOUNT OF MONEY ON SOMETHING THAT MAY NOT EVEN WORK IS LUDICROUS.

NET FISHING IN THE MOUTHS OF ALL RIVERS IS THE BEST PLACE TO START ON FISH RESTORATION.

THE LOSS OF LAKE MILLS AND ALDWELL WOULD BE TERRIBLE NOT TO MENTION THE HABITAT OF THESE LAKES.

I THINK THE PARK BOUNDARIES SHOULD BE MOVED AND GET THESE LAKES OUT OF THE PARK.

I BELIEVE THE DAMS SHOULD BE RELICENSED NOW AT A REASONABLE,FAIR,TIMELY, AND ECONOMICAL COST TO THE OWNERS.

SINCERELY,

Gary Tveit

GARY TVEIT

Received
DSC-TWE
DEC 23 1994
C465-OLYM 404-06

To whom it may concern:

--"I support the preferred alternative of removing the dams! It is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law."

--Dam removal has broad support from environmentalists, recreationists (the upper Elwha is a great whitewater run, dam removal will increase access and create a much longer trip), fishermen, Native Americans, business groups and even the dam owners.

--Restoring the Elwha is a wise investment -- this is the single best opportunity to restore salmon anywhere in the Northwest.

--Failure to remove the dams would lead to more litigation, extinction for salmon runs, violation of tribal treaty rights, and the loss of hundreds of jobs.

We've all read how the oceans are getting fished out, let's restore some habitat, the idea of eating "fish-farm" salmon is not appealing.

Christopher J. Webster
[redacted]

Received
DSC-TWE
DEC 23 1994
C466 OLYM 404-06

David DeBusk
[redacted]

December 21, 1994

Ms. Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

I am writing to express my strong support for removing the Elwha and Glines Canyon dams on the Elwha River. This alternative of the Draft EIS is the only one that will restore the Elwha River ecosystem and its once-prized salmon runs.

Numerous and diverse interests have worked for several years to develop a thoughtful response to the impacts these small but damaging projects have caused. The recommendation that the dams be removed has broad support – it would be a tragic failure in leadership to allow such a forward-looking and well-considered plan to wither on the vine. I urge you to avoid the economic, legal and environmental costs of inaction. Please support the timely removal of these dams, consistent with the Preferred Alternative.

The Clinton Administration cannot afford to pass up win-win opportunities like this to simultaneously promote economic growth and environmental recovery. Again, I urge your support for removing the outdated Glines Canyon and Elwha projects and appreciate your consideration of these comments.

Respectfully,

David DeBusk

cc: Senator Slade Gorton
Senator Patty Murray
Representative Norm Dicks

Received
DSC-TWE
DEC 23 1994
C467 OLYM 404-06

[redacted]

December 19, 19[illegible]

Sarah Bransom
National Park Service, Western Team
P.O. Box 25287
Denver, CO 80225-0287

Re: Elwha River Salmon

Dear Ms. Braneom:

As many of the salmon runs in Washington state are rapidly becoming depleted, and some already have ceased completely, it is imperative that something be done to stop the loss of thie resource. Mistakes made in the past are largely responsible for their decline, and in some cases can be rectified.

Since Congress passed the Elwha River Ecosystem and Fisheries Restoration Act, there is a good possibility that the superior runs of times past could be restored. Of the four alternatives mentioned by the Park Service on the Draft Environmental Impact Statement, we urge you to support the preferred alternative of removing the two dams.

Sincerely youre,

Ward Irwin Lois Irwin

Ward Irwin Lois Irwin

Copies to
Senator Patty Murray
Senator Slade Gorton
Congressman Norm Dicks

Received
DSC-TWE
DEC 23 1994
C468 OLYM 404-06

December 16, 1994

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

Deer Ms. Bransom:

I am writing to ask that the Environmental Impact Statement's preferred alternetive of dam removal for the Elwha River be implemented. Full restoration of that river's ecosystem and ite ealmon rune is critical to the Northwest salmon recovery, to which I have given eo meny years of effort.

Living along the White Salmon River, where a dam continuee to block enadromous fish passage, I am very much awere of the ieeues involved. I have followed the hopeful progress towerd the Elwha'e rehebilitetion and aek that you go forward promptly to remove the dams so thet ealmon will once agein ewim in that river.

Sincerely,
Phyllis Clausen
Phyllis Clausen
[redacted]

Brian Cantrell
[redacted]

Received
DSC-TWE
DEC 23 1994
C469 OLYM 404-06

December 15, 1994

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

Thanks for the great EIS on restoring the Elwha River ecosystem. I agree with the preferred alternative identified in the EIS, removing both Elwha River dams.

Let's not have this issue return to the fights between the different interest groups over the future of the Elwha. Environmental groups, Indian tribes, local government and business interests (including the dam owner) found agreement in 1992 on a way to work together instead battling in court. We must now go forward to fund that agreement -- for the sake of the salmon, for the fishermen (tribal and non-tribal) and other businesses who will benefit from restored salmon runs, and for protection of the jobs at the Daishowa mill.

The EIS confirms what study after study have previously reported -- dam removal is the only way to achieve full restoration of the Elwha River salmon runs.

Sincerely,

Brian Cantrell

Brian Cantrell

STEVEN M. McCONNELL
ATTORNEY AT LAW
1980 WASHINGTON MUTUAL TOWER
1201 THIRD AVENUE
SEATTLE, WASHINGTON 98101
(206) 442-9838
FAX (206) 442-9216

Received
DSC
DEC 23 1994
C470 OLYM 4of-06

December 21, 1994

Sarah Bransom
National Parks Service
Elwaha River Project
P.O. Box 25287
Denver, CO 80225-0287

RE: Elwaha River Draft EIS

Dear Ms. Bransom:

I am writing to comment on the Environmental Impact Statement for restoring the Elwaha River. I strongly support the preferred alternative of removing the dams as this is the only way of restoring the Elwaha River ecosystem and its salmon runs.

Restoring the Elwaha is the single best opportunity to restore salmon anywhere in the northwest, and it would provide tremendous economic benefits for the Olympic Peninsula. I strongly urge you to move forward to implement this important project.

Sincerely,

Steven M. McConnell

SMM:smc
cc: The Honorable Patty Murray
The Honorable Slade Gorton
The Honorable Jennifer Dunn
The Horonable Norm Dicks
The Honorable Jim McDermott

letters\bransom.let

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)

National Park Service
Department of the Interior

Received
DEC 23 1994
C471 OLYM 4of-06

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your comments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): KENNETH C. HARTFORD
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): REAL.

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: • BECAUSE THE DAMS LICENSES EXPIRED, WASN'T OWNERSHIP SUPPOSED TO REVERT TO THE ELWHA TRIBES OR P.U.D.? • THE EIS SAYS REMOVAL OF THE DAMS WOULD SETTLE ONGOING LITIGATION ABT. THE DAMS. WHAT IS THE SCOPE OF THESE LAWSUITS? • FLOODING — TO FULLY RESTORE THE ELWHA, ALL DIKES AND LEVEES SHOULD BE REMOVED. • KEEP THE DAMS FOR EMERGENCY POWER • WHAT IS THE POTENTIAL WATERSHED VALUE? & ELECTRICAL OUTPUT IF UPDATED GEN. ARE INSTALLED

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:
I BELIEVE THE ELWHA DAM REMOVAL IS A BIG DECEPTION TO CHEAT THE ELWHA TRIBES AND/OR THE LOCAL P.U.D. OUT OF OWNERSHIP OF THE DAMS. THE MEMBERS OF THE ELWHA TRIBE DO NOT KNOW THEIR RIGHTS TO POWER GENERATION & WATER. THEY COULD MAKE MORE REVENUE SELLING ELECTRICITY & WATER THAN THEY CAN WITH CASINOS.

OTHER COMMENTS:

Please continue your comments on the back of this sheet if needed.

DATE

SARA BRANSOM
NATIONAL PARKS SERVICE
DENVER, COLORADO

Received
DSC-TWE
DEC 23 1994
C472 OLYM 404-06

RE: DRAFT ENVIRONMENTAL IMPACT STATEMENT
ELWHA RIVER ECOSYSTEM RESTORATION

DEAR MS. BRANSON:

I AM WRITING TO COMMENT ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR ELWHA RIVER ECOSYSTEM RESTORATION.

THE SECRETARY OF THE INTERIOR HAS RECOMMENDED REMOVAL OF BOTH DAMS ON THE LOWER ELWHA

I STRONGLY SUPPORT THIS RECOMMENDATION. THIS PROJECT WOULD PROVIDE FAR REACHING ECONOMIC AND ENVIRONMENTAL BENEFITS TO THE OLYMPIC PENINSULA AND THE PACIFIC NORTHWEST.

SINCERELY,

TODD S. PETERSON

[redacted]

PREPARED BY

PAGE

MARK KLOEPPER

[redacted]

Received
DSC-TWE
DEC 23 1994
C473 OLYM 404-06

Sarah Bransom
National Park Service, Elwha River Project
PO Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

I am writing to you during the public comment period on the Environmental Impact Statement for the removal of the outdated dams on the Elwha River in Olympic National Park. This is to voice my whole-hearted support for the removal of the dams!! This is the only way to fully restore the Elwha River ecosystem.

Restroring the Elwha makes great snese from an economic standpoint. It is the best oportunity to restore salmon anywhere in the Northwest. Our investment today will reap benefits for uncounted generations that will follow us. Enormous bang for the buck!

The removal of the dams is supported by abroad coalition of environmentalists, sport and commercial fishermen, Native Americans, voting Republicans and Democrats, and forward-thinkers.

Failure to remove the dams will lead to more Congressional gridlock, litigation, and extinction for the salmon runs. History will record our generation as selfish and shortsighted.

Removal of the dams will create hundreds of good paying jobs for workers on the Olympic Peninsula. Restoration of the salmon runs will generate millions of dollars per year of new income for commercial and tribal fishermen. Recreational fishermen from nearby population centers will pump even more money into the local economies.

These dams were built in the days when men saw no end to the wealth of resources in the Northwest. We now see the folly of such thinking. Here we have a golden and rare opportunity to set right the foolishness of the settlers' generation. Do the right thing for our children and their children. Restore the Elwha!

Sincerely,

Mark Kloepper

Mark Kloepper

Sarah Bransom
National Parks Service
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

12-19-94

Received
DSC-TWE
DEC 23 1994
C474 OLYM 404-06

Re: Elwha River Draft EIS

Dear Ms. Bransom:

I am writing to comment on the draft Environmental Impact Statement for restoring the Elwha River. I strongly support removal of the dams. We must fully restore the Elwha River Ecosystem and its historic salmon runs. The immense benefit to be gained at such minimal cost provides a rare opportunity in environmental restoration. The economic benefits to the Olympic Peninsula will be enormous. Please move forward to implement this important project.

Sincerely,
John C. Durgan
[redacted]

Received
DSC-T
DEC 23 1994
C476 OLYM 404-06

December 20, 1994

Dear Ms. Bransom:

I am writing to urge you to support the Draft Environmental Impact Statement proposed action to remove both Dams on the Elwha River. There should not be such severe impacts on a river basin associated with a National Park. The dams were a serious mistake from the beginning & now it is time to turn things around.

As a taxpayer, I have no reservations about having my money used for this action.

Thank you for your consideration.
Paul Ray Butler
[redacted]

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)

National Park Service
Department of the Interior

Received
DSC-TYE
DEC 23 1994
C477 OLYM 404-06

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your comments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Dowell Hilt

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): —

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

We have several rivers here that we believe the trend of salmon is there; now they are down to 10% + there are no dams on them.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

I believe before there is any more studies on how to bring the fish back; there has to be a guarantee that the tribes will not get any of the Bolts Law went into effect the native Americans united fish Runs that is known today — the state could not do anything about it until they began ~~to~~ endanger us. ~~Tribes~~ you & the they

OTHER COMMENTS: put a stop to the netting but it leaves to take

I think that these RE Bi papers will better than I can read them

Please continue your comments on the back of this sheet if needed.

Received
DSC-TYE
DEC 23 1994
C478 OLYM 404-06

December 20, 1994

Sarah Bransom
National Park Service
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

RE: Elwha River Ecosystem Restoration

Dear Ms. Bransom:

I write to comment on the Draft Environmental Impact Statement for restoring the Elwha River Ecosystem. I strongly support the preferred alternative of removing the dams. The science is clear and undebatable; dam removal is the only means to fully restore the Elwha River ecosystem. Dam removal also would provide tremendous economic benefits for the Olympic Peninsula.

The history behind the Elwha dams is tragic and outrageous. Despite its undeniable knowledge of construction of the Elwha Dam, the Washington Department of Fisheries failed to enforce existing state law requiring fish passage facilities. This breach of the State's public trust obligation directly resulted in the decimation of legendary runs of all five Pacific Salmon species. Elwha Chinook Salmon exceeded 100 pounds and spawning runs of Pink Salmon regularly reached 275,000 fish.

The dams, owned by James River Corporation, currently provide only one third of the power needs of the Daishowa Paper Mill in Port Angeles. James River and Daishowa have been on record as supporting dam removal as part of the carefully crafted legislative solution passed by Congress in 1992. Dam removal also enjoys widespread support from the local community as well as statewide and national interests.

There can be little doubt that removal of the Elwha Dams provides the best and most cost-effective opportunity for Salmon restoration anywhere in the Northwest. This is not a project which will require expensive habitat restoration efforts or contentious measures to restrict private property rights or other river uses, because the majority of the Elwha watershed is pristine and protected in Olympic National Park. The fish just need removal of the barriers that block their upstream and downstream migrations; Lake Mills, Lake Aldwell, and the two dams.

Dam removal also provides the only alternative to costly and lengthy litigation over proposals to license the dams. The public interest would be better served by avoiding lawsuits almost certain to prove the federal government's failure to protect tribal treaty rights and the State government's failure to comply with its public trust obligations.

The time clearly is right to remedy the shortsighted errors of past generations and remove the dams. Please move forward with great speed to implement this important project.

Sincerely,

Tony Dyllian

Tony Dyllian

[redacted]

Received
DSC-TWE
DEC 27 1994
C480 olym 404-06

December 16, 1994

National Park Service
P.O. Box 25287
Denver, CO 80225

Dear Ms. Bransom:

Regarding the draft Elwha River EIS, I support the Park Service's preferred alternative, removal of both dams.

Removal is only way to fulfill numerous legal obligations of the United States government:

-- The 1992 Elwha Act requires full restoration of the Elwha River ecosystem; removing the dams is the sole way of doing so;
-- the Federal Power Act prohibits the licensing of dams in a National Park. Since the Glines Canyon project's license expired in 1976, the dam is an illegal intrusion on Olympic National Park and must be removed;
-- the Indian treaty rights affirmed by the U.S. Supreme Court and the federal government's trust responsibilities require the restoration of the Elwha Tribe's fishing rights, and dam removal is the best means for restoring the fish.

Don't let the cooperation and agreement between the various interests involved in this long-running issue be destroyed for lack of action; stay out of court by moving forward with funding and implementation of dam removal and ecosystem restoration.

Thank you,

Joanne Cantrell

Joanne Cantrell
[redacted]

Received
DSC-TWE
C480 olym 404-06
DEC 27 1994

from the desk of

Kris Cadle

December 13, 1994

Sarah Bransom:

Please remove the 2 Elwha dams now! The draft Environmental Impact Statement for Elwha River Ecosystem Restoration spells out the need for doing so as swiftly as possible.

Those dams have altered the entire river-based ecosystem. The salmon and steelhead runs may be the most visible part of the Elwha harmed by the dams, but as the EIS points out, the devastation reaches into all parts of the watershed, and even outside the Elwha:

- diminishment of the anadromous fish runs resulted in the loss of a valuable, stable food source for over 22 species of wildlife, while the basin's vegetation lost an important source of nitrogen and phosphorus; (page 5)
- blockage of downstream movement of sediment and other bedload materials has resulted in the destruction of the historic shellfish beds at the mouth of the river as well as erosion on Ediz Hook; (page 26, page 50)
- the dams flooded villages, fish camps, burial sites and spiritual sites for the Lower Elwha S'Klallam Tribe, as well as destroyed the fish runs vital to the culture and economy of the Tribe. (page 59)

Despite such far reaching adverse impacts, if the dams are removed, we can restore the balance to the Elwha. (page i-ii) Restoring the Elwha River is a "Win-Win" solution. Implementing the 1992 Elwha River Restoration Act is the best way to address the needs of the dam owners, the pulp mill that uses power from the dams, commercial and recreational fishing groups, environmental organizations, Native American tribes, and local government.

It is critical that the Interior Department implement the Elwha Act as soon as possible. Failure to do so would return us to the gridlock and litigation over the Elwha which the region faced prior to the 1992 Act. This in turn could lead to the closure of a major employer in Port Angeles, continued diminishment of Tribal treaty rights, and endangered species listings and possible extinction for Elwha River salmon runs.

Removing the dams is required by law. Removal of both dams is the only alternative fully consistent with the Elwha Act, the Federal Power Act, the 1855 Treaty of Point No Point, National Park Service Management Policies, National Marine Fisheries Management Plan, and the Clallam County Comprehensive Plan. (page x, pages 7-8, page 20)

Restoring the Elwha also makes good economic sense. Removing the dams is a wise investment -- it is the best opportunity to restore salmon anywhere in the Northwest. Short term de-construction jobs would be created for workers in Clallam County, with millions of dollars flowing to this economic depressed region. (page 71, page 75)

Restoration of the fish runs following dam removal will generate millions of dollars more every year from increased tribal, commercial and sport fishing, while nature based recreation and tourism would provide Clallam County long-term economic stimulus. (page 75)

I look forward to the day, hopefully soon, when the Elwha runs free and salmon return to their historic spawning grounds up and down the river. Let's get moving!

Sincerely,

Kris Cadle

Kris Cadle
[redacted]

cc: Senator Slade Gorton
Senator Patty Murray
Senator Mark Hatfield
Representative Norm Dicks

ANGELTOUR NEKETAS
[redacted]

December 20, 1994

Received
DSC-TYPE

DEC 27 1994
C482 OLYM 404-06

Sarah Branson
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

RE: Elwha River Dams

Dear Ms. Branson,

As it appears, the removal of the Elwha River dams would be one of the best opportunities to restore salmon in the NORTHwest.

Removal of the dams is supported by environmentalists, fishermen, Native American Tribes, and even the dams owners.

On a recent visit to the Aquarium in Seattle, it was so sad to see that only three salmon had returned, out of the thousands that had left. Failure to remove the dams will contribute to the inability of the salmon to successfully complete their Runs.

Please Remove the dams and restore the Habitat.

Sincerely,

ANGELTOUR NEKETAS

CC: US CONGRESS

December 15, 1994

Received
DSC-T

DEC 27 1994
C483 OLYM 404-06

Sarah Brensom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Brensom:

I am writing to register my support for removing the Elwha and Glines Canyon dams as described in the draft EIS on Elwhe River Restoretion. The EIS does a good job of identifying the alternetives and appropriately selects dam removal as the preferred action.

I grew up in several small towns around western Washington, and want to make sure our region doesn't lose the wonderful salmon and other natural resources that make this a great place to live. Moving forward with dam removal will help us avoid the extinction of Elwha River salmon runs, as well as prevent the loss of a major source of jobs on the Olympic Peninsula.

The Elwhe Act rightly requires the full restoration of the Elwha ecosystem and its historic salmon runs. The only way to achieve thet legal restoration mandate is through dam removal. The Elwha Act also protects nearly 350 high-wage union jobs at the Daishowe pulp mill by providing the mill access to a reliable supply of power through BPA.

It is criticel that the U.S. government fully fund and implement the Elwha Act as soon as possible. If we fail to acquire and remove the dams, followed by restoration of the fish runs, the region will once again face the gridlock and litigetion over the Elwha which lead to the 1992 Elwhe Act.

The adverse environmental and economic impacts of these 2 dams are huge, while the amount of energy they produce is comperatively small. Their combined output can be readily replaced by cost-effective, less damaging alternative resources such as energy conservation and wind turbines.

The EIS should more fully describe the various economic benefits dam removal and river restoration will provide. Millions of dollars of "deconstruction" jobs would be a major boost to an area currently experiencing high unemployment. Once the dams are removed, the restored salmon runs will generate millions of dollers more every year from increased fishing. Dam removal will also enhance whitewater boating opportunities on the Elwha. And the river will undoubtedly experience a large increase of visitors who come to see first hand the restoretion in progress.

For also these reasons, I support the preferred alternetive in the draft Elwhe EIS. Please complete the final EIS as soon as possible and move to acquire and remove these dams.

Sincerely,

Kelly Grover

Kelly Grover
[redacted]

cc: Bruce Babbitt
Petty Murrey
Jim McDermott
Jennifer Dunn
Slade Gorton
Mark Hetfield
Norm Dicks

Siobhan M. Cantrell
[redacted]

Received
DSC-TWE
DEC 27 1994
C484 olym 404-06

December 11, 1994

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225

Ms. Bransom,

Please add my name to the list of supports for removing the Elwha River dams. I entusiastically support the Park Service's preferred alternative in the Elwha River EIS. Time is short, so please proceed with dam removal and river restoration. It is the best choice for the salmon, for the ecosystem of Olympic National Park, for the rights and the culture of the Elwha Tribe, for Northwest fishermen, for the hundreds of workers at the Daishowa paper mill in Port Angeles, and for concerned taxpayers everywhere who want to see our nation's laws enforced.

Free the Elwha.

Siobhan M. Cantrell

Siobhan M. Cantrell

Thomas Lawrence
[redacted]

Received
DSC-TWE
DEC 27 1994
C485 olym 404-06

December 20, 1994

Ms. Sarah Bransom:

I fully support the proposal to remove the dams on the Elwha River to fully restore the ecosystem. Removing the dams makes both economic and environmental sense since the economic well being of the Port Angeles area will ultimately depend on the tourism generated by the rich natural diversity of the area. This natural diversity can only be enhanced with the restoration of over 75 miles of salmon habitat.

Sincerely,

Thomas Lawrence

Thomas Lawrence

Received
DSC-TWE
DEC 27 1994
C487 OLYM 404-06

Michael williamson
[redacted]

December 22, 1994

Sara Branson:

U have just gotten notice of what you plan to do and U highly recommend that you do it soon. Please tear down the dams on the Elwha River.

Sincerely,
Michael Scott Robert Williamson;

Rec'd
DSC-TWE
DEC 27 1994
C488 OLYM 404-06

STEVE WILLIAMSON
[redacted]

December 22, 1994

SARA BRANSOM
NAT. PARK SERVICE - ELWHA RIVER PROJECT
DENVER SERVICE CENTER
PO BOX 25287
DENVER, CO 80225-0287

DEAR SARA:

I strongly support the Secretary's recommendation to remove both Elwha River system dams and restore the ecosystem in its entirety.

Sincerely,

STEVEN R. WILLIAMSON

[redacted]

Received
DSC-TMP
DEC 27 1994
C489 OLYM 404-06

Sarah Bransom
National Park Service
Elwha River Project
P. O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

I support the preferred alternative of removing the dam on the Elwha River. It's the only certain way to restore the ecosystem and the salmon runs as required by law. Seventy-five miles of salmon habitat are blocked by two dams which are generating electricity for one or two pulp mills. A strong salmon population from this region is far more important to me, my family and friends, and the state's economy than a single pulp mill.

Sincerely,

Paul K. Bryant

Received
DSC-TMP
DEC 27 1994
C491 OLYM 404-06

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, Co. 80225-0287

Dear Sarah,

I have read the Elwha draft EIS and attended the public meeting at the Vern Burton Community Center on Nov. 14, 1994. I was very pleased with the conclusions in the draft EIS and agree with most of the comments therein. I urge you to keep in mind that time is of the essence with this project and we need to do everything possible to move things along as expeditiously as possible to insure a complete recovery. It is apparent from all the facts available that both dams must be removed for a complete restoration of the Elwha River habitat. I believe that anything short of full restoration would be an insult to future generations. If our children have to remove these dams, the cost will be much greater and restoration, if possible at all, will take much longer. If we can take responsibility now, full restoration is almost assured. It is my sincere hope that everyone involved will do whatever it takes to make sure this project is completed quickly and completely.

Sincerely,

James D. Curnew

Peninsula Security Services
208 E. Front St.
Port Angeles, WA 98362

Received
DSC-TWE
DEC 27 1994
C492 OLYM 404-06

December 23, 1994

Sarah Bransom
National Park Service
PO Box 25287
Denver, CO 80225-0287

Re: Elwha River Restaration Draft EIS

Dear Ms. Bransom:

I am an avid recreational fisherman. I believe that removing the Elwha dams is an excellent way to increase fish resources. I want to ensure that my children have the same opportunities to fish I have enjoyed. Therefore, I strongly support the removal of two Elwha River dams as described in the draft Environmental Impact Statement (DEIS).

My friends and I spend hundreds of dollars on fishing trips each year. Simply put, we go where we can catch fish. In the future, this may not include the Olympic Peninsula unless more is done to enhance local fisheries. Increased fishing will produce additional revenue for local communities.

Restoring the fisheries will take advantage of pristine habitat already protected within the Olympic National Park. I urge you to begin removing the dams and restoring fish runs without further delay.

Sincerely,

Anthony J.W. Gewald
Coupeville, WA

[redacted]

Received
DSC-TWE
DEC 27 1994
C493 OLYM 404-06

20 December 1994

Sarah Branson
National Park Service
Elwha River Project
PO Box 25287
Denver, CO 80225-0287

Dear Ms Branson

REF: Elwha River Draft Environmental Impact Statement

Thank you for the opportunity to comment on the Draft Environmental Impact Statement for Restoring the Elwha River. I strongly support the preferred alternative of removing the dams. Removing the two outdated Elwha River dams offers the only way to fully restore the Elwha River ecosystem and its salmon runs.

By restoring the Elwha River ecosystem it will be the best opportunity anywhere in the Pacific Northwest, and it would provide tremendous economic benefits for the Olympic Peninsula. Please move forward to implement this important project.

Thank you for your time and consideration.

Sincerely

Harry E Wilson

[redacted]

Copy to: Congressman Norm Dicks

Received
DSC
DEC 27 1994
C494 OLYM 404-06

December 22, 1994

Sarah Bransom
National Park Service
Elwha River Project
P. O. Box 25287
Denver, CO 80225-0287

Re: Elwha River Ecoaystem Reatoration

Dear Ms. Bransom:

As an environmentaliat, I wish to add my voice to the effort to restore the Elwha River. It is my underatanding that the Environmental Impact Statement recommends the remo val of the dams as the preferred alternative.

With their removal, the ecocystems of the Elwha River will be restored. Salmon migration patterns will return to their historic runs. A pristine waterahed will be conaerved and the local community will benefit economically. We will all benefit environmentally when a beautiful ecosystem is returned to grace our natural heritage.

The dams were unwisely built in the first place and were a breach of state laws that required fish pasaage facilities. Now is the opportunity for reatoration of a natural resource that has been tragically abuaed.

Yours truly,

Helen Hirschfeld

Helen Hirschfeld
[redacted]

Received
DSC
DEC 27 1994
C495 OLYM 404-06

[redacted]

Sarah Bransom
National Park Service
Elwha River Project
P. O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

I support the preferred alternative of removing the dam on the Elwha River. It's the only certain way to restore the ecosystem and the salmon runs as required by law. Seventy-five miles of salmon habitat are blocked by two dams which are generating electricity for one or two pulp mills. A strong salmon population from this region is far more important to me, my family and friends, and the state's economy than a single pulp mill.

Sincerely,

Brett E. Burris

NOTE

Received
DSC-TWE
DEC 27 1994
C496 OLYM 4604-06

November 23, 1994

Direct Line 654-2429

Sara Bransom
National Parks Service , Elwa River Project
Denver Service Center , PO Box 25287
Denver, CO 80225-0287

Re: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympia Peninsula. I strongly support the Secretary's recommendation to remove both dams and to restore the ecosystem in its entirety.

Sincerely,

BURTON C. DINUS
P.O. BOX 861
WESTPORT, WA. 98595
NAME
ADDRESS

SAVE MILLIONS BY CUTTING A 12FT. HOLE THRU DAM AT GROUND LEVEL OR IS THIS TOO LOGICAL.

B. C. D.



Wed 21 Dec 94

To: Ms. Sarah Bransom - NPS
Box 25287; Denver CO 80225-0287

From: Ken Sletten 206-396-2525
[redacted]

Received
DSC-TWE
DEC 27 1994
C498 OLYM 4604-06

Dear Ms. Bransom,

As an avid user of Washington National Parks, wilderness areas, and wild rivers for most of 20 years, I am writing to strongly support the preferred alternative of removing the two old Elwha River dams. This option is probably one of the most significant things that can be done to restore salmon runs in the Pacific Northwest region.

Thank you for this opportunity to comment on this matter,

Cordially,
Ken Sletten
Ken Sletten

21 December '94

[redacted]

Received
DSC-TWE
DEC 27 1994
C 500 OLYM 404-06

National Park Service
PO Box 25287
Denver, CO 80225-0287

Dear Ms Sarah Bransom

As a citizen of western Washington, I urge you to go foreward in removing the Dams on the Elwha River of Olympic National Park. Please work for the removal of both dams and restoration of the riverbed: for the Salmon, the integrety of the Elwha & Olympic National Park, our future generations & to gain experience in restoring the river.

Sincerely,
Ramona Hammerly

12/20/94

Received
DSC-TWE
DEC 27 1994
C 502 OLYM 404-06

Sarah Bransom
National Parks Service
Elwha River Project
PO Box 25287
Denver, CO 80225-0287

Re: Elwha River Draft EIS

Dear Ms. Bransom,

The only way to fully restore the Elwha river ecosystem and its salmon runs is removal of the dams. Restoring the Elwha is the single best opportunity to preserve salmon anywhere in the Northwest - salmon are both a symbolic and an economic necessity for all of us in this region.

Please make the records show that I am writing you specifically to comment on the draft Environmental Impact Statement for the Elwha River. I strongly support the preferred alternative of removing both the Elwha and the Glines canyon dams and would very much support you in making this next step happen. It would an outrage if we watched as time ran out on our few remaining opportunities to preserve our damaged salmon runs because people were caught bickering in costly courtroom battles.

Some people might try and make the case that you have a difficult choice before you. You don't. It's the law. It's the right choice to make. People like me around the region understand that we must do what we can to save the salmon.

Please move forward bravely to implement this important project.

Sincerely,
Leslie Kellogg
[redacted]

cc: Senator Slade Gorton
Senator Patty Murray
Representative Norm Dicks

Received
DOC-TWE
DEC 27 1994
C503 OLYM 404-66

November 23, 1994 Direct Line 654-2429

Sara Bransom
National Parks Service , Elwa River Project
Denver Service Center , PO Box 25287
Denver, CO 80225-0287

Re: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympia Peninsula. I strongly support the Secretary's recommendation to remove both dams and to restore the ecosystem in its entirety.

Sincerely,
Andrew Warber
TU Chapter 111

NAME
ADDRESS

ANDREW WARBER
[redacted]

Received
DOC-TWE
DEC 27 1994
C504 OLYM 404-66

November 23, 1994 Direct Line 654-2429

Sara Bransom
National Parks Service , Elwa River Project
Denver Service Center , PO Box 25287
Denver, CO 80225-0287

Re: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympia Peninsula. I strongly support the Secretary's recommendation to remove both dams and to restore the ecosystem in its entirety.

Thank you
Jon & Sally Lewis
[redacted]

DEC 27 1994
C505 olym 404-06

November 23, 1994

Direct Line 654-2429

Sara Br[illegible]om
National Parks Service , Elwa River Project
Denver Service Center , PO Box 25287
Denver, CO 80225-0287

Re: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympia Peninsula. I strongly support the Secretary's recommendation to remove both dams and to restore the ecosystem in its entirety.

Sincerely,

Howard F. Eldon

NAME
ADDRESS
[redacted]

[redacted]

19 December 1994

Received
DSC-TWE
DEC 27 1994
C506-Olym-404-06

Sarah Bransom
National Park Service, Western Team
12795 West Alameda Parkway
Denver, CO 80225-0287

Dear Ms. Bransom:

re: Public Comment, Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

I am writing in strong support of the decision by the Department of the Interior to fully remove both dams presently blocking the Elwha River -- the Proposed Action of the Draft EIS of October 1994. My main reasons for this support are listed below.

1. Only the Proposed Action of removing both the Elwha and the Glines Canyon Dams has the potential to fully restore all 10 runs of salmon and trout runs in the Elwha.
2. Not only are the fish runs important in themselves, but it is very important to me that dam removal will return the processes of river flow and transport of sediments and organic material to pre-dam functioning levels, benefitting many other species as well. When the natural processes are restored, conditions at the mouth of the river will return to "normal" for the biota there, and as fish biomass and nitrogen and phosphorus are returned to the upper reaches of the river, both aquatic and terrestrial species will have a chance to return to their former numbers, thanks to a return of a year-round food supply.
3. The Elwha River is a perfect choice for restoration efforts since 83% of its watershed lies protected within Olympic National Park. Almost every summer, it is my great privilege and joy to carry my pack up, up, up to the origin of the Elwha, then over into the headwaters of the Queets. I feel we have a moral obligation to restore this entire river system to the fullest extent that we can, and it's very exciting to see that the data show we have an opportunity here for great success through taking well-defined action.

It is significant to me that dam removal has generated such broad-based support -- the tribes, the dam owners, fishermen, and environmentalists. At the workshop I saw a few who are vocal in their opposition. They are the same voices who oppose anything Olympic National Park proposes. I'm puzzled that they seem not to recognize that this dam removal is a huge public works project that will create hundreds of jobs and be of huge economic benefit to Clallam County. Nor do they seem to understand the economic benefits of restoring the salmon runs (and the shellfish habitat in the Elwha's estuary).

Thank you for your efforts. I appreciate being able to add my comments.

Sincerely,

Pat Willits

Pat Willits
Education Director, Art Feiro Merine Lab, Port Angeles

c: Senator Patty Murray
Representative Norm Dicks

Received
DSC
DEC 27 1994
C508 OLYM404-06

December 19, 1994

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Sarah Bransom:

I support the preferred alternative of removing the dams on the Elwha River. As a resident of the northwest I care deeply about the land I consider my home. Also, being an outdoors enthusiast, I love the Rivers of the Northwest and the Salmon, Trout and Steelhead who call these Rivers home. But, my own personal feelings are certainly not the most important reason why these dams should be removed.

These dams were apparently built before laws were made which protect the environment from ignorance. Ignorance is building a dam without fish ladders in the middle of a major fish spawning highway. Obviously this was a mistake which must be fixed.

I believe the best way to fix this problem is to remove the dams. This will give the fish the greatest chance of recovery, as long as it is done soon. It will also provide jobs on the Olympic Peninsula, were timber miss-managment has created unemployment, and many people are in need of jobs. Waiting any longer to do something about this problem is just going to cost more money and do more, possibly irreversible, damage. Also, restoring the fish population will create even more new jobs and income for local commercial, tribal, and recreational fisheries. And lastly, I think a lot more people (including myself) will be happy about where they live and how the environment is being managed in their area.

Sincerely,
Jamie Salay
Jamie Salay
Measurement Technology NW
3822 Latona Ave NE
Seattle, WA 98105

cc: The Honorable Patty Murray
The Honorable Norm Dicks

Received
DSC
DEC 27 1994
C509 OLYM404-06

Joseph P. Kelly
[redacted]

December 21, 1994

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom,

I am writing to urge you to push for the full completion of the Elwha River Restoration Act — removal of the Elwha and Glines Canyon dams! The Act is supported by all involved parties: fishermen, Native American Tribes, environmentalists and the dam owners themselves. Failure to remove the dams would undo years of good-faith efforts by local activists and Northwest congressional representatives, and effectively veto a law whose message was so compelling that it was approved by the 1992 Congress and a less-than-environmentally-sensitive president.

My main message is simple: Support the preferred alternative of removing the dams! It is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law! Don't lose this valuable chance to restore one of the region's great salmon runs and bring hundreds of jobs to an area hard-hit by recession.

It saddens me that I even have to write this letter, given the fact that the Elwha River Restoration Act is already law. Those involved in its drafting have clearly demonstrated the cultural, economic and aesthetic benefits it would provide to the Olympic Peninsula and the entire Northwest. Please don't delay: bring down the dams today!

Sincerely,
Joseph Kelly
Joseph Kelly

cc: Sen. Patty Murray
Sen. Slade Gorton
Rep. Norm Dicks

MARCY JOHNSON GOLDE
4407 52nd Ave. NE, Seattle, WA 98105
(206) 527-6350 – Fax (206) 523-0567

Received
DSC-TWE
DEC 27 1994
C510 OLYM 404-06

December 21, 1994

Sareh Brensom
National Perk Service, Elwhe River Project
P.O. Box 25287
Denver, CO 80225-0287

RE: SUPPORT FOR REMOVAL OF ELWHA DAMS

Dear Ms. Bransom,

I strongly support full funding for the removal of both Elwha dems. Our femily has been property owners on the Olympic Peninsule for almost thirty years. We ell support removel of the dams. This is the best opportunity eveilable to edd 75 miles of prime, unthreetened salmon hebitat in the Northwest. As you well know, we ere fecing the loss of our wild salmon throughout the Northwest, and this is e opportunity to reverse thet in e vital piece. It is especially desireble, because the reopened habitat is within the Olympic Netionel Park end therefore, not in conflict for other uses.

While the cost seems high, it is not when you realize the jobs created in perpetuity through increased fish returns. Those jobs will be there every year. Yes, there are harvest problems too for the selmon, but they can be fixed. If the dems remain, nothing can restore the runs. In e hungry world, how can we be parties to the destruction of the greatest source of free protein ever known?

Dem removal has broad support, from tribes, fishermen, business groups, and even the dem owners. Look for the cheepest method end DO IT! TAKE OUT THOSE DAMS!

Sincerely,

Marcy J. Golde

Mercy J. Golde

cc: The Honoreble Slade Gorton
The Honoreble Norm Dicks

MARCY TOBIN
[redacted]

Received
DSC-TWE
DEC 27 1994
C511 OLYM 404-06

December 20, 1994

Sarah Bransom
National Park Service, Elwha River Project
P O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom:

I support the preferred alternative of removing the dams! It is the only way to fully restore the Elwha River ecosystem as required by law.

As the populatioo of Washington State continues to grow, fewer and fewer pristine watersheds will remain. Why not take advantage of the pristine habitat that is available for salmon and steelhead behind the walls of the Elwha dams? This habitat provides prime conditions for spawniog salmon, and with the protection it enjoys, will continue to do so well into the future.

With the recent loss of jobs in the logging industry and the devastating decline of the sport fishing industry, the economy of the Olympic Peninsula is in desperate need of seeing this dam removal project come to fruition. Removing the Elwha dams will create hundreds of good paying construction jobs, plus restoring the Elwha River salmon runs will generate new income for commercial, tribal and recreational fisherman.

Dam removal is supported by a broad coalition of environmentalists, fisherman, Native Americans, and even the dam owners. Pacific salmon are in trouble all over the Pacific Northwest. Habitat destructioo and other human impacts are the major causes of the Pacific salmon crisis. Here is an opportunity to provide prime salmon habitat that will take advantage of lands that are already safely protected well into the future.

Please do what you can to ensure the removal of the Elwha dams.

Sincerely,

Marcy Tobin

Marcy Tobin

Recei
DSC-T
DEC 27 1994
C 512 OLYM 404-06

[redacted]

December 20, 1994

Sarah Bransom
National Park Service
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

re: Elwha River Restoration

Dear Ms. Bransom,

I am writing to comment on the Draft Environmental Impact Statement for restoring the ecosystem of the Elwha River. I strongly support the alternative of removal of the dams. This is the only means to fully restore the Elwha River Ecosystem.

Removal of the dams on the Elwha River would also provide economic benefits to the area and avoid litigation over proposals to license the dams.

I urge you to implement the removal project without further delay.

Sincerely,

Rita Griffith

Rita Griffith

cc: Rep. Jim McDermott
Sen. Patty Murray
Sen. Slade Gorton

Recei
DSC-Twe
DEC 27 1994
C 513 OLYM 404-06

Patrick Pilcher

2621 50th Ave. SW
Seattle, WA 98116
(206) 933-0219

12/19/94

Sarah Bransom
National Park Service
Elwha River Project
POB 25287
Denver, CO 80225

Dear Ms. Bransom:

After reviewing the draft EIS for the Elwha River I strongly support the preferred alternative.

We have a unique opportunity to restore an historic salmon run for the future generations but only if we take the initiative and remove the dams.

Remove the dams and reetore a truly magnificant species to our Northweet.

P. D. Pilcher

Patrick Pilcher

Received
DSC-TWR
DEC 27 1994
C515 OLYM 4of4-06

November 23, 1994 Direct Line 654-2429

Sara Bransom
National Parks Service , Elwa River Project
Denver Service Center , PO Box 25287
Denver, CO 80225-0287

Re: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympia Peninsula. I strongly support the Secretary's recommendation to remove both dams and to restore the ecosystem in its entirety.

Sincerely, JACK R Moody

[redacted]

NAME BRYCE Moody
ADDRESS [redacted]

Received
DSC-TWR
DEC 27 1994
C516 OLYM 4of4-06

November 23, 1994 Direct Line 654-2429

Sara Bransom
National Parks Service , Elwa River Project
Denver Service Center , PO Box 25287
Denver, CO 80225-0287

Re: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympia Peninsula. I strongly support the Secretary's recommendation to remove both dams and to restore the ecosystem in its entirety.

Sincerely,

NAME
ADDRESS

[redacted]

Receive
DSC-TWE

DEC 27 1994
C517 OLYM 404-06

Dear Sarah Bransom

RE: Elwha River Ecosystem Restoration DEIS

I completely support your teams findings i.e. dam removal. I do not advocate any changes to the DEIS.

We are paying the piper for years of environmental destruction and neglect. I for one am willing to pay the piper to have the dams removed. Have you thought of using volunteer labor to reduce costs? Shame all the Seattle liberals into coming over and working on the removal project. I'd be there!

Between the dam's illegal licensing, Indian Treaty Right's Endangered species Act and being inside a National Park Removal of dams seems like the right thing to do. Let's just find a way to pay for it.

FRASER HAVENS

[redacted]

Fraser Havens

Received
DSC-TWE

DEC 27 1994

December 19, 1994
C518 OLYM 404-06

Sarah Bransom
National Park Service
Western Team
Box 25287
Denver, CO 80225

Dear Ms. Bransom:

I have thoroughly reviewed the issues pertaining to the Elwha River Ecosystem Restoration EIS and can reach only one conclusion: **THE DAMS SHOULD BE REMOVED!** I am employed as a fishery biologist and have worked on rivers on the Olympic Peninsula (including the Elwha) for six years now. The situation on the Elwha is truly unique and represents the best opportunity for large scale restoration in the state if not the entire country! As I look around the Northwest I see that we are in a crisis with regards to salmon. We as a society have degraded through logging, mining, agriculture, urbanization, hydroelectric development almost every river system in the country. Ironically, people wonder where the salmon have gone. Admittedly, salmon have been fished hard for almost a hundred years, and past hatchery practices have compromised genetic integrity to some degree. However, there are currently no undammed, unlogged streams that support salmon on the entire west coast of the continental United States. It is apparent that the magnificent Elwha River system in a free flowing state could come closest to meeting this elusive dream.

I hear alot of talk about restoring other rivers instead of the Elwha. People say that money should be spent on "streams without dams" first. However, what people fail to realize is that the cost to restore these streams to their original condition would be astronomical. The habitat of the majority of rivers on the Peninsula has been extensively altered. For example, I have managed a habitat restoration project on a North Olympic Peninsula river. The cost on a very accessible stream averaged about $250,000/mile. On difficult terrain the cost could easily double or triple. Additionally, on private lands, there are no long-term guarantees on the protection of your restored habitat. This is not the case on the Elwha: the habitat is intact and permanently protected. On a cost-benefit basis there is no better restoration opportunity on the Olympic Peninsula than the Elwha River.

Sincerely,
Michael McHenry
Michael McHenry

[redacted]

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)
National Park Service
Department of the Interior

Received DSC-T
DEC 27 1994
C519 0LYM 404-06

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): DALE ERICKSON
MAILING ADDRESS: 113 RONDALE DRIVE
SEQUIM WA 98382
AFFILIATION (IF ANY):
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: HOW WILL DAM REMOVAL CHANGE THE UEGATIVE ECONOMIC TREND IN CLALLAM CO. - I DON'T BELIEVE IT. (PG 76)

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: IS THERE AN ECONOMIC TREND. THAT'S UEGATIVE? CLALLAM CO HAS MANY OTHER ECONOMIC OPPORTUNITIES THAT ARE PROVEN AND THEY WILL NOT PURSUE THEM. THIS PROJECT CAN NOT, BY ITSELF, REVERSE A TREND.

OTHER COMMENTS: THE MOST GLARING QUESTION — WHY IS THERE A DRAMTIC DECLINE IN FISH STOCKS ON ALL RIVERS.

Please continue your comments on the back of this sheet if needed.

Received DSC-T
DEC 27 1994
C520 0LYM 404-06

Dear Ms. Bransom.

As a door to door canvasser for the Sierra Club I meet many people each night. At least 95% of those I speak with are for the complete removal of the Elwha Dams. Staunch Republican supports to liberal Democrats all want to see a complete restoration of the Salmon habitat.

The removal of the dams is in the interest of everyone. Please do not delay in moving this project forward.

Stefan Smulowitz
[redacted]

Colleen E. O'Connor
[redacted]

Received
DSC-TM
DEC 27 1994
C522 olym 404-06

December 22, 1994

Sarah Branson
National Park Service
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Re: Elwha River Ecosystsm Restoration

Dear Ms. Bransom:

I am writing to comment on the Draft Environmsntal Impact Statement for restoring the Elwha River Ecosystem. I strongly support the prsfsrred alternative of rsmoving ths dams. It is the only way to restors ths river system and its salmon runs as required by law. Most of ths land surrounding the river is owned by the Olympic Park, thus rsmoval of the dams will rsquire littls habitat restoration efforts. Removal of the dams is also cost effective. It would avoid litigation ovsr proposals to licenss the dams. It would furthsr avoid violation of trsaty rights, and the loss of hundrsds of jobs on the Olympic Peninsula.

Please implement this project.

Sincerely,

Colleen O'Connor

cc: Senator Patty Murray
Senator Slade Gorton
Rsprssentativs Jim McDermott

Rece...
DSC
DEC 27 1994
C523 olym 404-06

December 22, 1994

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, Colorado 80225-0287

Ms. Bransom:

The removal of the Elwha and Glines Canyon dams presents us with a unique opportunity for the restoration of the Elwha River ecosystem. Not only might dam removal allow the river to regain its former physical attributes, the re-introduction of anadromous salmon to the upper system could have significant impacts on productivity for a variety of species once dependent on these fishes and the nutrients derived from their carcasses. Much recent research suggests that anadromous salmon may be a keystone species in many Pacific Northwest ecosystems by providing a nutrient base to numerous vertebrate and invertebrate species[1] and even to plants in the riparian zones of rivers[2].

Much as the Army Corps of Engineers' Kissimmee River Restoration project seeks to restore a vital ecosystem in the southeast, the Elwha River Restoration project can be an opportunity for the PNW to regain an ecosystem of rare and unusual significance. Please include this project in your budget request for the coming fiscal cycle.

Sincerely,

Robert R. Fuerstenberg
Ecologist
[redacted]

[1] Cederholm, C.J., D.B. Houston and W.J. Scarlett. 1989. Fats of Coho Salmon Carcasses in Spawning Streams. Can. Journal of Fisheries and Aquatic Sciences 46: 1347-1355.

[2] Bilby, R.E., P.A. Bisson and B.R. Fransen. 1993. Role of Coho Salmon Carcasses in Maintaining Stream Productivity; evidence from nitrogen and carbon stable isotope analysis. American Fisheries Society Annual Meeting. Portland, Oregon. Aug. 29-Sept. 2, 1993.

Received
DSC-TWE

DEC 27 1994
C524 OLYM 404-06

December 19, 1994

Ms. Sarah Bransom
National Park Service
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

re: Dam Removal on the Elwha

Dear Ms. Bransom:

There are few issues as symbolic of environmental decline in the Northwest as the dwindling runs of salmon and steelhead. On the Elwha, we have an opportunity to boldly affirm the role these creatures play in our economy and ecology.

Removal of the dams is a win-win proposition for all affected parties:

- the pristine upper-Elwha watershed will once again be available for spawning anadromous fish
- new revenue (estimated at $5M annually) will ultimately be generated from increased commercial and sport fishing
- the local mill that currently relies on the dams for electrical power will obtain adequate supplies of low-cost electricity from an alternate source under existing agreements
- removal of the dams will create significant new income to workers in Clallam County

I understand that budgets are tight and under increasing pressures. Unfortunately, the time to act is now if the fish of this region are to have a fighting chance for survival. Removal of the Elwha's dams is the right thing to do. I strongly support it and ask you to do the same on my behalf.

Sincerely,

Merv Coover

cc: The Honorable Patty Murray
The Honorable Slade Gorton
The Honorable Jennifer Dunn

M. Coover

[redacted]

December 21, 1994

Received
DSC-TWE

DEC 27 1994
C525 OLYM 404-06

Sarah Bransom
National Park Service, Western Team
12795 Alameda Parkway
Denver, CO 80225-0287

Re: ELWAH DAMS

Dear Ms. Bansom:

I have been following this issue for several years and I still believe that these dams shall be removed.

I know this will be expensive, in a time of limited funds, but it looks like a good investment to me. Chances of success are very high!

So, lets get on with what-ever must be done to get these dams removed. Sincerely, I support your Preffered Alternative

Glenn B. Eades

[redacted]

Received
DSC-TWE
DEC 27 1994
C526 04&M 404-06

December 22, 1994

Ms Sarah Branson
NationalPark Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Dear Ms Bransom:

It is imperative that we restore the selmon runs to the Elwha River. We in the Northwest have already lost many of our major runs because of man's ignorance and greed. This is our chance to turn back the clock and resore not only the salmon, but the entire ecosystem.

Please support the removel of the dems on the Elwha.

Thank you for listening.

Sincerely,

Nancy M. Ashenfelter

Nancy M. Ashenfelter
[redacted]

CC: Senator Slade Gorton
Representative Norm Dicks

Received
DSC-T
DEC 27 1994
C527 04&M 404-06

December 22, 1994

Serah Bransom
National Perks Service
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Re: Elwha River Draft Environmental Impact Stetement (DEIS)

Dear Ms. Bransom:

Although I em currently located in Floride, I feel strongly enough to write regerding the Dreft Environmentel Impact Stetement for restoring the Elwha River. I wholeheartedly support the alternetive of removing the two outdated dems, an opinion which is shared by environmentalists, fishermen, Native Americens, business groups - even the dem owners. Removel of the dams is the only wey to fully restore, es mandated by the 1992 Elwha River Restoretion Act, the Elwhe River ecosystem end its formerly megnificent salmon runs.

Furthermore, restoring the Elwhe is the single best opportunity to restore salmon *anywhere* in the Northwest, and it would provide tremendous short-term and long-term economic benefits for the Olympic Peninsula. Clearly, the dams are e problem, but not one without e reesoneble solution. Please move forward with greet speed to implement this important project.

Sincerely,

Thomas C. Woodwerd
[redacted]

Received
DSC-TWE
DEC 27 1994
C528 0408404-06

December 21, 1994

Sarah Bransom
National Park Service, Elwha River Project
PO Box 25287
Denver, CO. 80225-0287

Dear Ma. Bransom:

As a long time reaident of Washington state who has lived near the Elwha river for much of the 1980's, I would like to comment on the Elwha River Environmental Impact Statement.

It ia my understanding that congreaa pasaed the Elwha River Restoration Act in 1992 and that ita progreas now depends on congress supplying the funds to get the job done. As a fisherman and an avid back country hiker, I can't imagine a wiaer long term investment for the future of our state and the opportunity to reatore our legendary salmon. By removing the dams, the Olympic National Park oan once again become a complete and intaot ecosystem. Without their removal, it remains a fragmented diafunctioning system.

With the apparent broad-based support from environmentaliata, fisher familiea, Native Americans and local business groups, it seema to me that every effort should be made to entice congress to do the right thing and fund the complete removal of both dama that now restrict the mighty Elwha river.

I therefore fully support the preferred alternative of removing both dams. Reatore the Elwha river ecoayatem and its magnificent aalmon runa for the future generations of Americana to know, enjoy and appreciate.

most sincerely:

Leslie J. Welsh

[redacted]

Received
DSC-TWE
DEC 27 1994
C529 0408404-06

Sarah Bromson,

December 19, 1994

RE: Elwha River

It seems that all sides involved in the issue are in agreement that the preferred measure is to remove the two out-dated dams on the Elwha River. I support this decision. It is time to restore the Elwha River and restore the ecosystem. We've waited long enough - let's hope it's not too late. This is our best opportunity to restore the salmon to our great Northwest. And keep in mind that not removing the dams means more negotiations, more gridlock, possible total extinction of our salmon run.

Removing the dams is an investment in our future. The dam owners are in favor of removing the dams. They are joined by fishermen, business groups, environmentalists and Native Americans alike.

Congress passed the Elwha River Restoration Act in 1992. We all know what needs to be done. Let's do it!

Beverly Morgan

[redacted]

cc Slade Gaton
cc Norm Dicks

Received
DSC-TWE
DEC 27 1994
C530 OLYM 404-06

8140 Elston Place
San Diego, California
92126-2211

December 18, 1994

Sarah Bransom
National Park Service
P. O. Box 25287
Denver, Colorado 80225-0287

RE: Elwha River Draft EIS

Dear Ms. Bransom:

I am writing to comment on the draft Environmental Impact Statement for restoring the Elwha River. I strongly support the preferred alternative of removing the dams. This is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law.

Restoring the Elwha is the single best opportunity to restore salmon anywhere in the Northwest, and it would provide tremendous economic benefits for the region. Please move forward with funding and implementing this important project.

Sincerely

Scott M. GrantSmith

Received
DSC-TWE
DEC 27 1994
C531 OLYM 404-06

[redacted]

December 18, 1994

Sarah Bransom
National Park Service
P. O. Box 25287
Denver, Colorado 80225-0287

RE: Elwha River Draft EIS

Dear Ms. Bransom:

I am writing to comment on the draft Environmental Impact Statement for restoring the Elwha River. I strongly support the preferred alternative of removing the dams. This is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law.

Restoring the Elwha is the single best opportunity to restore salmon anywhere in the Northwest, and it would provide tremendous economic benefits for the region. Please move forward with funding and implementing this important project.

Sincerely

Leslie GrantSmith

[redacted]

Received
DSC-TWE
DEC 27 1994
C532 OLYM 404-06

December 18, 1994

Sarah Bransom
National Park Service
P. O. Box 25287
Denver, Colorado 80225-0287

RE: Elwha River Draft EIS

Dear Ms. Bransom:

I am writing to comment on the draft Environmental Impact Statement for restoring the Elwha River. I strongly support the preferred alternative of removing the dams. This is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law.

Restoring the Elwha is the single best opportunity to restore salmon anywhere in the Northwest, and it would provide tremendous economic benefits for the region. Please move forward with funding and implementing this important project.

Sincerely

Loretta M. Smith

[redacted]

Received
DSC-TWE
DEC 27 1994
C533 OLYM 404-06

December 18, 1994

Sarah Bransom
National Park Service
P. O. Box 25287
Denver, Colorado 80225-0287

RE: Elwha River Draft EIS

Dear Ms. Bransom:

I am writing to comment on the draft Environmental Impact Statement for restoring the Elwha River. I strongly support the preferred alternative of removing the dams. This is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law.

Restoring the Elwha is the single best opportunity to restore salmon anywhere in the Northwest, and it would provide tremendous economic benefits for the region. Please move forward with funding and implementing this important project.

Sincerely

Paul E. Smith

Received
DSC-TWE
DEC 27 1994
C534 olym dcl-06

Sara Bransom
N.P.S. Elwha River Project
P.O. box 25287
Denver, CO 80225-0287

Re: Draft Environmental Impact Statement
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

I am writing to you to express my support of the draft environmental impact statement for Elwah River ecosystem restoration. This project is extremely important for the Pacific Northwest. It will restore 6 major salmon runs and provide tremendous economic benefits for the Olympic Peninsula and Washington state. I strongly support the Secretary's recommendation to remove both dams and restore the ecosystem in it's entirety.

Sincerely,

Earl Babiar

[redacted]

Received
DSC-TWE
DEC 27 1994
C535 olym dcl-06

Dear Ms. Bransom,

I am very concerned with the state of the Elwha Dam Project. I strongly support the preferred alternative of removing the dams in order to fully restore the ecosystem of the Elwha River, we have no alternative but to remove dams as soon as possible. I am the Canvass Director for the Sierra Club citizen outreach project. In the past three months, I have spoken with thousands of Washington residents who predominantly agree that salmon must be saved now! Thanks for your time

Maud Macrory

[redacted]

Received
DSC-TWE

December 23, 1994

DEC 27 1994
C536 0SM 404-06

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver Colorado 80225-0287

Dear Ms. Bransom,

I am writing to inform you that I support the removal of the out-dated Elwha River Dems in the Olympic Penninsule of the State of Washington. As you know, much attention has been focused on the conflicts of interest between environmental and business concerns in the Pacific Northwest in recent years. It is rare that such e wide range of "special interest" groups should find themselves in agreement as with this issue. Removel of these dems is the best alternative for restoring the Elwha River Salmon runs, is supported by numerous business and environmental groups and is one of the best opportunities for restoring e devastated fishing industry in the Pecific Northwest. I believe it is essential to take adventage of opportunities such as these when an action can not only have a profound positive impact but enjoys such a broad besed support. Thank You very much for your consideration.

Sincerely,
Robert Weaver
Robert Weaver

[redacted]

Adrian & Isabel Lawrence
[redacted]

Received
DSC-TWE

DEC 27 1994
C537 0SM 404-06

December 20, 1994

Dear Ms. Sarah Bransom:

I fully support the proposal to remove the dams on the Elwha River to fully restore the ecosystem and its legendary salmon runs. The Elwha is one of the few rivers in which we have the opportunity to undo the damage caused by human shortsightedness.

Sincerely,
Adrian & Isabel
Adrian & Isabel Lawrence

Received
DSC-TWE
DEC 27 1994
C538 ocwm 464-06

Dear Ms. Bransom,

I am writing to let you know that I am in support of the preferred alternative of removing the dams. It is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law. I feel that this is the single best opportunity to restore salmon anywhere in the Northwest. Please do what you can to see that the dams are removed.

Thank You,

John D. Samaras

JOHN SAMARAS
[redacted]

Received
DSC-TWE
DEC 27 1994
C539 ocwm 464-06

Richard Hamann
[redacted]

December 21, 1994

Sarah Bransom
National Park Service
Elwah River Project
P.O. box 25287
Denver, CO 80225-0287

Re: Elwha River Restoration

Dear Ms. Bransom:

I am writing in support of the preferred alternative, dam removal, that has been proposed in the Draft Environmental Impact Statement for Elwah River Ecosystem restoration. This option appears to be the best for restoring the lost salmon runs of the Elwah River ecosystem. It is supported by all of the local environmental groups, and even by the owners of the dams themselves. Restored salmon runs would be an immensely valuable and sustainable resource for the Olympic Peninsula. Having visited this rich, but degraded landscape, I know that much restoration work needs to be done in the area. The potential benefits of this project are so great, and the costs are so minimal, that I cannot imagine any reluctance to proceed with restoration as expeditiously as possible.

In Florida we realized several years ago the benefits that can be attained from ecosystem restoration. Efforts are now underway to restore the Kissimmee River, the Everglades, Lake Apopka, the Upper St Johns River and the Oklawaha River, among others. We applaud your efforts in the great Northwest.

Sincerely,

Richard Hamann

cc: The Honorable Bob Graham
The Honorable Connie Mack
The Honorable Corrine Brown

Received
DSC-TWE
DEC 27 1994
C540 0L9Y6406

[redacted]

December 22, 1994

National Park Service, DSC-TWE-Planning
12795 Alameda Parkway
Denver, CO 80225-0287

Subject: Elwha River

Attention: Sarah Bransom

Dear Ms. Bransom:

My acquaintance with the Elwha River Area began over 40 years ago on a car camping trip. We camped for a couple of nights along the river between the two dams, probably at Altaire. We drove up the old road from Whisky Bend to Hurricane Ridge, which was converted to a trail many years ago. Over the last 20 years, I have backpacked almost every year somewhere in the Olympic National Park. Two of these trips have been up the full length of the river from Whisky Bend to Dodwell Rixon Pass. Additional trips have involved shorter sections of the main valley or the upper areas of several tributaries.

We need to keep in mind that humankind is just one part of the interdependent web of life. If we do not take care of the ecosystem, it will not be able to care for us and man will be added to the endangered species list if anyone is still around to keep such lists. Our planning efforts need to be directed toward conservation of our biological diversity and the maintenance and restoration of functioning ecosystems.

I appreciate receiving a copy of the DEIS and the FERC's Draft Staff Report. I have spent several hours reviewing them and appreciate the brevity of your DEIS. The information is well presented and is informative.

The two DOI objectives, 1) restoring wild, self-sustaining runs of anadromous fish and 2) restoration of the Elwha River ecosystem are the highly desirable. The FERC in their '91 DEIS had a third: providing

renewable hydraulic energy, desirable but mutually exclusive with the DIO objectives. The environmental and economic cost of the energy is too high and must be foregone.

Of the four alternatives presented, the Proposed Action that removes both dams is by far the best. It offers a good opportunity to restore nine of the ten historic anadromous fish runs to all suitable parts of the Elwha River System. It also will return about 17 miles of river to a much higher level of fish production by restoring sand, gravel and cobbles to the armored sections of the river bed below Glines Canyon Dam and a running river where the reservoirs now are. Also this supply of sand, gravel and cobbles will help to maintain and restore the delta at the river's mouth and Ediz Hook just to the east in the Strait of Jaun de Fuca.

The DEIS states that the Olympic National Park has been declared a World Heritage Park and a World Biological Reserve. The Proposed Action does the most to support these designations, the other alternatives are less effective in this support. The analysis and impacts of the alternatives need to reflect their affects on these designations.

The Elwha River drainage is a significant part of the Park and actions by the DOI should be to enhance the biological and physical attributes of the drainage. The removal of both dams maximizes the enhancement by returning the most anadromous biomass to the Park and the ultimate return of 715 acres now occupied by Lake Mills to park land. This 715 acres will not look like park land initially but over the years, as the forest regenerates, it will take its place as part of the Park. The re vegetation of these acres with forest should have a small positive effect on the green house affect by removing some carbon dioxide from the atmosphere.

The alternative that just removes the Glines Canyon Dam would return Lake Mills to park land status but does considerable less for the fish runs and biomass return. This alternative has a serious problem in that the return of sediment load to the river will result in the infilling of Lake Aldwell (Page 29) and loss of Elwha Dam's hydroelectric value. So why not remove both dams?

Removal of just the Elwha Dam does not restore the 715 acres occupied by Lake Mills to park land and does a poorer job of helping the

fish runs and biomass return to the upper river compared to removal of both dams. It does nothing to overcome the lack of sand, gravel and cobbles in the river below Glines Canyon Dam though temporarily, the channel through Lake Aldwell and on below Elwha Dam would be helped.

The dam retention Alternative with fish passage does the least to restore the up river fish runs and does not restore the Lake Mills site to park land. It does nothing to restore the river channel between the dams or below the Elwha Dam to good anadromous spawning condition nor does it provide material for the delta at the river's mouth or Ediz Hook to the east. Because of the cost of mitigation to the dams for fish passage and a slight reduction in power produced, the cost of power from the dams is higher than removing them (Table 5). Only by the year 2010 for coast avoidance does the power become less expensive by retrofitting the dams, but that does not consider the many value of more fish in the river by removing both dams. This is a poor alternative for managing the present and potential resources of the Elwha River and should be set aside in favor of removing both dams.

As you state, the economic analysis is incomplete. When it is provided in the Implementing EIS, be sure to account for the values, both in the river and adjacent ocean as well as off shore, of the enhanced wild fish runs resulting from the removal of both dams. The value of an enhanced shell fish harvest resulting from a restored river delta and the cost avoidance by the Corps of Engineers in maintaining Ediz Hook should also be included. The recreation values to both the local tribes and the larger region should be included as well as the value to the local tribes for food and ceremonial purposes.

It appears that the 1992 Congressional act assumes that the public will pay for the removal of the dams. The removal of the Glines Canyon Dam should have been considered when it was originally licensed. And the Elwha Dam was built before licensing was required. The removal of both dams is for the public's benefit, so Congress will need to come up with the funding. This funding must be aggressively pursued. The current owner should also contribute as they have enjoyed economic gain from the use of the public's water for over 60 years, directly and as the willing successor of the former owners. The least they could do would be to donate the dams and associated lands they own, the Glines dam to the Park Service, and the Elwha Dam to the State of Washington.

In the event that the selected alternative does not require the remove of both dams, then provision should be included in the license to finance the removal of the dam(s) if a future decision were to require their removal.

I did study the Staff Report and its sediment stabilization possibilities. I agree that retention on the terraces of as much of the silt, sand and cobbles as possible would be acceptable. The material should be contoured some what irregularly and planted with native trees and shrubs.

Please send me a copy of the FEIS, the Implementing EIS and the Rod when they are published and keep me informed on the progress of this project.

Yours truly
Bob Powne
Bob Powne

Tanja Wilcox
[redacted]

Received
DSC-TWE
DEC 27 1994
C541 OLYM 404-06

Sarah Bransom
National Park Service,
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287
December 21, 1994

Dear Ms. Bransom,

I am writing in support of the removal of the Elwha River dams. The recently issued Elwha River Environmental Impact Statement has identified the removal of both dams as the only way to fully restore the Elwha, and has made this the preferred alternative. I support this alternative. Thank you for working on behalf of the Elwha and its salmon! Without the removal of these dams, we can be sure that the salmon will soon go extinct, an incredible loss on emotional, biological and economic levels.

The Elwha River dams were only built to provide power for one industrial plant in Anacortes. Today the dams are out-dated and the power they generated can easily be replaced by other power sources. One new source of power that we could begin to utilize is the electricity that can be produced from Methane gas emitted from landfills. King County is negotiating with a developer to build a steam electric generating plant fueled by the gas from the Cedar Hills landfill (enough for 20 megawatts of electricity, or energy for 15,000 homes!) (Seattle, Daily Journal of Commerce, Dec. 13, 1994). Therefore, there can be no argument which claims the dams are needed or efficient.

Tribes, the community, fishermen, and the salmon can only benefit from the removal of these dams. It is one of the wisest investments towards restoring a salmon run, because the habitat above the dams is in good shape, there are still some wild salmon returning to the river, and this was one of the most productive salmon streams in the region.

Failure to remove the dams will lead to more litigation, extinction of the salmon runs, violation of tribal treaty rights, and the loss of hundreds of jobs on the Olympic Peninsula.

Please do all you can to ensure the removal of the Elwha dams! Thank you.

Sincerely,

Tanja Wilcox

cc.: The Honorable Slade Gorton; The Honorable Norm Dicks

Doug Rose
[redacted]

Received
DSC-TWE
DEC 27 1994
C543 OLYM 404-06

December 22, 1994

Serah Breneom
Netional Park Service
DSC*TWE*Planning
12795 Alemede Parkway
Denver CO 80225-0287

Dear Ms. Bransom:

I wholeheertedly support the removal of both the Elwha and Glines Canyon dems on the Elwha River. I urge the Secretery to edopt the "Proposed Action" es eoon es possible.

I em en outdoor writer end freelance journelist. In recent years, I have written about the Elwhe River for Salmon-Trout-Steelheeder, Fishing Holes and Fly Fiehermen megezines. I also developed the outline end wrote part of the script for e backpacking video on the hiking in Olympic Netional Perk, which included an Elwhe River back-country hike. And I heve writteo e book--Fly Fishing the Olympic Peninsule--that will be publisheddnext year end that has a chapter on t the Elwhe.

I heve read the DrafteEnvironmeotal Impect Stetement and egree with the euthors thet the only relisble wey to ensure the reetoration of the Elwhe's enedromous selmon and trout ie to remove the dams. On e river system with a degraded heedwetere, such en endeavor might not be worth the expense. But, with the pristine condition of the the Elwhe beckcountry and the fact that it will be preserved that wey in perpetuity, I believe it would be the utmost in foolishneea

not to pureue tbis restoretion project. In e world where surging populetione plece greater demands oo the environment, I believe tbe scieotific knowledge gleeoed from tbe restoretion elone will be wortb tbe coet of the dem removel. Indeed, the Elwbe River Ecosystem Restoretion will develop tools end koowledge tbet fisheries biologists cen use eround tbe world when tbe ettempt to rebebilitete degreded fisheriee.

No doubt, you will receive meny lettere from people from Port Angelee end Sequim who oppose dem removel. So let me eey thet most of them come from e emell but vociferous group of old-timers who 1) hete Olympic Netionel Park end 2) ere violently oppoeed to enything thet might benefit local Indiens. Believe me, if you bed proposed to edd e tnird dam, this eeme group would have whined ebout thet too. Also, ell of the locel reel-estate end homebuilder8s essocietioos oppose dem removel, so it isn't herd to see tbet this bas more to do with politics tben it doas with sciencs or justice. Tberefore, when the Secretery mekes bis decision I bope he will remember tbet he represents the people from New Jersey and Mississippi es well es e disgruntled segment of tbe Olympic Peninsule wbo hete tbe neturel world uoless it can be subjegsted.

Last October I bike down to e spot on the Elwbe e little wey above Leke Mills. It was e crisp eutumn dey endmy wife and I lingered elong the sandbars, looking et deer trecks andwetcbing the Octobar ceddis on their egg-leying flights over tbe river. Then, as we climbed up out of the canyon, we could see e small group of lerge trout moving upstream. And we both telked how wonderful it would be if twenty years from now there could be steelbeed and selmon meking thet seme journey.

Finelly, I am ewere thet during tbe restoretion process I mey not be eble to reecb some of my fevorite backcountry treilheed or fishing boles for e few years. I em eleo ewere thet the river's reeideot trout in the backcountry will probebly be negetively affected by the reiotroduction of migretory fisb. Nevertheless, I believe thet thet the poseibility of heving summer steelheed in the Elwbe wilderness end for the Klellem tribeto heve their treditionel wey of life restored ie wortb thet secrifice.

Tberefore, once egein, I urge tbe Secretery to adopt tbe "Propoeed Action" end for tbe Perk Servics to lobby Congress vigorously for the funds to complete tbis project. It is e wooderful oppurtunity for the perk, tbe river, the fieh end ell people who love wild thinge.

Sincerely,

Doug Rose

[redacted]

December 20, 1994

Received
DSC-TWE
DEC 27 1994
C545-ASM/Ad-06

Sarah Bransom
National Park Service, Western Team
12795 Alameda Parkway
Denver, CO 80225-0287

Dear Ms. Bransom:

I strongly support the removal of the two dams on the Elwha River.

As my address suggests, I live along the Little River, two miles up from where it joins the Elwha. Pink salmon used to flourish here; now there are none.

I can walk up the Little River to Hurricane Ridge, and from there to anywhere else in Olympic National Park, and I have walked along most of the valleys of the Elwha basin: Boulder Creek, Cat Creek, Long Creek, Lillian River, and the Elwha valley itself. Those 75-odd miles of riverine habitat are in near-pristine condition. They are ready for the salmon to come back

I was skeptical as to whether the salmon would come back after being gone for so long, but I changed my mind at the public workshop held on the afternoon of November 14 in Port Angeles. There, John Meyer and Patrick Crain explained where the new runs were likely to come from: native hatchery stock for coho and chinook, nearby runs for chums and pinks, and readaptation of upstream kokanee and trout to anadromous cycles as sockeye and steelhead.

During a seminar at Olympic Park Institute, Jim Lichatowich extolled salmon's adaptability: if good habitat is opened for them, they will fill that habitat, in time. If the dams come down, I would urge those in charge of the fishery to intervene as little as possible, to allow good, strong native stocks to develop.

At the November 14 workshop, there was a vocal minority of people carrying signs in support of the dams. I listened to their questions and comments, and I have read their letters to the editor in the Peninsula Daily News. Every one of their arguments breaks down when analyzed more deeply. They vented their full wrath on Meyer and Crain, and those gentlemen patiently answered every argument. However, their explanations seemed to fall on deaf ears. Many of these people with REAL walked off before the answers to their arguments were even finished; presumably, their plan was to tour all of the small groups, dropping their bombs in each one and then getting out. This hardly seems the way to discuss public policy.

I assure you that nothing like REAL's claim of 85% local opposition to dam removal is true here, particularly when the full story is known. The political problem of the moment is that those who favor dam removal have not organized. If the need presents itself, I believe we would.

But two questions remain: Is dam removal worth the money it would cost, and who would pay?

As John Meyer explained, it would be more cost-effective than any other salmon-enhancement projects in this area, since no other habitats are in such pristine condition. If need be, money should be taken from some of these other projects and applied to where it's certain to do some good.

In regard to who should pay, just look at the cost of not removing the dams. FERC licensing, assuming it were forthcoming, would require mitigation measures costing up the $34 million. Daishowa would either have to pay or shut down the mill, resulting in a great loss to the community. In addition, there would undoubtedly be lawsuits by the tribes and environmental groups that would cost millions more.

I propose that a funding consortium be established, consisting of all the potential losers were the dams not to come down:

--the federal government, in lieu of lawsuits against the FERC;
--the state government, which could lose Daishowa's corporate taxes;
--the county government, which could lose Daishowa's property taxes and jobs;
--the city government, same as the county;
--Daishowa/James River;
--the Bonneville Power Administration;
--environmental and sport-fishing groups, who should form an umbrella committee to fund-raise for private donations;
--the tribes, who could front money from their avoided lawsuit and also guarantee a percentage of the proceeds of the eventual catch from the expanded fishery.

The dams should never have been built in the first place; now, with some political will and creative problem-solving, we can bring them back down and restore the Elwha ecosystem, and perhaps along with it the vitality of this community.

Respectfully yours,

Edward A. Chadd

Edward A. Chadd

cc: The Honorable Norm Dicks
The Honorable Slade Gorton
The Honorable Patty Murray

Received
DSC-TWE
DEC 27 1994
C547 OLYM 404-06

[redacted]

16 December 1994

Sarah Bransom
National Park Service
Elwha River Project
P. O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bransom: re: Elwha DEIS

As a resident of Washington State for over twenty yeara, I am deeply disturbed that salmon and steelhead, once symbols of the vigor of the Northwest, have declined to such an extent that many species are now on the verge of extinction. For the aalmon and steelhead, and for the ecosyatem that theae species represent, it is a aad commentary on our aociety that we have allowed our great regional symbols to be pushed to the very limit of their existence. This is analogous to the serious decline in popuIstion levels of our national symbol, the bald eagle, which the United Statea faced two decadea ago--and aucceasfully turned around.

The good newa ia that salmon and steelhead restoration is alao possible, at least for the Elwha River'a ten runs of aalmonida. Aa the DEIS on the Elwha River states, removal of the dama is the only option which can fully restore the fiah runa on the Elwha.

In order to be in compliance with existing law, the dams muat be removed. Glines Canyon dam cannot be relicensed becausa of ita intruaion on Olympic National Park. Therefore, it is operating illegally. In sddition, the 1992 Elwha River Restoration Act mandates that the Elwha ecoaystem be restored. Thia, too, pointa to the legal necessity of removing the dams.

Restoration of the Elwha River fishery will not aide the plight of endangered salmon in tha Columbia River aystem. It will, howsver, help the ailing commercial and tribal fishing industry of this state and provide construction joba for the economically depreased Olympic Peninsula. Succeasful aalmonid reatoration on the Elwha River also will apur efforts to find workable aolutions in the Columbia aystem.

The time is now to allow the Elwha to return to a free-flowing condition, which ia the beat and only option to permit the wild salmon and steelhead of this river system to come back. I strongly support the removal of the Elwha River dams and urge the National Park Service to adopt the preferred alternative.

Thank you for your consideration of this matter. I request that thia letter be included in the comments on the Elwha River DEIS.

Sincerely,

Karen M. Fant

Karen M. Fant

LENELL NUSSBAUM
ATTORNEY AT LAW
MARKET PLACE TWO, SUITE 200
2001 WESTERN AVENUE
SEATTLE, WASHINGTON 98121

TELEPHONE
(206) 728-0996

FAX
(206) 448-2252

Received
DSC-TWE
DEC 27 1994
C548 ELWA 404-06

December 19, 1994

Ms. Sarah Bransom
National Park Ssrvice
Elwha River Projsct
P.O. Box 25287
Denver, CO 80225-0287

Re: Elwha River

Dear Ms. Bransom:

I writs to comment on the Draft Environmental Impact Statement for restoring the Elwha river Ecosystem. I strongly support the preferred alternative of removing the dams. The science is clsar and undebatable; dam removal is the only means to fully restore the Elwha River ecosystem. Dam removal also would provide tremendoue economic benefits for the Olympic Peninsula.

The history bshind the Elwha dams is tragic and outrageous. Deepite its undeniable knowledgs of construction of the Elwha Dam, the Washington Departmsnt of Fisheries failed to enforce existing state law requiring fish passags facilities. This breach of the State's public trust obligation directly resulted in the decimation of legendary runs of all five Pacific Salmon species. Elwha Chinook Salmon excseded 100 pounds and spawning runs of Pink Salmon regularly reached 275,000 fish.

The dams, owned by James River Corporation, currsntly provide only one third of the powsr needs of the Daishowa Paper Mill in Port Angelee. James River and Daishowa havs been on record as eupporting dam removal as part of the carsfully crafted legislative eolution passed by Congrese in 1992. Dam removal aleo enjoye widsspread eupport from the local community as well as statewide and national intersts.

Thers can be little doubt that removal of the Elwha Dame provides ths best and most cost-effective opportunity for Salmon restoration anywhere in ths Northwest. This ie not a projsct which will requirs expensive habitat restoration efforts or contentious meaeures to rsstrict privats property right or othsr river uses, becauss the majority of the Elwha watershed is pristine and protected in Olympic National Park. The fish just nsed removal of the barriers that block their upetrsam and downstream migratione: Laks Mills, Lake Aldwell, and the two dams.

Dam removal also providse the only alternative to costly and lengthy litigation over proposale to license the dame. The public interest would be better eervsd by avoiding lawsuits almoet certain to prove the fedsral government's failure to protect tribal treaty rights and the State government's failure to comply with its public truet obligations.

The time clearly is right to rsmedy the shortsighted errors of past generations and rsmove the dams. Please move forward with great epeed to implement this important project.

Sincerely,

Lenell Nusebaum

TIM MCNULTY
[redacted]

Received
DSC-TWT
DEC 27 1994
C549 OLYM 4004-06

December 20, 1994

Sarab Bransom
National Park Service, Western Team
12795 Alameda Parkway
Denver, CO 80225-0287

Dear Ms. Bransom,

I'd like to commend the National Park Service for its visionary preferred alternative in the Elwha River Ecosystem Restoration DEIS recommending the removal of the Elwha Dams. It's long been obvious that this is the only way to restore the river's native salmon runs and return this watershed to its pristine ecological condition. As both a World Heritage site and a Biosphere Reserve, Olympic National Park deserves no less.

The significant investment in dam removal would be dollars well spent. As I look at other salmon restoration projects in the Pacific Northwest, nowhere do I see a potential for return on dollars invested that can approach that of the Elwha. Every other river system is heavily impacted by development pressures, pollution from agriculture and timbering activities, or instream water shortages as a result of irrigation withdrawals. All of these limit the amount of return in fish for dollars invested. With the Elwha we have a pristine, unpolluted natural system guaranteed to remain that way.

I was disappointed that the DEIS did not fully dress economic benefits, in terms of employment and commercial value of fisheries, that would result from restoration. I hope the final EIS will not only discuss these benefits further, but compare them with other salmon restoration projects in the Northwest, comparing costs and projected benefits for each.

Some of the major objections to the proposed action are in regard to it's cost. I suspect that the $300-million figure frequently mentioned reflects trucking of sediments from the reservoir sites. I'm opposed to this approach as both costly and unnecessary. I suspect that nearly all of the sediments can be transported in a controlled manner by the river itself, reducing cost and replenishing needed downstream spawning gravels. I urge you to select the most expedient and cost effective strategies for dam removal and site restoration in your final document.

As you know, failure to take the proper action at this time will lead to further litigation, excessive cost, and possible extinction of several native salmon stocks. In the end, everyone will loose. I appreciate the excellent work that the National Park Service and other federal agencies have accomplished thus far, and I have faith that this singularly important restoration project will move forward under your leadership. Thank you for this opportunity to respond.

Sincerely,

Tim McNulty

cc: Norm Dix
Slade Gorton
Patty Murray

Received
DSC-TWE
DEC 27 1994
C550 0494 404-06

December 21, 1994

Me. Sarah Bransom
National Park Service
Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Re: Elwha River Ecosystem Restoration

Dear Ms. Bransom:

I am writing to shars my thoughts on ths Draft Environmental Impact Statement for restoring the Elwha River Ecosystem. Because I believe that removal of the dams will provide substantial economic and environmental benefite to the people of the Olympic Penineula and Washington state in general, I urge the Park Service to adopt that preferred alternative.

I would first like to emphasize that I underetand and appreciate the economic benefits hydroelsctric projects have provided to the Northwsst. Having lived in Washington for over eleven years and having epent a great dsal of time on ths Olympic Peninsula, I aleo underetand the difficult economic conditions which many psople in that part of this etate suffer. That is why I bslieve that removing ths Elwha Dams is so important; it will both improve the local economy and rsmovs an antiquated environmental blight from one of the region's truly spectacular river syetems.

As you are undoubtsdly aware, ths salmon runs which once served ae a great sconomic resource to thie region have been severely depleted in recsnt decades, largsly dus to the numerous hydroelectric projects on various Northweet Rivers. In some casee, ths economic bensfits of thsse dams continues to outweigh the coets. That is certainly not true for the Elwha Dams. The benefits there ars minimal since the dams serve only a single paper mill, provides only 1/3 of the mill's power neede, and the mill's ownere support removal of the dams. Balanced against the bsnefits of rebuilding ths salmon runs and rsetoring the Elwha to its natural state, the costs of dam removal are minimal.

While I aleo believs that dam removal mandated by law, that is not the point I wish to focue upon here since it is clearly in everyons's interest to avoid yet another lengthy court battle which funnels public reeources into lawyers' pockets. Removing the Elwha dams is not a zero eum iseue pitting environmental against economic interests. Dam removal will benefit both the environment and economy of ths Northwest. I sinoersly hope that you will adopt the dam removal alternative.

Sincerely,

Carl Baer
8614 24th Avs. S.W.
Seattle, WA 90106
(206) 767-3780

cc: The Honorable Jim McDermott
The Honorable Slade Gorton
The Honorable Patty Murray

Received
DSC-TW

DEC 27 1994
C554 0474 4of 06

Sarah Bransom
NATIONAL PARK Service
P.O. Box 25287
DENVER CO 80225-0287

RE ELWHA RIVER DRAFT EIS

In regards to the draft Environmental Impact Statement for restoring the Elwha River.
The State Council of Trout Unlimited has supported from the start of this process the prefered alternative of removing these two dams. This dams are inconsistent with the National Park service policys, and missoin to preserve our nations national parks their wildlife, including their fishery. This majestic river once teamed with wild runs of Steelhead & Salmon, with Chinook over 100 lbs. To bring back native Populations & Implementation of a watershed approach to this system. means nothing less then total removal of these dams, & full restoration of the ecosystem. We know that this approach will open up pristine spawning grounds, in the upper watershed.
In Washington State today we face closures on Recreational & Commercial Fisheries due to ~~many factors~~ including ~~& loss of stocks due to~~ listings under the endangered Species act, ~~habitat loss~~ and total loss of Stocks of anadromous fish due to habitat loss. This biological & ecological loss to the State & nation are now just starting to be understood. ~~Restoring~~
Restoring the Elwha is an opportunity we can not afford to loose TO. Bring back the native populations of salmon & Steelhead to this system will provide tremendous economic benefits for the region. We therefor ask that you move forward will full funding and implementation of this project.

Sincerely,

Dan Scalise

Environmental Protection
Coordinator.

no address on envelope

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

Received
DSC-TWE
DEC 27 1994
C555 ELW 424-06

COMMENT FORM

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Cheryl S. Smith

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: other reasons why salmon and seagoing trout runs have declined in the Elwha and all other rivers on the Olympic peninsula – you are assuming the dams are to blame, but long-time local residents recall excellent fish returns for many years after dams were installed. And fish returns in free-running rivers such as the Dungeness, Bogachiel, Hoh, have also declined dramatically. Dams are certainly not to blame there

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: to factor in all the other reasons all sea-run fish populations are declining, such as seine nets in the oceans, Indian netting at river mouths, burgeoning seal and sea lion populations, pollution, El Niño effects, lack of treaty with Canada, overfishing in Alaskan waters

Also, consider that eliminating the power from these dams will increase demand on the Bonneville Power Authority, which needs to lower its power requirements to release water for salmon runs on those rivers.

OTHER COMMENTS:

I have considered myself an environmentalist all my life. While I don't want to see dams built on free-running rivers, these have been in place so long that they have developed their own ecosystem of swans, osprey, herons, and a variety of amphibians (now in decline everywhere). There is no way that you can ensure the

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

public that removal of the dams will restore anadromous fish runs. There are no massive native stocks that will come rushing back to the river. You will have to use hatchery fish, which is what is being done now anyway. And I have not seen any specific plans for dealing with the silt and debris that will be released. The silt will likely kill whatever fish there are in the river.

Mr. Babbitt, I held out great hope when you took your post. I waited eagerly for increased fees for grazing on public lands, revamping of the antiquated mining and logging laws. It didn't happen.

Please believe me when I say this is not a case of "not in my back yard." If they decide to close logging roads and instead make them trails in the Olympic National Forest, that is fine with me, though my knees will keep me from traveling nearly as far.

I am in favor of my tax dollars being spent on the environment, but this project is blue skying with no guarantee of any success and possibilities for damage. Please reconsider.

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service

Department of the Interior

Received DSC-TWE DEC 27 1994 C 556 OLYM 404-06

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NAME (PLEASE PRINT CLEARLY): Thomas C. Santos

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): Washington State Grange, Clallam County Pomone Grenge

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: Local information is that salmon never used the upper reaches of the Elwha River. Why are the other rivers without dams also devoid of anadromous fish? How are you going to restore runs that no longer exist?

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: If dams are removed, not only would Clallam County lose $231,000.00 in annual property tax but electric rate payers would pay more to subsidize Daishowa rates. (see below)

OTHER COMMENTS: I've reviewed your Elwha River Ecosyetem Restoration o.e.i.s.. Am aware of wishful boast of the Secretary of the Interior wanting to remove a dam, and that O.N.P. superintendent Finnerty's main objectives seemed to be get rid of the goats - get rid of the dams, and that Brian Winters was an Elwha tribal employee before being hired to coordinate this report. So it wasn't surprising to find this

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

report biased in favor of your 'proposed action'. Surprised to find on page 26 that D.O.I. had placed Freshwater Bay to the east of the mouth of of the Elwha. Believe D.O.I. erred on page 65, there is a view spot of the Elwha off the south side of highway 112 on the east of the river. The report is ambiguous in reporting steelhead angling catch numbers from page 64 & 66. On page 69, "The fish passage alternative would result in fewer salmon and trout than presently populate the Elwha River". Huh? How Come? Table 5, on page23, is hard to follow. Why would the figures on 'no action' and 'dam retention' be different? Why is your 'proposed action' figure lower than other figures where power is being produced? Where do you get the $21 million for the years 2000 & 2010 on (B) 'no action'? On page 5, the report speaks to the drastic decline of anadromous fish after the dams were built. The truth is that there still were 60 pound chinook in the Elwha 50 to 60 years after the dams were built. It wasn't until after the implementing of the Bo Boldt decision that the drastic decline occurred on all our rivers, with or without dams. Note on page 5, the Klallams were not covered by treaty, the Jamestown Band was given treaty rights in 1981. On pages 62 & 72 the report is in error, the introduction of nylon gill nets and commercial fishery didn't take off until after implementation of the Boldt decision. Of course netting does not result in additional nutrient-producing carcasses. The waters of the Elwha and its two lakes are classed as AA. This is the sole supply for the city of Port Angeles domestic use, also for the Dry Creek Water Association and for the industrial use of Daishowa Reyonier. Page 27, with the dams in place, water is released during critical lows to maintain flows for fish and domestic water levels. True (page 16) Glines Canyon Dam is within the boundary of Olympic National Park, but like the goats, it was there before the park.

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)
National Park Service
Department of the Interior

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DEC 27 1994
C557 olym 4d-06

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): TIMOTHY D PAGE
MAILING ADDRESS: [redacted]
AFFILIATION (IF ANY): EAST LAKE WASHINGTON AUDUBON SOCIETY
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS:
I am in complete favor of removal of BOTH the Elwha Dam and Glines Canyon Dam. Both dams need to be completely removed to assure a return to a natural ecosystem state and to insure the survival

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

~~THE~~ OF the threatened salmon runs. Any proposal that does not include complete removal of both dams is only a partial solution whose benefits do not out weigh the costs on salmon runs and the health of the river.

I support partial removal of entrapped sediment and use of this material to possibly create wetlands up stream that will be destroyed by removal of the dams. I think that mechanical sediment removal should cover approximately 50% of total sediment mitigation with natural sediment flushing action for the remaining sediment load.

This opportunity to remove both dams and restore the Elwha to its natural state is a once in a lifetime chance to improve the areas tourism economy and observe the natural restoration of endangered salmon populations. Please REMOVE BOTH DAMS.

Thank You.

Timothy Page

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DEC 27 1994
C557 OLYM 404-06

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Roy Vermillion
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: The dams on the Elwha need to be removed. We need to do every thing we can to restore the river to its former, natural condition. I don't feel any part of the dams or the hydroelectric plants should be left in place. An interpretive sign with pictures would be sufficient historical landmark reference at the site. As is known and stated in published information, the silt may present a problem for

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

fish and other organisms as the sediment behind the dams is removed. I would like to see the dams lowered in increments to bring down the lake levels over a period of time. This may allow the sediments to wash out to sea a little at a time. The sediments would naturally have followed this course if the dams were not in place. we should allow them just to wash downstream.

The dams do not need to be retained. We don't need them for recreational purposes. We already have lake Crescent within Olympic National Park. With all the noise from boats and jet skis it is more like a National Recreation Area than a National Park. Retaining the dams and building a fish ladder would put a large financial burden on the dam owners and those who use the power. It would put them out of business. If we do that, who will maintain the ladders? What will happen in the future when sediments fill the dams? who will pay for sediment removal?

why do we put millions of dollars into things (not necessarily Federal) like fixing up the Kingdome in Seattle, yet we can't do that to preserve and restore our natural heritage. Lets restore this area to a natural condition for wildlife and fishes.

The dams must go!

Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)
National Park Service
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DEC 27 1994
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Please return your comment form on or before December 23, 1994.

I was at the meeting in Port Angeles. Didn't like the way they were prejudiced.

NAME (PLEASE PRINT CLEARLY): Lavonne Ensor, outdoor person

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): R.E.A.

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: Keeping the 2 mills of Port Angeles, providing 750 jobs, well and able to run with the clear water they need. Also The cost of power for Dishowa will be Too much. And also the problem of water for the city of Port Angeles. The city needs clean water for its people. The people can't drink Silt For Twenty years.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: The Fish are not going To come back like you state. Bring them back some where else ie: the Dungeness, Morse Creek the Lyre, Sol Duc, The Quilcene River, etc, etc, before spending all the 300+ million $ to take out the Dams It is Dumb, Dumb, Dumb To spend that much money without knowing if you can bring the fish back

OTHER COMMENTS: I think it is dumb to spend 300 million dollars plus at a time our deficit in this country is in the Trillions. The people are against it here! The Flood plain, Indian Reserval would be under water with the dams gone.

Please continue your comments on the back of this sheet if needed.

(over

COMMENTS CONTINUED:

We had a bad storm Dec. 19-20 and without the dams the whole lower Elwha would now be under water without those dams. Do you know how much damage that would have been? In the millions - just check it out.

The Fish are in the Elwha now. Instead of killing them all which removing the dams would do, build Fish ladders. Even Trucking fish To the upper Lake Mills area would not cost 300 million dollars. Building Fish ladders would employ lots of people whom are out of work because of the poor handling of the Fishing & timber systems in our areal.

Why should the Indians be allowed to net the rivers. No one counts how many fish are taken & left To rot. The seals also need to be Taken down in Number. The seals take one bite To kill the Salmon and leave the rest. The Canadians also get our Salmon. The Russians & Japanese also have decimated our Salmon runs.

The Indians should be allowed to fish like they did when the Treaties were made. With Spears & Fish Traps. Not a modern huge net To block all the Fish.

The National Park hasn't the money To bring the dams down and our city can't afford to lose our Two mills and 750 jobs by taking the Elwha away From us. The silt coming down For twenty years will not permit the water To be used.

It will be so ugly, ugly To have 74 acres of silt To look at and every time a rain comes To carry that down To the rest of the banks of the river.

What good would it do To bring in Fish To the Elwha when the Indians are allowed to net the whole River & and block the mouth and kill so many and not even count how many they waste or let rot?

In conclusion: It costs too much for our city To lose the mills & water so build Fish ladders To provide jobs and a way To help the fish.

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

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C561 D&M 404-06

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Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): ALBERT J. SEDLACEK

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

THE FISH RUNS IN ALL OF THE North Olympic Peninsula ARE VERY POOR AND THERE ARE NO DAMS ON THOSE RIVERS
THE ECONOMIC IMPACT OF THE NORTH OLYMPIC PENIN. SHOULD COME FIRST

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

RESTORE FISH RUNS ON SOME OF THE OTHER RIVERS ON THE North Olympic Peninsula BEFORE WE DEMOLISH THE DAMS
THE ECONOMIC IMPACT NEEDS TO HAV CONSIDERATION AS WELL
THERE IS ANOTHER ECO-SYSTEM ON THE ELWAH System THAT WILL BE DESTROYED IN THE PROCESS.

OTHER COMMENTS:

TALK TO SOME OF OLD TIME CITIZENS OF THE North Olympic Peninsula AS WELL AND LET THEM TELL HOW GOOD THE FISH RUNS WERE.
THEY WON'T BE WRITING VERY MANY LETTERS

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

THE MAJORITY OF THE PEOPLE MAKING THE LOUDEST NOISE ARE PEOPLE RELATIVELY NEW TO THE PENN.

THE PARK PERSONNEL AND THE TRIBES WERE GIVEN MORE INPUT THEN THE REST OF THE CITIZENS.

THE LOCAL MILLS ARE A MAJOR PORTION OF OUR ECONOMIC BASE. THEY NEED LOW COST POWER AND WATER. TO STAY VIABLE

OUR COUNTY IN ALREADY IN A ECONOMIC CRISIS WE DON'T NEED TO SPEND HUNDREDS OF MILLIONS OF DOLLARS TO REMOVE THE DAMS TO MAKE OUR LONG TERM ECONOMY WORSE.

I HAVE FISHED ALL OF THE RIVERS OVER THE TWENTY YEARS OF LIVING IN PORT ANGELES. AND THEY HAVE GOTTEN POORER EVERY YEAR.

Albert J. Sedlacek

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
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NAME (PLEASE PRINT CLEARLY): Sandra E. Reed

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

I'm concerned that there hasn't been enough interest or study as to what the impact of removing the dams will have upon the residents of Port Angeles and Clallam County. Removing the dams will cause closure of our two paper mills ... counting primary and secondary jobs, we're looking at a loss of at least 2500 jobs.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: My husband and I went to the meeting held at Vern Burton Gym in Port Angeles a few weeks ago. The way it was set up we felt we were unable to express our views. There were centers where one could ask about fish, fish environment, pristine environmentality etc. But nowhere could we ask about the impact on the people who live on the Olympic Peninsula.

I did finally ask a question of one of the facilitators. She stated she didn't know the area I was speaking of because she was from Denver. At that point, I became discouraged and left.

I agree that building the dams years ago was wrong; yet, at the same time, I feel tearing them out at this time is a greater error. A compromise needs to be made — one which will help the fish population without destroying the human population of the area.

Let's try fish ladders and other creative ways to entice the fish back without ripping out the dams.

Our depletion of the fish population is not caused by the dams alone. Until we consider all causes and address solutions to all causes, ripping out the dams will only be an expensive band-aid.

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

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C563 OS/M 404-06

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your comments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Daniel S. Johnson
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): Taxpayer
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: The Elwha River Restoration Act directed the Secretary of the Interior to determine what actions would allow for full restoration of the Elwha River. The Elwha Report determined that only removal of both dams would provide the opportunity for full restoration. The dams (both Glines Canyon and the Elwha) should be removed in the most efficient and least disruptive

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

method. All auxiliary buildings and equipment should be removed and the sites should be returned to a natural state. Since both dams were built without fish passage devices at a time when they were required by State law they should never be licensed or relicensed. Fish passages built today would hardly negate the effects of over half a century of disruption to the ecosystem. If our government can spend billions of dollars on a single bomber then the least we can do for our environment and a place like Olympic National Park is to invest in the restoration of the Elwha river. It will be an investment that will continuously produce rewards far into the future. The project lands should be turned over to the National Park Service, and the entire river corridor should be protected- perhaps as a National Wildlife Refuge. The Elwha river provides us with a unique opportunity in the Pacific Northwest for restoring salmon runs since the majority of the Elwha watershed lies within Olympic National Park.

As for sediment removal and removal of the dam structures, I feel that this should be done in the least disruptive method possible. If mechanical removal is necessary to protect the lower river then the least amount of roads necessary should be constructed on the sites. Sediments should be moved to the mouth of the Elwha to restore the sandy bottom habitat that once existed there. The structures (dams) should be used to create reef habitat in the Strait of Juan de Fuca or perhaps used as breakwaters for a harbor somewhere else. The sites of the dams and lakes should be revegetated to allow for a faster return to the natural state.

As someone who has hiked extensively in the Elwha river watershed, I look forward to the day when salmon will return to their rightful place. Bald Eagles will once again winter in the Elwha, Black bears will fish for salmon leaping over cascades and river otters will hunt for salmon carcasses on the rivers edge. Our commitments to the Native Americans on the mouth of the Elwha will be honored and we will leave a legacy that will be passed on to many future generations. What will we pass on if we don't remove the dams? The irreversible destruction of a river ecosystem, two silted in lakes, costly litigation over the issue that will drag on for years, the extinction of more stocks of salmon, the list could go on.

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service
Department of the Interior

DEC 27 1994
C564 OLYM 4041-06

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your comments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Linda LeBard
MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): Port Angeles Assoc of Realtors
ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: True Cost of the LOSS of electricity. The NW Power Council is importing electricity the drawdowns & the droughts have caused a real loss of water in our reservoirs. There is a serious concern over the supply of Power in Western Washington & even greater concern over lack of future power for the entire N.W.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED: You did not study the alternatives to dam removal. What studies have been done that proves fish ladders/passages do not work as fish returns 1994 has been an excellent year as you can see from attached news articles
* Please note attachments

OTHER COMMENTS: The workshop in Port Angeles were not fair. They didn't record the message. They wrote comments on a limited basis & changed the intent. The public could not hear or comment on concerns

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

that were brought up in groups other than the one they were in. Why did we have a 4th workshop in Seattle? These people are not going to be affected by the Dam removal. Spend the money to enhance the fish! Relicence the dams & put our energy into the fish. All these years of fighting with environmental groups, Fish & Wildlife Olympic National Park, WHAT HAS BEEN DONE TO ENHANCE THE FISH! What a waste of time energy and resource

I deeply resent the survey that was done by "Decision Data" where $1.00 was sent in order to insure. Questioner return. Questions were open ended and worded to the point that only 1 answer would be Chosen. There were no cost explained, there were no estimates of how successful the fish restoration will be or if all species will be destroyed upon dam removal. The Elwha Report states that they are unsure and that for at least 10 years there will be an impact to the fisheries from Dam removal & silt. WHO WOULDNT GIVE JUST $1.00 PER YEAR TO DO everything as explained in Section 1, paragraph 2

The Majority of the People in Port Angeles WANT the Dams Relicenced. They want the Park moved back and they are upset that so much money has been spent on this issue. Tom Dick & lost his standing in this county because of this issue. The Mill NEEDS CERTAINTY, no business can run effectively with this type of Black Spot over their head. Our Daily News puts a poll out every night. Usually between 100 and 200 people respond. When the Dam issue is brought up close to 1000 respond. Leave the Dams alone Relicence them, try Fish enhancement NOW

Received
DSC-TWE
DEC 27 1994

11-30-94
C565 OLYM 404-06

Elwha Restoration Coordinator
Olympic Nat'l Pk

Friend

Receiving papers & had a word fix, & changed on notice of 11-15-94 Elwah hearing. Missed it.

Just likes sunrise. Probable off budget now - needs dog-flight idly.

I'm not so sure the dams must be removed. What if it doesn't help. ~~Stupid~~ Both removal &/or rebuild are costly!

Why not just de-activate them. Carefully. Blast out a hole for river bed. Blast off approaches to deter miners from claiming or erection. Adults should know better.

This plan will cost 10% of total estimates of dams. Leave as a monument to Federal construction. Will even blend with the setting like the ruins of castles/dams.

Yrs truly

[redacted]

December 22, 1994

Sarah Bransom
National Park Service, Elwha River Project
P.O. Box 25287
Denver, CO 80225-0287

Received
DSC-TWE
DEC 27 1994
C566 OLYM 404-06

Dear Ms. Bransom:

I strongly support the preferred alternative in your DEIS on restoring the Elwha. Only removal of the dams will ensure the full restoration of our incomparable salmon and steelhead. I am confident that creativity, commitment and hard work will turn up even more cost effective ways to accomplish the removal. The restoration of these runs is required by human and natural law. Please do not delay.

Sincerely,
Sara Patton

cc Honorable Patty Murray
Honorable Slade Gorton
Honorable Jennifer Dunn
Honorable Norm Dicks
Honorable Jim McDermott

[redacted]

Received
DSC-TWE

DEC 27 1994
12-21-94
C567 01 M 401-06

DEAR SARA,

PLEASE PUSH FOR THE RE-STORATION OF THE ELWA RIVER —

REMOVE THESE OBSTACLES SO THAT OUR SALMON CAN SURVIVE

THANK YOU VERY MUCH FOR YOUR EFFORTS —

JACK NORTH

[redacted]

[redacted]

12/4 Received
DSC-TWE

DEC 27 1994
C568 01 M 401-06

Dear Elwha River Project,

I fully support the removal of both dams as the preferred alternative. It's the right thing to do, scientifically, ethically, morally, economically (we're talking long-term sustainable economics, not idiotic, fool-hardy ~~short~~ short-term economic thinking.) Restoring this river [redacted] will create a world-class fishery worth hundreds of millions of dollars. "SOBS." Dam removal has the support of fishermen, dam owners, business groups and environmentalists. Native Americans' tribal treaty rights will be violated if the dams are not removed. It will be expensive to remove the dams, but will pay for itself in the long run. We have made trillions of dollars at the expense of nature and its wildlife; its high time we give something back to nature. This is the single best opportunity to restore salmon anywhere in the Northwest.

Sincerely, James C. Roberts

[redacted]

Received
DSC-TWE
DEC 27 19
C569 OLYM

THINGS TO DO TODAY

DATE 12-15-94

Sarah Bransom

I support the preferred alternative of removing the dams! It is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law."

Sincerely.

William Mann

CONTINENTAL
Full Service Quality Printers
13751 Lake City Way N.E. • Seattle, Washington 98125 • (206) 362-6903 • FAX (206) 367-1711
Continental Printing Incorporated

Received
DSC-TWE
DEC 27 1994
C570 OLYM 404-06

Dec. 16 1994

Dear Ms. Bransom -

I Support the Preferred Alternative of Dam Removal on the Elwha River. I feel They Never Should Have Dammed the River And Ruined the Salmon Run. And its About Damn time Someone Did Something About it.

Sincerely

[redacted]

Kelly D. Maier

Received
DSC-TWE
DEC 27 1994
C571 OLYM 404-06

Dec 17 1994

Dear Ms. Branson

I am writing to express my support for the preferred alternative of dam removal on the Elwha River. Those dams need to be taken out in order to restore the salmon runs while there are still some of the original genetic stock remaining.

Thank you
Sincerely

Alan Murray

no address on card

Received
DSC-TWE
DEC 27 1994
C572 OLYM 404-06

We support ~~them~~ removing the dams! It is the only way to fully restore the Elwha River!! The salmon must be saved!

Elizabeth DeVino
June DeVito

James & Elizabeth DeVito
[redacted]

Received
DSC-TWE
DEC 27 1994
C573 OLYM 404-06

Dear Mr. Bransom,

I would like to support the removal of dams on the Elwha River. I would like to see the salmon runs restored.

Thank you,

Rae Colborne

Rae Colborne
[redacted]

Received
DSC-TWE
DEC 27 1994
C574 OLYM 404-06

Dec. 16. 1994

Dear Ms. Bransom

I am writing to express my support for the preferred alternative of dam removal on the Elwha River. Those dams need to be taken out as soon as possible in order to restore fully the legendary salmon runs while there are still some of the original genetic stock remaining.

Thank You

Sincerely

B. Setzer
[redacted]

Received
DSC-TWE

DEC 27 1994
C575 04/M 404-06

CT-4113

SNOQUALMIE FALLS
Washington
A view from the bottom of the falls.
Photo by Ray Atkeson

SEATTLE
PM
DEC
A 1994
WASH

December 25, 1994

Hello:
I support DEIS proposal to remove both dams on the Elwha. Thank you for your consideration.

Kay Danfield
2549 NE 106th Pl
Seattle, WA 98125

PRINTED IN U.S.A.

Post Card

Sarah Bransom
NPS
Western Team
P.O. Box 25287
Denver, CO 80225-0287

Published/Distributed by Smith Wholesale Co., P.O. Box 1574, Fayetteville, NC 28302

Received
DSC-TWE

DEC 28 1994
C578 04/M 404-06

[redacted]

December 23, 1994

Ms. Sarah Bransom
National Park Service
Western Team
12795 West Alameda Parkway
Denver, CO 80225-0287

Dear Ms. Bransom:

Subject: Elwha River Ecosystem Restoration Draft Environmental Impact Statement Released 10-4-94

Re: Memo to Dr. Brian D. Winter dated 11-8-93

The referenced memo is my response to the Elwha Report to Congress dated September 13, 1993. This referenced memo is to be included as part of my response to the Elwha River Ecosystem Restoration Draft EIS.

In Appendix I, "Disposition of Project Lands," you discuss the proposed use of the acquired lands in this project. It is known and stated that the present project lands associated with the Elwha Dam, including Lake Aldwell, are open and accessible to the general public. It is requested that this access be maintained and improved in your final copy of the EIS.

Your final copy of the EIS needs to provide a legal easement for an Elwha Public trail with a minimum width of 12 feet adjacent or in close proximity to the Elwha River channel starting at the present Elwha Dam site and up to the McDonald Bridge crossing. This legal easement needs to provide for a minimum of five access points to the Elwha public trail.

In the draft EIS, the Olympic National Park has done an outstanding job presenting their recommendations for the utilization of the project lands. We need to give strong consideration to Alternative "C" with the "developed zone"

ending at the dam operator's house. Port Angeles is a major retirement community in our country, and we need to support these senior people. The Alternative "C" does provide these people an opportunity to utilize the Park and other senior tourists who may visit our Park.

Your work on this draft EIS is appreciated. A response from you indicating that you have received my comments would also be appreciated.

Youre truly,

Joe Michalczik

JM:AW

Attachment

[redacted]

November 8, 1993

Dr. Brian D. Winter, Team Leader
Elwha Restoration Interagency Team
National Marine Fisheries Service
7600 Sand Point Way N.E.
Seattle, WA 98115

Dear Brian:

Re: The Elwha Report, Section,
Disposition of Elwha Project Lands

The section, *"Disposition of Elwha Project Lands,"* does not mention or provide access to these lands for the general public. In Section 4, *"Development and Use by the State,"* it is noted that no state agency is interested in the management of these lands.

There was a meeting to provide input on the dispoeition of the project lands in the Clallam Courthouse on April 14, 1993. The attendance was limited to government agencies, two large industries, and a few land owners. The general public was not aware of this meeting. It was stated in thie meeting, *"there would be a public hearing on the disposition of the project lands at a later date."* At this date, there has not been a public hearing on the diepoeition of the project lands. I trust that the general public will be given the opportunity to receive the same information that was provided in the meeting on April 14, 1993.

The general public will be asked to financially support the acquisition of the two projects and removal of the two dams. This is an extremely large sum of money that we will have to pay. It is, therefore, reasonable that we be given the opportunity to have access to these project properties.

Presently the Elwha Project Lands are accessible to the general public. Thie access may be difficult, but the lands are accessible. It is requested that thie accees be maintained and improved in the final copy of the Elwha Report.

The final copy of the Elwha Report needs to provide a legal easement for an Elwha public trail with a minimum width of 12 feet adjacent to or in close proximity to the Elwha River channel starting at the present Elwha Dam site and up to the McDonald Bridge croesing. This legal easement would provide for a minimum of five acceee points to the Elwha public trail.

The Olympic National Park in the future management of the Glines Project Lands has done an outstanding job in providing access for the general public. See pages 172 through 175. They have provided descriptions of proposed public trails and campgrounds while meeting the criteria for an enviromentally-sensitive area. It is requested that the legal easement for the Elwha public trail in the final copy of the Elwha Report be given this same level of management planning.

Your cooperation on this request is sincerely appreciated.

Sincerely,

JM:AW

J. Michalczik

cc: M. Finnerity
C. Hoffman

December 23, 1994

Received
DSC-TWE
DEC 28 1994
C579 OLYM/J04-06

Ms. Sarah Bransom
National Park Service
DSC-TWE-Planning
12795 Alameda Parkway
Denver, Colorado 80225-0287

RE: Elwha River Ecosystem Restoration Draft Environmental Impact Statement

Dear Ms Bransom.

Thank you for the opportunity to provide comments on the Draft Environmental Impact Statement (EIS) for the Elwha River Ecosystem Restoration Project.

KEY POINTS

1. **Removal of both the Elwha and Glines Canyon dams is the only viable alternative for fully restoring the Elwha River ecosystem.**
2. **A thorough assessment of all federal, state, local, and private funding sources to accomplish removal of the Elwha and Glines Canyon dams must be undertaken.**
3. **A cost benefit analysis must be undertaken in order to assess the benefits of dam removal and therefore justify the costs of the project.**
4. **Cost estimates for the project must be further refined and all reasonable economies utilized in order to minimize the cost of the project.**
5. **A Citizens Advisory Committee should be established to help guide implementation of the project.**

DISCUSSION

1. **Removal of both the Elwha and Glines Canyon dams is the only viable alternative for fully restoring the Elwha river ecosystem.**

The only way to meet the goals of the Elwha Restoration Act (i.e. full restoration of the Elwha ecosystem) is to remove both the Glines Canyon and Elwha Dams.

The draft EIS states that only the removal of both dams will provide good to excellent chances that all of the major fish runs, save sockeye, could be restored. Each of the remaining alternatives does not provide a high enough probability for restoration of the majority of the runs to merit recommendation, or to meet the intent of the Act.

The lack of silt, gravel, and woody debris transport below the dams has also caused problems that are noted in the draft EIS including erosion of the Elwha River delta, receding of the barrier beach at Freshwater Bay, and the erosion of Ediz Hook. These problems, would eventually be very costly to correct. This is especially true of the erosion of Ediz Hook. The Hook is essential to the protection of the deep water harbor and Port of Port Angeles.

Removal of both dams is the only alternative that will return the natural flow regime to the river system and therefore commence the correction of these problems An additional benefit would be that gravel would again be transported to lower areas of the river in order to provide for spawning by anadromous fish.

Finally, the proposed alternative would also improve shellfish abundance near the river mouth which is currently suppressed due to the lack of silt transport into the area.

2. **A thorough assessment of all federal, state, local, and private funding aources to accomplish removal of the Elwha and Glines Canyon dams must be undertaken.**

It is imperative that a thorough analysis of all available funding source be conducted, and that all reasonable funding sources identified by the analysis be sought to obtain equitable funding for the project.

It is not reasonable or practical to expect that all funding for the project will be provided by the federal government. The utilization of local and state sources such as the state Public Works Trust Fund and Clean Water Fund must be explored In additional the possibility of funding from private sources must also be explored in order to ensure that costs are equitably and creatively distributed. No stone should be left unturned for providing project funding.

3. **A cost-benefit analysis must be undertaken in order to assess the benefits of dam removal and therefore justify the costs of the project.**

This is a critical need that must be immediately undertaken if the project is to remain viable Recently, questions have begun to surface about the cost-effectiveness of the project as well as the overall cost of the project.

One of the first efforts related to the Implementation Plan EIS must be to identify accurate cost estimates for each of the dam removal scenarios, and well as all of the benefits from dam removal including:

- Increased recreational and commercial fish catches;
- Increases in shellfish abundance,
- Reversal of the erosion of Ediz Hook;
- Stabilization of the barrier beach at Freshwater Bay; and,
- Stabilization of the eastern edge of the Elwha River Delta.

A thorough cost-benefit analysis must then be developed that includes cost comparisons with other current and proposed fisheries restoration and enhancement projects.

4. **Cost estimates for the project must be further refined and all reasonable economies utilized in order to minimize the cost of the project.**

Costs estimates currently found in the Elwha Report must be thoroughly examined for accuracy since many of the estimates appear to be unrealistic. Due to budget constraints at all levels of government (federal, state and local) this cannot be a Cadillac project To quote Billy Frank, Chair of the Northwest Indian Fisheries Commission "We just need to get the dams out and let nature do it's thing".

A "Lean and Mean" approach is imperative if the project is to remain viable

5. **A Citizens Advisory Committee should be established to help guide implementation of the project.**

The next phase of the project calls for development of an Implementation Plan EIS. In order to assist with development of the Implementation Plan EIS and to ensure that all interested parties including local residents, intervenors, state and federal agencies, Indian Tribes and businesses are providing ample input into this process, a Citizens Advisory Committee should be formed under the Federal Advisory Committee Act.

This approach would ensure exceptional public review of and participation in the project. It would provide for greater public awareness of the project, especially at the local level.

This approach would help to build the type of partnership between the Park Service, interest groups, the business community and local citizens that is absolutely necessary for successful completion of the project.

In addition, the Citizens Advisory Committee could assist with determining the most cost-effective way to complete the project, and could provide regular input on the progress of the project.

In conclusion, as a sportsman and a conservationist I strongly support removal of both the Elwha and Glines Canyon Dams as the only way to effect the goals of the Elwha Restoration Act. Once the alternative selection has been made it is critical that the other work items that I have outlined be commenced in order to ensure the viability and ultimate success of the project.

Sincerely,

William E. O'Neil Jr.

Wiliam E. O'Neil Jr.

Received
DSC-TWE
DEC 28 1994
C580 OLYM 404-06

23 December 1994

Sarah Bramson
U.S.D.I. National Park Service
Elwha River Project
P O. Box 25287
Denver, CO 80225-0287

Dear Ms. Bramson:

I am writing this letter to express my support for the removal of the Elwha River dams in Olympic National Park. I sincerely hope the National Park Service will not delay or scrap the removal of these dams. The most politically expedient and cost effective option is to continue with the removal of the dams now that the Park Service has received support from all of the affected parties. This is a terrific opportunity to restore an entire river's lost salmon habitat and important riparian habitat for other species in Olympic National Park. As the National Park Service has determined, the dams as they exist provide little to no benefits for anyone aside from a couple of timber mills in Port Angeles.

I find it disturbing that the U.S. government would even consider scrapping this project after spending years of labor and a significant amount of money trying to achieve scientific and political concensus on this project. If the general goal of this administration and Congress is to slim down government in order to more efficiently carry out the mandates of Congress it would seem to make sense to ***continue*** projects that are supported by a majority of the interested parties.

Please consider my comments when the decision is made whether to continue with this removal of the dams. I would like to be kept apprised of any further developments on this issue. Thank you very much for your time and consideration.

Sincerely,

Merri Martz

Merri Martz
[redacted]

Received
DSC-TWE
DEC 28 1994
C581 OLYM 404-06

Dec 14, 1994

To whom it may concern:

We support legislation & government action that will promote protection of salmon runs, salmon spawning habitat, & controlling the fishing industry to prevent over-fishing.

[redacted] [redacted]

no address on envelope

Received
DSC
DEC 28 1994
C582 OLYM 4M-06

Sara Brannon N.P.S.,
P.O. Box ~~80225~~ 25287, Denver, 80225-0287
Reference the Draft E.I.S. for
Elwha River Ecosystem Restoration

We urge you to promote the
efforts to remove the two dams
on the Elwha River. This river
formerly held six species of
salmon.

The dams were built illegally
& without license & believe the
owner of these dams should
assist in the removal of the dams.

Sincerly
Bill Walduck
[redacted]

Received
DSC
DEC 28 1994
C573 OLYM 4M-06

To whom it may concern,

In Regards to the River dams it would be a
Great pleasure should you know you help me in some way see
it through. And you close down the Elwha in Help Restore
Free the salmon there as a stream I will do Everything
in my power if you will do likewise to help the situation
Thanks you very much.

Sincerely,
Thomas R. Cuff

no address on envelope

Re[illegible]
D[illegible]

DEC 28 1994
C584 OLYM 404-06

November 23, 1994 **Direct Line 654-2429**

Sara Bransom
National Parks Service , Elwa River Project
Denver Service Center , PO Box 25287
Denver, CO 80225-0287

Re: **Draft Environmental Impact Statement**
Elwha River Ecosystem Restoration

Dear Ms. Bransom:

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration. This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympia Peninsula. I strongly support the Secretary's recommendation to remove both dams and to restore the ecosystem in its entirety.

Sincerely,

Jack Ludwig

NAME
ADDRESS

[redacted]

[redacted]

Received
DSC-TWE

DEC 28 1994
C585 OLYM 404-06

December 23, 1994

Sara Branson
National Park Service, Elwah River Project
P.O. Box 25287
Denver, CO 80225-0287

Subject: Elwah EIS, Comment on

I support the preffered alternative of removing the dams.
It ie the only way to fully restore the Elwah River ecosystem
and it's ealmon runs ae required by law.

It would be a crime to let thie opportunity to eave thie
important salmon run, with the watereh ed above the dame
protected by the National Park.

Lets get the job done and save the litigation.

Sincerely youre,

Alice C Bond

Alice C. Bond

[redacted]

DATE 12/22/94

Received
DSC
DEC 28 1994
C586 OLYM 401-06

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

RE: Elwha River Draft EIS

Dear Ms. Bransom:

I am writing to comment on the draft Environmental Impact Statement for restoring the Elwha River. I strongly support the preferred alternative of removing the dams. This is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law.

Restoring the Elwha is the single best opportunity to restore salmon anywhere in the Northwest, and it would provide tremendous economic benefits for the region. Please move forward with funding and implementing this important project.

Sincerely,

Derinda Cantrell

NAME DERINDA CANTRELL
ADDRESS [redacted]

As a former Washington State resident, I urge you to help the Olympic peninsula return to its former pristine condition!

Received
DSC-TMS
DEC 28 1994
C587 OLYM 401-06

DEAR MS. BRANSOM

I SUPPORT THE PREFERRED ALTERNATIVE OF DAM REMOVAL. I FEEL THIS IS THE ONLY WAY OF RESTORING SALMON POPULATIONS. THANK YOU.

SINCERELY,

[redacted]

DAN WICKHAM

Received
DSC-TWE
DEC 28 1994
C588 OLYM 404-06

Dec. 22. 1994

Dear Sarah Branson —

I urge you to support the alternative of removing the dams on the Elwha River on the Olympic Peninsula. We must reverse the ongoing loss of our great heritage — the wild salmon.

Thank you.

Suzanne Christiansen

Mr. & Mrs. John V. Christiansen
[redacted]

Received
DSC-TWE
DEC 30 1994
C590 OLYM 404-06

December 23, 1994

Sarah Branson
NPS, Elwha River Project
PO Box 25287
Denver, CO 80225-0287

Dear Ms. Branson:

I am writing to express my support for the preferred alternative to fully remove the Elwha Dam and restore natural conditions for the Elwha system and salmon. Please take whatever steps you can to see that this project goes forward as proposed in a timely manner.

Sincerely,

Marc Liverman

MARC LIVERMAN
[redacted]

NOV 30, 1994

Received
DSC
DEC 30 1994
C591 OLYM 404-06

To: MS SARA BRAMSON
NAT PARK SERVICE

SUBJ: ELWHA RIVER PROJ

P.O. BOX 25287
DENVER, CO
80225-0287

Ref Draft environmental impact statement
Elwha River Eco Sys Restoration

DEAR MS BRAMSON;

This is an important project for the N'W Eco system and I support the ELWHA River dam removals. We need to restore the 6 species of Pacific Salmon that could use this river.

These dams exist without proper permits or licencing and the Park system is morally obligated to cease the continuing existance of these illegal structures.

Sincerely

GARY NOEL
[redacted]

11/30/94

Received
DSC
DEC 30 1994
C592 OLYM 404-06

SARA BRAMSON
NPS
ELWHA RIVER PROJECT
P.O. BOX 25287
DENVER, CO 80225

RE: DRAFT ENV. IMPACT STATEMENT
ELWHA RIVER ECOSYSTEM RESTORATION

I WOULD LIKE TO TAKE THIS OPPORTUNITY TO VOICE MY SUPPORT IN THE REMOVAL OF BOTH DAMS ON THE ELWHA RIVER SYSTEM. THESE DAMS WERE PUT IN WITH OUT PROPER LICENSING & WITHOUT REGARD TO THE SIX SPECIES OF PACIFIC SALMON THAT HAVE BEEN DISPLACED.

SINCERELY

MIKE LOWERS
[redacted]

Received
DSC-TWE
DEC 30 1994
C593 olym 404-06

John A. Dyer
[redacted]

Sarah Bransom
National Park Service
DSC-TWF-Planning
12795 Alameda Parkway]
Denver, CO 80225-0287

Dear Ms. Bransom:

I first backpacked up the Elwha River into Olympic National Park during Christmas week in 1951 and remember well this special area.

Removing the dams from the Elwha River will go a long way to bringing the river back to its once earlier glory. Please add my name to those commending you for a fine environmental impact statement and support for removal of the dams.

I may not live to see the fully restored river, but I look forward to those much younger than I having that opportunity.

Sincerely,

John A. Dyer

John

POLLY DYER

[redacted]

December 22, 1994

Received
DSC-TWE
DEC 30 1994
C594 olym 404-06

Ms. Sarah Bransom
National Park Service
DSC-TWF-Planning
12795 Alameda Parkway
Denver, Colorado 80225-0287

Dear Ms. Bransom:

Re: Elwha River Ecosystem Restoration, Draft Environmental Impact Statement, October 1994, together with the January 1994 Elwha Report and Appendices, submitted pursuant to Public Law 102-495 are excellent documents.

The analyses of the several alternatives and their advantages and disadvantages of removing both the Glines Canyon and Elwha Dams compared to the retention of one or the other or both is excellent.

I fully concur the only guarantee that all but perhaps one species of anadromous fish throughout the Elwha River system and tributaries can eventually be recovered will be the removal of both dams.

I am also particularly interested in the return of spawned-out salmon carcasses to restore nutrient cycles to the upper river and as a source of food for current indigenous wildlife, whose forebears were once dependent on these. It is anticipated that these returned food sources will have a favorable result for a more natural balance of the populations of native wildlife within Olympic National Park.

Restoring the Elwha River ecosystem will take time and dollars. Hopefully, the dam removal and sediment management can be done at a relatively low cost. But, it can also be anticipated that the economic impact to the Port Angeles area will be a positive benefit, including jobs created for dam removal, re-establishing a major fishery, increased benefits from visitors coming to witness the miracle of bringing back a

natural free-flowing river with its salmonids in the river and shellfish in the estuary.

No small benefit will be the beginning toward fulfillment of treaty agreements with the Lower Elwha Tribe when it can also gain economically from a recovered fishery and culturally with potential accesss to their ancient historical sites.

Thank you for an excellent Draft Environmental Impact Statement. One of the bright prospects as the Twentieth Century draws to a close and the Twenty-first Century approaches is the recognition of the need to restore the important Elwha River ecosystem on the Olympic Peninsula in the State of Washington. You have my full support.

Sincerely,

Patty Dyer

cc: Secretary of Interior Bruce Babbitt
Senator Slade Gorton
Senator Patty Murrary
Congressman Norm Dicks
Congressman Jim McDermott

Dec 24, 1994

Received
DSC-TWE
DEC 30 1994
C595 OLYM 404-06

Sarah Bransom
National Park Service
P.O. Box 25287
Denver, CO 80225-0287

RE: Elwha River Draft EIS

Dear Ms Bransom:

I am writing to you regarding the draft Environmental Impact Statement for restoring the Elwha River.

I support the Preferred alternative of removing the dams. This is very important to me. This is the only way to fully restore the Elwha River ecosystem and its salmon runs as required by law.

Restoring the Elwha is the single best opportunity to restore salmon anywhere in the Northwest. It would also provide many economic benefits for the region.



Please move forward with funding and implementing this important projects

Sincerely,

Kelly Fe Cantrell

[redacted]



Elwha River Ecosystem and Fisheries Restoration
Environmental Impact Statement(s)
National Park Service
Department of the Interior

Received
DEC 30 1994
C597 0491 464-06

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your coments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): MARIANN MANN

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY): The Mountaineers

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED: None I think enough studies have been done and that it is time to take action. The Park Service has been very thorough in its studies

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

OTHER COMMENTS: I support the preferred alternative to remove both dams. I commend the Park Service for this bold and scientifically credible decision. It is an unprecedented opportunity to bring back the salmon when

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

runs all over the West Coast are declining. There is no longer any economic justification for the dams, while there is great justification for returning the salmon runs. They will bring more recreation and tourist dollars to Peninsula towns and restore NW pride in its heritage.

Removing the dam that exists within the park boundaries will remove an eyesore and also send a message to visitors that our most special areas (National Parks) are natural no place for hydropower developments. let us return the area to its pristine condition in order that my children, grandchildren & great grandchildren can experience nature's beauty no matter how much the world changes.

Thank you for the opportunity to make these comments.

- Mariann Mann

Elwha River Ecosystem and Fisheries Restoration Environmental Impact Statement(s)

National Park Service

Department of the Interior

Received DSC-TWE DEC 30 1994 C598 ALYM 404-06

COMMENT FORM

Please use this form or a similar format to provide us with your written comments on the first, draft programmatic environmental impact statement released October 14, 1994, or to give early, scoping input on the second, Implementation EIS.

Turn in your comments at the public workshop or send them to: Sarah Bransom, National Park Service, Western Team, 12795 West Alameda Parkway, Denver, CO 80225-0287.

Please return your comment form on or before December 23, 1994.

NAME (PLEASE PRINT CLEARLY): Jacqueline Schindler

MAILING ADDRESS: [redacted]

AFFILIATION (IF ANY):

ADDITIONAL ISSUES YOU BELIEVE SHOULD BE STUDIED:

FISH PASSAGE MEASURES SHOULD HAVE BEEN GIVEN AS MUCH CONSIDERATION AS DAM REMOVAL. FISH RUNS ARE DEPLETED IN ALL NORTH OLYMPIC PENINSULA RIVERS NOT JUST WHERE THE DAMS ARE.

* ECONOMIC IMPACT TO THE NORTH PENINSULA AREA SHOULD HAVE PRIORITY IN ANY DECISION.

REASONS WHY YOU BELIEVE ADDITIONAL STUDY IS NEEDED:

1) FISH RESTORATION HAS NOT BEEN ATTEMPTED IN ANY LARGE SCALE WAY IN ANY OF THE OTHER AREA RIVERS
2) PRESENT ECO-SYSTEMS THAT HAVE BEEN IN PLACE FOR MANY YEARS WOULD NOW BE DESTROYED ~~BEEN~~
3) ECONOMIC IMPACTS NEED TO HAVE AS MUCH CONSIDERATION AS ENVIRONMENTAL IMPACTS
4) ENERGY FROM DAMS CAN NOT BE REPLACED AT SAME LOW COST.

OTHER COMMENTS:

THE CITIZENS OF THE NORTH PENINSULA WERE GIVEN VERY LITTLE RESPECT OR CONSIDERATION IN THE ORIGINAL PROCESS. THERE ARE MANY WHO LIVE HERE, HAVE BUSINESSES HERE, AND HAVE RAISED

Please continue your comments on the back of this sheet if needed.

COMMENTS CONTINUED:

THEIR FAMILIES HERE, WHO WERE NOT INCLUDED IN THE PROCESS UP TO THIS POINT.
THE TRIBES AND THE PARK PERSONNEL WERE GIVEN MUCH MORE INPUT THAN THE REST OF THE CITIZENS. THIS IS OUR HOME. WE RESPECT THE WILDLIFE AND FORESTS AS MUCH, AS OR MORE, THAN THOSE WHO VISIT. WE ALSO REALIZE THAT IF OUR CHILDREN ARE TO BE ALLOWED TO RAISE THEIR CHILDREN HERE THERE MUST BE AN ECONOMIC BASE TO ALLOW THEM TO EARN A LIVING IN A FREE MARKET SOCIETY.
OUR MILLS ARE OUR ECONOMIC BASE. THEY NEED LOW COST POWER AND WATER TO OPERATE, BUT THE REST OF US DO NOT WANT OR NEED TO SUBSIDIZE THEIR POWER COSTS by HAVING OUR RATES RAISED DUE TO AN ADDITIONAL TRUNK LINE FROM BPA. THE DAMS CURRENTLY SUPPLY THEIR NEEDS AND SHOULD be ALLOWED TO CONTINUE TO DO SO.

WITH THE ECONOMIC CRISIS FACING OUR COUNTRY AT THIS TIME, THE LAST THING WE NEED TO DO IS SPEND UNTOLD MILLIONS TO REMOVE DAMS TO RESTORE A FISH RUN THERE ARE MANY MORE PRESSING PROBLEMS TO ATTEND TO.

THANK YOU FOR YOUR CONSIDERATION

[redacted]

Janelle Keller
Legislative Liaison
Washington State Grange
PO Box 1186
Olympia, WA 98507-1186

Received
DSC-TWE
DEC 30 1994
C 600 OLYM 604-06

Dear Ms. Keller,
I am not in favor of having the Elwha Dams removed.

I think you could approve salmon enhancement program including installation of fish ladders.

Sincerely,

Gladys B. Johnson

Dear Sir. Dec. 2 '94
I am not in favor of having the Elwha Dams removed.
I think you could approve the salmon enhancement program including installation of fish ladders.
Sincerely
Gladys B Johnson
[redacted]

G Johnson
53224 Hwy 112
Port Angeles WA
98363



Jeanelle M Keller
Legislative Liaison
Wash. State Grange
P.O Box 1186
Olympia Wash.
98507-1186

[redacted]
Dec. 7, 1994
[redacted]

Received
DSC-TWE
DEC 30 1994
C 601 OLYM 404-06

Washington State Grange
PO Box 1186
Olympia, WA 98507-1186

Dear Grange,

I was happy to read in the Grange News that you wanted to know what Grangers felt about removing Dams.

Mr. Larson's letter (Mr. Stachorek's letter) reflects the high percentage of not only Grangers, but the fact knowing people of the area.

Also note the underhanded methods of the Daily News.

Help the people of P.A. (Port Angeles).

Sincerely,

Bob Hoyle
[redacted]

Received
DSC-TWE
DEC 30 1994

[redacted]

Dec. 2, 1994

Washington State Grange
PO Box 1186
Olympia. WA 98507-1186

The Elwa Dams.

I lost my left leg above the knee about a year ago, so I do a lot of reading. I have read many articles on the removing of the Elwa Dams on the Elwa River. I cannot see any reason this should be cone. They are productive Dams and their removal would be of no good. only just to pacify the Indian Tribes. Fix them so the fish an go above them and call it good.

Anything that has been in service as long as they have, surely have proved their value. They are producing clean Electric power not dirty Nuclear power. Also, to Mr. Bruce Babbitt, tearing down is not what his job is, his job is to build up our resources.

Sincerely,

Carl L. Erinsley

P.S. Age 81

[redacted]

THE ELWHA DAMS

I LOST MY LEFT LEG ABOVE THE KNEE ABOUT A YEAR AGO, SO I DO A LOT OF READING. I HAVE READ MANY ARTICLES ON THE REMOVING OF THE ELWHA DAMS ON THE ELWHA RIVER. I CANNOT SEE ANY REASON THIS SHOULD BE DONE. THEY ARE PRODUCTIVE DAMS AND THEIR REMOVAL WOULD BE OF NO GOOD. ONLY JUST TO PACIFY THE INDIAN TRIBES. FIX THEM SO THE FISH CAN GO ABOVE THEM AND CALL IT GOOD.

ANYTHING THAT HAS BEEN IN SERVICE AS LONG AS THEY HAVE, SURELY HAVE PROVED THIER VALUE. THEY ARE PRODUCING CLEAN ELECTRIC POWER NOT DIRTY NUCLEAR POWER. ALSO TO MR. BRUCE BABBITT TEARING DOWN IS NOT WHAT HIS JOB IS, HIS JOB IS TO BUILD UP OUR RESOURCES.

SINCERLY
Carl L. Erinsley

[redacted]

P.S
AGE 81

December 3, 1994

Received
DSC-TWE
DEC 30 1994
C 603 OLYM 404-06

Janelle M Keller
Legislative Liaison,
Washington State Grange,
P.O. Box 1186, Olympia, Washington
98507-1186

Dear Janell M Keller:

I sent this letter to the Editor Andrew, of the Royal Review news paper, Royal City Washington. I live here at Desert Aire between Two Dams, Priest Rapids, and the Wanapum , Mr Bruce Babbitt also said that these two damse should be removed.

As I state in this letter the dams in the State of Washington is not the cause of the demise of the salmon runs, the true cause is over fishing , power boating in the area where the salmon are trying to establish runs, and the pollution of the rivers streams lakes and oceans by cities .

On all our waters, rivers, streams, lakes and oceans , we must establish sanctuaries , where the salmon can live and produce with out any interference .

In this letter to the Editor of the Royal Review News Paper I stats that all fishing in and power boating on the Columbia river between Richland and Wenatchee should be stoped. The Columbia river from Richland to the Priest Rapids dam is and should be a free running river, this is what the Salmon require, the lakes behind the two dams create still water for the raising of the salmon smolts. There isn't any problem getting the Salmon around these two dams, or the the dams on the Elwha river.

Sincerely
C.E. "Buck" Johnson
C.E.(Buck) Johnson
[redacted]
[redacted]

P.S. I am a member of
the Outlook Grange
Yakima Valley.

Received
DSC-TWE
DEC 30 1994
C 605 OLYM 404-06

[redacted]

Dec. 7, 1994

J. M. Keller, Leg. Liaison
Washington State Granga
Olympia, WA 98507-1186

Dear Janalle:

I am not in favor or removing (destroying) either the Elwha or the Glines Canyon Dams.

Dams ware constructed to be permanent structures, to provide electrical energy, water storage, flood control and in many instances, to provide irrigation water.

I think it is irrational to even think of moving such fine structures.

Respectfully yours, I am,

John A. Skok
John A. Skok
member of The Valley Granga # 1048
Valley, WA

12-02-94 06:38 P.01

Received
DSC-TMT
DEC 30 1994
C 606 OLYM 404-06

ELWHA DAM PROPOSAL;

To whom it may concern;

In care of Janelle M. Keller, Washington State Grange Legislative Liaison.

A POSITIVE PROPOSAL FOR ELWHA DAMS;

The negative report for the removal of Elwha dams should be replaced by a positive action that would take advantage of the Elwha's unique adaptability for a pilot program, a laboratory to document procedures for making dams and natural barriers an asset to anadromous fish.

The Elwha has, isolation from other systems, Pristine areas, Two dams and impoundments, a dissatisfaction with, and a willingness to change the present system, very possibly in a negative manner.

Use this area for a pilot program to Maximize, egg production, fertilization, hatch and growth of natural smart smolt, their return to sea, past dams and impoundments, and to then use the entire returning run for commercial products while still maximizing egg production.

To follow such a proposal on one sheet of paper requires a positive imagination, to use more detail would over tax attention span, but I will try.

PROPOSAL;

Install a system now used in the Cowlitz hatchery for total capture, sort, ripen, and spawning of salmon for fertilized eggs.

This system should be as close as practical to river mouth, this will shorten the time the salmon deteriorates commercially in fresh water.

Only the spawners are kept. Jacks, excess males, and others are sold commercialy on bid.

Spawners are ripened in ponds, stripped of eggs and sperm, carcass sold for highest and best use, (Smoked Salmon), then the production of fertilize eggs is maximized, eggs are planted in pristine areas in gravel or in stream incubators. (Alaska uses an in stream incubator, R46 which has a capacity of 1,700,000 eggs), smaller ones are recommended.

Some eggs could also be hatched at a hatchery and smolt planted at an age determined most beneficial in pristine areas above dams.

The fish would be gathered above first dam and transported past the second in pilot programs, by a flume, truck, barge, or as one hatchery personal suggested, a floating flume or pipe down the impoundment, past second dam face, and to the sea.

Turbines would be screened and bypassed in the most efficient and economical manner, documenting success and failures for other systems.

This is a small easily handled river, comparatively speaking, but what could be learned and proven here in a pilot program could solve many questions. You would need no ladders, the spawner would not get past the collection point. you would have the option to let steelhead and other sport fish pass, you would be in control to maximize and document, then adapt to other systems.

My gut feeling this program would cost one hundred times less than all the studies and political posturing that have given us endangered specie.

But what is more important it would give positive answers and how to live with dams and maximize fish.

DON'T TEAR DOWN THE DAMS, USE THEM FOR POSITIVE ACTION. THEY ARE UNIQUE.

J.M.O'Sullivan

[redacted]

MALAN & ASSOCIATES
P.O. Box 510
Edmonds, WA 98020
Bus: (206) 771-3232 • Res: (206) 771-8072

Received
DSC-TMT
JAN 3 1995
C 607 OLYM 404-06

12/26/14

Dear Ms Branson;

I am writing to comment on the draft environmental impact statement for Elwha River ecosystem restoration.

This is an important project for the Pacific Northwest which will provide tremendous economic benefits for the Olympic Peninsula. I strongly support the Secretary's recommendation to remove both dams and to restore the ecosystem in its entirety

Sincerely
Joe Malan

Received
DSC-T.
JAN 3 1995
C 608 OLYM 404-06

[redacted]

December 31, 1994

[redacted]

Ms. Sarah Bransom
National Park Service
Elwha River Project
PO Box 25287
Denver, Colorado 80225-0287

Dear Ms. Bransom:

I am very familiar, professionally and as a sports fisherman, with the Elwha River, all the other rivers along the north coast of the Olympic Peninsula, and the marine shoreline and intertidal regions of this coast. I am also knowledgeable of the salmonids that use these habitats, and the sad history ~~that~~ of the two Elwha dams that have led to despoliation of huge amounts of this habitat.

There is now the remarkable opportunity to remove these dams and restore this magnificent river. Not only the biological but also the economic benefits to the region would be huge. There is no logical excuse for any action by the Park Service and the federal government except for the removal of these dams and the restoration of this river.

Sincerely yours,

Arthur H. Whiteley

Arthur H. Whiteley, Professor Emeritus
Department of Zoology
University of Washington

DANIEL J. EVANS ASSOCIATES

Received
DSC-TWE
JAN 3 1995
C 609 OLYM 404-06

December 23, 1994

Ms. Sarah Brensom
Netlonel Perk Service
Post Office Box 25287
Denver, Colorado 80225-0287

Re: Elwha River Dreft Environmentel Impect Stetement (DEIS)

Dear Ms. Bransom:

I am writing to express my continued support for the removel of Glines Canyon end Elwhe dams on the Elwha River, Washington. As you know, the Elwha River historically was one of the lergest producers of salmon end steelhead on the Olympic Peninsula. The two dams deny access to approximately 65 miles of premium quality salmon end steelheed spewning habitat. The construction and continued operation of the dams has greatly undermined the long term health of the Elwhe River ecosystem, e unique and importent netlonal park resource.

I heve encoureged dem removal for many yeers. In 1992, I supported efforts to pess the Elwhe River Restoretion Act. The Elwha Restoration Act remains en important fremework for restoretion efforts. Nevertheless, I am aware of, and to e certain extent share, concerns raised in Congress end locelly ebout implementetion. Consequently, I believe mejor changes ere needed in the implementation proposel to eddress those concerns end put restoration efforts beck on track.

Most importantly, costs must be seriously constrained. It is important et this juncture to elimlnete alternatives which don't represent the most cost-effective meens to achieve environmentel and economic objectives. As e region, we have limited financial resources for salmon restoretion end must prioritize to ensure we are using them wisely. To do so, it is important to demonstrate that the economic impects of dem removal compare fevorably with other current end proposed restoretion end enhencement meesures.

Furthermore, funding should come from e number of sources. The National Park Service should make e financiel commitment to restoretion commensurete with its responslbllitles as leed egency. The Bureeu of

TELEPHONE: (206) 447-4700 · FACSIMILE: (206) 447-4701 · TELEX 32-8024
1111 THIRD AVENUE, SUITE 3400 · SEATTLE, WASHINGTON 98101

Reclamation and the Fish and Wildlife Service also have important roles to play. Nevertheless, discussions should continue with the Corps of Engineers and the National Marine Fisheries Service to determine whether they can perform dam removal, sediment management and fish restoration tasks in a more cost-effective manner. State and local participants also must come forward with a significant and equitable cost sharing proposal. This is important to demonstrate a credible non-federal commitment to the project.

Finally, local concerns must be determined and addressed. Issues such as water quality and recreation access must be taken seriously and specific measures should be included in the proposed action to protect these resources. Critically important is the assurance of reliable and reasonably-priced power and water supplies for the people and businesses of Clallam County.

Removing the Elwha dams will allow for the utilization of pristine habitat already protected within the Olympic National Park. This is an important restoration project and I urge you to continue forward without delay.

Sincerely,

DANIEL J. EVANS
U.S. Senator 1983-1988
Governor, State of Washington 1965-1977

Received
DSC-TWE
JAN 04 1995
C611-olym-404-06

[45] From: Brian Winter at NP-OLYM 1/3/95 8:03AM (820 bytes: 14 ln)
To: Heidi West at NP-DSC, Lisa Norby at NP-DSC
Subject: Comment on Elwha
---------- Forwarded ----------
From: Fran Andrews 12/30/94 12:32PM (604 bytes: 14 ln)
To: Brian Winter
Subject: Comment on Elwha
---------- Message Contents ----------

You received a call from a lady who wantsd her comments taken over the phone:

She is a former Washington Native who comes to Olympic to visit the hot springs and her brother fishes here. Would like it known that she thinks ws should blow up the dams and plan total restoration.

Vivian Rose
[redacted]

Received
DSC-TWE
JAN 05 1995
C613 OLY/M 4/4-06

NORTHWEST
wholesale incorporated

1567 N Wenatchee Ave.
Wenatchee, WA 98801

(509) 662-2141
Fax (509) 663-4540

P.O. Box 1649
Wenatchee, WA 98807-1649

Sara Brenson Elwha River Project
National Park Service PO Box 25287
Denver Service Center 80225-0287

Re Draft Environmental I.S.
Elwha River Ecosystem Restoration

Support the removal of the dams on the Elwha River

Sincerely
Joseph F. Wood

[redacted]

NORTHWEST WHOLESALE WAREHOUSES • AREA CODE 509

BREWSTER	CASHMERE	CHELAN	OMAK-OKANOGAN
689-3580	782-3363	682-5821	422-4441

OROVILLE	TONASKET	WENATCHEE
476-2411	488-2234	662-2141

Received
DSC-TWE
JAN 05 1995
C614 OLY/M 4/4-06

THINGS TO DO TODAY

DATE 12/15/94

DEAR MRS. BRANSON,
I SUPPORT THE PREFERRED ALTERNATIVE OF REMOVING THE DAMS! IT IS THE ~~ONLY~~ WAY TO FULLY RESTORE THE ELWHA RIVER ECOSYSTEM AND ITS SALMON RUNS AS REQUIRED BY LAW.

SINCERELY,

JASON WEEKS

[redacted]

CONTINENTAL
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13751 Lake City Way N.E. • Seattle, Washington 98125 • (206) 362-6903 • FAX (206) 367-1711
Continental Printing Incorporated

Bibliography

Allendorf, F.W., and S.R. Phelps.
1980 *Loss of Genetic Variation in a Hatchery Stock of Cutthroat Trout.* Trans. Am. Fish. Soc. 109:537-543.

Bachtold, L.M.
1982 *Destruction of Indian Fisheries and Impact on Indian Peoples,* in The Historic and Economic Value of Salmon and Steelhead to Treaty Fisheries in River Systems in Washington, Oregon and Idaho. Meyer-Zangri Associates: A Report to the Bureau of Indian Affairs.

Bliton, W.S.
1989 *Elwha River Dams,* in Engineering Geology in Washington, Volume 1 : Washington Division of Geology and Earth Resources Bulletin 78.

Bonneville Power Administration,
1986 *Calculation of Environmental Costs and Benefits Associated with Hydropower Development in the Pacific Northwest.* Portland, DE-AC79-83BP11546.

Bonneville Power Administration
1993 *Wholesale Power and Transmission Rate Projections, 1993-2014, and Historical Wholesale Power Rates, 1939-1992.*

Bonneville Power Administration
1994 *Natural Gas Forecast Update.* Final Analysis. B. Clark.

Brannon, E.L., and W.K. Hershberger
1984 *Elwha River Fall Chinook Salmon.* p. 169-172 in J.M. Walton and D.B. Houston (eds.) Olympic Wild Fish Conference, Peninsula College, Port Angeles, Washington.

Brown, Gardner M. and H. Hodges
1994 *Economic Impacts on Port Angeles Due to the Closure of the Salmon Fishery.* University of Washington and University of Puget Sound. A Report to the City of Port Angeles.

Bureau of Reclamation, U.S. Department of the Interior
1995 *Elwha River Ecosystem and Fisheries Restoration Project: Overview of Ground-water Conditions.* Elwha Technical Series PN-95-3. Boise, Idaho.

Bureau of Reclamation, U.S. Department of the Interior
1995 *Cost Range - Elwha River Restoration Project.* Boise, Idaho.

Calambokidis, J., G.H. Steiger, and J.C. Cubbage
1987 *Marine Mammals in the Southwestern Strait of Juan de Fuca: Natural History and Potential Impacts of Harbor Development in Neah Bay.*

Charles, Frances, Chairperson, Lower Elwha S'Klallam Tribe
1994 Personal Communication, at Elwha; December, 1994

Clallam County Economic Development Council
1994 *Investor's Guide to Clallam County.*

Clallam County Planning Division, et. al.
1994 *Port Angeles Regional Watershed*, draft report.

Commerce, Secretary of
1993 *Report of the Secretary of Commerce to the Congress of the United States Concerning U.S. Actions Taken on Foreign Large-Scale High Seas Driftnet Fishing Pursuant to Section 206 of the Magnuson Fishery Conservation and Management Act.* Department of Commerce, Washington D.C.

Dames and Moore
1989a *Test and guidelines for Water Resource Development, Lower Elwha Klallam Tribal Hatchery Aquifer*, Clallam County, Washington.

Dames and Moore
1989b Letter to Tony Sample of Delhur Industries.

Davidson, W.S., T.P. Birt, and J.M. Green
1989 *A Review of Genetic Variation in Atlantic Salmon, Salmo salar L., and its Importance for Stock Identification, Enhancement Programs and Aquiculture.* J. Fish Biol. 34:547-560.

Dilley, S., and R. Wunderlich
1990 *Juvenile Chinook Passage at Glines Canyon Dam, Elwha River, 1989–1990.* U.S. Fish and Wildlife Service, Fisheries Assistance Office, Olympia, Washington.

Federal Insurance Administration
1980 *Flood Insurance Study*

Federal Register.
1992 *Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for the Washington, Oregon, and California Population of the Marbled Murrelet*, Vol. 57, No. 191, October 1.

Fish and Wildlife Service, U.S. Department of the Interior
1994 *Elwha Dam and Glines Canyon Dam Hazardous Waste Status.*

Forest Service, U.S. Dept. of Agriculture, Forest Ecosystem Management Team
1993 *Forest Ecosystem Management: An Ecological, Economic and Social Assessment..*

Forest Service and Bureau of Land Management
1994 *Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl.*

Gearin, P., R. DeLong, and B. Ebberts
1988 *Pinniped Interactions with Tribal Steelhead and Coho Fisheries in Puget Sound.* NMFS-National Marine Mammal Laboratory Manuscript.

Gerdon, Ruth M.
1994 *Revenue Comparisons/Current Expense.* Clallam County Treasurer's Office.

Harza Northwest, Inc.
1992 *Development of Groundwater Production at the Elwha Rearing Channel.*

Haynes, Richard W.
1990 *An Analysis of the Timber Situation in the United States: 1989-2000.* U.S. Forest Service, General Technical Report RM-l99.

Hoines, L.
1994 *Washington State Statistical Report 1991.* Washington State Department of Fish and Wildlife, Olympia, Washington.

Hoines, L.
1995 *Washington State Statistical Report 1992.* Washington State Department of Fish and Wildlife, Olympia, Washington.

Interior, Department of the
1994 *Elwha Dam and Glines Canyon Dam Hazardous Waste Status.*

James River II, Inc.
1988 Response to May 28, 1987, request for additional information, Prepared by Hosey & Associates.

Jones, R.P., and E.O.Salo
1986 *The Status of Anadromous Fish Habitat in the North and South Fork Toutle River Watersheds, Mount St. Helens, Washington, 1984.* Fisheries Research Institute Report FRI-UW-8601, University of Washington, Seattle, Washington.

Loomis, John
1995 *Measuring the Economic Benefits of Removing Dams and Restoring the Elwha River: Results of a Contingent Valuation Survey.* Colorado State University, Fort Collins, Colorado.

Lucas, R.E.
1985 *Recovery of game fish populations impacted by the May 18, 1980, eruption of Mount St. Helens. Part I. Recovery of winter-run steelhead in the Toutle River watershed. Report No. 85-9A,* Washington Department of Game Fisheries Management Division.

Lucas, B. and J. Lock.
1991. *Wild Steelhead Spawning Escapement Estimates for Southwest Washington Streams: 1988-1990.* Report No. 91-12. Washington Department of Wildlife, Olympia, Washington.

Martin, D.J., L.J. Wasserman, R.P. Jones, and E.O. Salo.
1984. *Effects of Mount St. Helens Eruption on Salmon Populations and Habitat in the Toutle River.* Fisheries Research Report FRI-UW-8412, University of Washington, Seattle, Washington.

Meyer, Philip A., Meyer Resources, Inc.
1994a *Discussion and Extended Analysis of Energy Portions of the FERC Draft Staff Report on Glines Canyon and Elwha Hydroelectric Projects, Washington.*

Meyer, Philip A., Meyer Resources, Inc.
1994b "A Preliminary Estimate of the Effects on Income, Employment and Direct Business Revenue in Clallam County from Removal of Elwha and Glines Dams."

Meyer, Philip A., R. Lichtkoppler, R. B. Hamilton, C.L. Borda, D.A. Harpman and P.M. Engel
1995 *Elwha River Restoration Project: Economic Analysis. A Report to the U.S. Bureau of Reclamation, the National Park Service and the Lower Elwha S'Klallam Tribe.* Davis, California.

Mullen, J., K. Williams, G. Rhodus, T. Hillman, and J. McIntyre
1992 *Production and Habitat of Salmonids in Mid-Columbia River Tributary Streams.* U.S. Fish and Wildlife Service. Monograph I.

Nehlsen, W., J. E. Williams, and J. A. Lichatowich.
1991 *Pacific Salmon at the Crossroads: Stocks at Risk from California, Oregon, Idaho, and Washington.* Fisheries 16(2):4-21

NOAA (National Oceanic and Atmospheric Administration), National Marine Fisheries Service and Washington Department of Wildlife
1992 *Environmental Assessment: Use of an Acoustic Barrier for Controlling California Sea Lion Predation on Wild Steelhead in the Lake Washington Ship Canal.* National Marine Fisheries Service, Seattle, Washington.

Office of Management and Budget
1992 *Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs.* Circular No. A-94.

Ranney Method Western
1977 *Report on Performance Test, Groundwater Collector No. 1.* City of Port Angeles, Washington.

Ranney Method Western
1991 Letter to Ebasco Environmental.

Ranney Method Western
1994 *Controlled Pumping Test, Ranney Collector No.1,* City of Port Angeles, Washington.

Rawding, D
1995 Letter from Dan Rawding to Lee Van Tussenbrook, Washington Department of Fish and Wildlife, North Bonneville, Washington.

Reisenbichler, R.R., and J.D. McIntyre
1977 *Genetic Differences in Growth and Survival of Juvenile Hatchery and Wild Steelhead Trout, Salmo gairdneri.* J. Fish. Res. Board Can. 34:123-128.

Reisenbichler, R., and S. Phelps
1989 *Genetic Variation in Steelhead (Salmo gairdneri) From the North Coast of Washington.* Can. J. Fish. Aquat. Sci. 46:66-73.

Research Group, The
1991 *Oregon Angler Survey and Economic Study.* Corvallis: A Report to the Oregon Department of Fish and Wildlife

Schwartz, Maurice L.
1994 *Beach Geomorphology at the Elwha River Delta in Connection with Removal of the Elwha and Glines Canyon Dams.* Coastal Consultants, Inc., Bellingham, Washington.

Seiler, D.
1991. *Coho Production Potential Above Snoqualmie Falls.* Letter to Bob Gerke, Washington Department of Fisheries, Olympia, Washington.

Seiler, D., S. Neuhauser, and M. Ackley
1981 *Upstream/Downstream Trapping Project, 1977-1980.* Progress Report No. 144, Washington Department of Fisheries, Olympia, Washington.

Stone and Webster Engineering Corporation
1991 *Evaluation of an Inclined Penstock Screen at Elwha Dam, Spring 1990 Test Results.* Prepared for Electric Power Research Institute, Palo Alto, California

Summit Technology
1993 *Impacts of Dam Removal on Elwha River.* Draft Report to Lower Elwha Klallam Tribe.

Tabor, R.W. and Cady, W.M.
1978 *Geologic Map of the Olympic Peninsula, Washington.* U.S. Geological Survey Miscellaneous Investigations Series Map I-994, 2 sheets, scale 1:125,000.

U. S. Department of the Army Corp of Engineers
1987 *Flood Damage Reduction Study*

U. S. Department of the Interior
1994 *The Elwha Report.*

USGS (U. S. Geological Survey)
1978 *Angeles Point Quadrangle*

U. S. Geological Survey
1985 *Elwha Quadrangle*

Walters, K. L., Haushild, W. L., and Nelson, L. M.
1979 *Water Resources of the Lower Elwha Indian Reservation, Washington.* U. S. Geological Survey Open-File Report 79-82.

Warner, W.W., Jr.
1961 *Fish Handling Facilities for Baker River Project.* J. Power Div., Proc. Amer. Soc. Civil Eng. November 1961, p. 23-54.

Washington Department of Fisheries
1971 *Elwha River Fisheries Studies.* Management and Research Division, Department of Fisheries.

Washington Department of Fisheries, Puget Sound Treaty Indian Tribes and Northwest Indian Fisheries Commission
1990 *1990 Puget Sound Sockeye Salmon Forecasts and Management Recommendations.*

Washington Department of Fisheries, Washington Department of Wildlife, and Western Washington Treaty Indian Tribes
1993 *1992 Washington State Salmon and Steelhead Stock Inventory.* Washington Department of Fisheries, Olympia, Washington.

Washington Department of Wildlife
1993 *Species of Special Concern in Washington.*

White, William, D. Stalheim and R. James,
1992 *Clallam County Profile. Clallam County, WA.*

Winter, B.D.
1989 *Elwha River Adult Steelhead Tagging and Catch Monitoring Project Final Report.* Technical Report TR 89-04, Point No Point Treaty Council, Kingston, Washington.

Winter, B.D.
1990 *A Brief Review of Dam Removal Efforts in Washington, Oregon, Idaho and California.* NOAA Technical Memorandum NMFS F/NWR-28. National Marine Fisheries Service, Seattle, Washington.

Wunderlich, R.S., and S. Dilley
1986 *Field Tests of Data Collection Procedures for the Elwha Salmonid Survival Model.* U.S. Fish and Wildlife Service, Fisheries Assistance Office, Olympia, Washington.

Wunderlich, R.S., S. Dilley, and E. Knudsen.
1989 *Timing, Exit Selection, and Survival of Steelhead and Coho Smolts at Glines Canyon Dam.* U.S. Fish and Wildlife Service, Fisheries Assistance Office, Olympia, Washington.

Wunderlich, R., and C. Pantaleo
1995 *A Review of Methods to Re-Introduce Anadromous Fish in the Elwha River.* Western Washington Fishery Resource Office, U.S. Fish and Wildlife Service, Olympia, Washington.

Glossary

aggradation - The build-up of river sediment by natural deposition.

alevin - A newly hatched salmon or trout with a yolk sac still attached.

anadromous fish - Species of fish such as salmon that hatch in fresh water, spend a large part of their lives in the ocean, and return to fresh water to reproduce.

angler - A person who fishes with a rod and reel.

armoring - Progressive removal of finer grained sediments from a streambed, leaving a layer of coarser sediment that is less easily eroded.

attenuate - To weaken or reduce the force of something such as flood waters.

avoided costs - Money that is not spent because something is done differently.

bedload - A mobile layer of coarse sediment (sand, gravel, cobble or rock fragments) transported along the bottom of a stream.

biomass - The total amount of living organisms of one or more species in an animal community, often expressed as weight per unit of volume or area.

brood - Young animals or fish born or hatched at one time.

brood stock - Animals or fish with a common origin that are kept for breeding.

brood year - Animals or fish born or hatched during one year.

cubic feet per second - A unit of measurement for flowing water.

Department of the Interior - The federal department preparing this environmental impact statement to analyze the impacts of fully restoring the anadromous fisheries and ecosystem of the Elwha River. The National Park Service is a bureau in the department and the lead agency in the preparation of this EIS.

discount rate - The rate at which future benefits and costs are discounted because people prefer to consume now rather than later, or because of the existence of a positive interest rate.

ecology - The study of the interrelationships between organisms and their environments.

ecosystem - A community of living organisms interacting with one another and with their physical environment, such as a forest, pond or estuary.

EIS - Environmental Impact Statement. The National Environmental Policy Act of 1969 requires that an environmental impact statement be prepared to evaluate the potential environmental affects of major federal actions. An EIS identifies and analyzes activities that might affect the human and natural environment.

electric weir - A structure that uses electric current to prevent entry by fish into an area.

ethnohistory - The study of the past ways of life of a group of people or culture based upon historical accounts such as diaries, explorer's journals, and other written records.

Eicher screens - Experimental technology to minimize fish injuries that places a screen within a penstock and uses water velocity to carry juvenile salmonids past the screen and into a bypass pipe, thus avoiding turbines.

escapement - The number of fish of a stock that returns to a lake or stream.

estuary - Area near the mouth of a river where fresh and salt water intermix.

FERC - Federal Energy Regulatory Commission, the federal agency authorized to issue licenses to operate and maintain nonfederal hydroelectric projects. This EIS has adopted much of a draft environmental impact statement prepared, updated and renamed the Draft Staff Report by FERC in March 1993.

fish ladder - An ascending structure of intervening pools of water that is built to allow fish to migrate upstream.

floodplain - Land adjacent to a river that is periodically subject to flooding.

food chain - The succession of organisms in a community according to the order of predation from one to another, usually lower, member, as a source of food.

forebay screens - A structure placed in the forebay of a powerhouse to discourage adult fish from being attracted to the powerhouse's water discharge.

hydroelectric - Generating electricity by conversion of the energy of running water.

indigenous - People or animals that live or naturally occur in a specific area or environment.

intertidal - The area between the extremes of high and low tide.

juvenile - Any fish that is not adult, the life stage of salmon and trout living in fresh water before entering the ocean.

kelt - Adult anadromous fish that spawn in fresh water and return to the ocean. They are called kelts upon their return to the sea.

levee - A dike or embankment of earth or concrete used to prevent water from overflowing the river channel during times of flooding.

meander - Winding course of a river.

megawatt - A unit of electrical energy.

mitigation - Activities that will lessen or eliminate adverse environmental impacts.

morphology - The three dimensional characteristics or form of a feature such as a river channel.

National Register of Historic Places - The official list maintained by the federal government of historic properties, including objects, sites, structures, landscapes and traditional cultural properties that are significant to the nation's heritage and worthy of preservation.

native anadromous fisheries - Populations of anadromous fish that historically inhabited a river.

net economic benefit - Total economic benefit, minus associated cost.

NEPA - National Environmental Policy Act, a 1969 federal law that requires the consideration of environmental effects of proposed federal actions.

non-market value - Values associated with a good or service over and above its selling price.

nonpoint - Refers to the source of sediment or pollution (such as runoff from a field) that cannot be linked to a discrete, identifiable source.

outmigration - The movement of juvenile fish from fresh water to the sea.

outplanting - Placement by humans of eggs and young juveniles.

palustrine - Nontidal wetlands dominated by trees, shrubs, persistent emergent vegetation, and emergent mosses or lichens, or non-vegetated wetlands less than 20 acres in size.

passerines - Songbirds.

polychlorinated biphenyls (PCBs) - Hazardous chemical compound that may be present in electrical power transformers.

present value - Value measured in present-day dollars.

Ranney well collector - A large diameter caisson with a series of perforated screen pipes radiating near its base to collect water by induced infiltration under a riverbed.

raptors - Birds of prey such as red-tailed hawks and bald eagles.

real costs or benefits - Benefits or costs that do not include the effects of inflation.

real rate - A rate of change that does not include anticipated inflation.

red tide - A bloom of microscopic marine organisms. Shellfish eaten during red tide events can be poisonous to humans.

residualism - Typically refers to anadromous trout or salmon juveniles that remain in fresh water instead of migrating to the ocean.

riparian - Vegetation found along waterways and shorelines that is adapted to moist growing conditions and occasional flooding.

riprap - Large angular stones that are used to build or strengthen river banks, and structures such as dikes, levees, and spits.

salmonid - Fish within the family Salmonidae, e.g., salmon and trout.

Section 106 - Section 106 of the National Historic Preservation Act requires that all federal agencies provide the Advisory Council on Historic Preservation an opportunity to comment on all proposed undertakings that could have effects on historic properties eligible for or listed on the National Register of Historic Places.

self-sustaining - Capable of maintaining oneself independently.

sessile - Organisms that are permanently attached or fixed to the bottom or substrate.

setback levee - A levee that is located away from a stream or river, typically to minimize impacts to the floodplain.

shoals - Shallow area in a body of water.

smolt - A young anadromous salmonid migrating downstream that has undergone the physiological changes necessary to survive in salt water.

spawn - The deposition and fertilization of eggs by organisms such as salmon and trout.

spawning gravels - Gravel of suitable size and shape in a stream that is used by salmonids as the substrate in which they lay their eggs.

species - A group of individual plants or animals (including subspecies and populations) that have common characteristics and interbreed.

spillway - A channel for overflow of water, as from a reservoir.

substrate - The base upon which plants or animals live or grow.

subtidal - Area of water below the low tide level.

successional forests - Stages of a forest that evolve from bare ground to climax community.

trap and haul - Collecting or trapping and transporting fish upstream for reproductive purposes. This is commonly done with trucks where structures such as dams have impeded fish migration.

turbidity - Visible undissolved solid material suspended in water. Increasing the turbidity of the water deceases the amount of light that can penetrate.

turbine - A rotary engine activated by the flow of a fluid that is subject to pressure in contact with vanes located on a rotating shaft.

watershed - The area drained by a river system.

wetland - Lowland area such as a swamp or marsh that is periodically saturated with water and supports vegetation adapted to wet areas.

Public Law 102-495 • Elwha Restoration Act

PUBLIC LAW 102–495–OCT. 24, 1992 106 STAT. 3173

Public Law 102–495
102d Congress

An Act

To restore Olympic National Park and the Elwha River ecosystem and fisheries in the State of Washington.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

Elwha River Ecosystem and Fisheries Restoration Act. Conservation.

SECTION 1. SHORT TITLE.

This Act may be referred to as the "Elwha River Ecosystem and Fisheries Restoration Act".

SEC. 2 DEFINITIONS.

For the purposes of this Act:

(a) The term "Administrator" means the Administrator of the Bonneville Power Administration.

(b) The term "Commission" means the Federal Energy Regulatory Commission.

(c) The term "electric power" means electric peaking capacity or electric energy or both.

(d) The term "Elwha Project" means the Elwha River Hydroelectric Project, Federal Energy Regulatory Commission Project Number 2683, including appurtenant works and project lands, located on the Elwha River in Clallam County, Washington.

(e) The term "Glines Project" means the Glines Canyon Hydroelectric Project, Federal Energy Regulatory Commission Project Number 588, including appurtenant works and project lands, located on private and public lands both within and without the exterior boundaries of Olympic National Park on the Elwha River in Clallam County, Washington.

(f) The term "local industrial consumer" means the owner of the pulp and paper mill located on Ediz Hook in Port Angeles, Washington, that, on the date of enactment of this Act, receives and consumes the electric power produced by the Projects, or its successors or assignees.

(g) The term "local preference customer" means Port Angeles City Light.

(h) The term "owner" means the current owner of the Projects or its successors or assignees, but shall not mean the secretary, the United States, or

any other entity acquiring title to the Projects or features thereof pursuant to the terms of this Act.(i) The term "Park" means Olympic National Park.

(j) The term "Project" or "Projects" means either or both the Elwha Project and the Glines Project, including project works and appurtenant lands.

(k) The term "project replacement power" means electric power delivered to the local industrial consumer to replace losses of electric power generation from the Projects following their acquisition by the secretary pursuant to this Act, in an amount not to exceed 172.088 gigawatthours of energy in any year.

(l) The term "secretary" means the secretary of the interior.

(m) The term "State" means the State of Washington, including its agencies and departments.

SEC. 3 ACQUISITION OF PROJECTS.

Effective date

(a) Effective sixty days after submission to the Congress of the report referred to in section 3(c), the secretary is authorized to acquire the Elwha and Glines Canyon Projects, and all rights of the owner and local industrial consumer therein, subject to the appropriation of funds therefor: *Provided*, That the secretary shall not acquire the projects unless he has determined pursuant to subsection (c) that removal of the Project dams is necessary for the full restoration of the Elwha River ecosystem and native anadromous fisheries and that funds for that purpose will be available for such removal within two years after acquisition.

(b) The consideration for acquisition of the Projects shall be $29.5 million and no more, to be paid by the secretary to the owner and local industrial consumer at the time of acquisition, and shall be conditioned on a release of liability providing that all obligations and liabilities of the owner and the local industrial consumer to the United States arising from the Projects, based upon ownership, license, permit, contract, or other authority, including , but not limited to, project removal and any ecosystem, fish and wildlife mitigation or restoration obligations, shall, from the moment of title transfer, be deemed to have been satisfied: *Provided*, That the United States may not assume or satisfy any liability, if any, of the owner or local industrial consumer to any federally recognized Indian Tribe nor shall such liability to the Tribe, if any, be deemed satisfied without the consent of such Tribe.

Reports

(c) The secretary shall prepare a report on the acquisition of the Projects and his plans for the full restoration of the Elwha River ecosystem and the native anadromous fisheries and submit such report on or before January 31, 1994, to the Appropriations Committees of the United States Senate and the United States House of Representatives, as well as to the Committee on Energy and Natural Resources of the Senate and the Committees on Energy and Commerce, Interior and Insular Affairs, and Merchant Marine and Fisheries of the Untied States House of Representatives. The report shall contain, without limitation:

(1) The precise terms of acquisition of the Projects, with an analysis of the costs, in addition to the consideration set out in section 3(b), and potential liabilities and benefits, if any, to the Federal Government resulting from the acquisition and all other actions authorized under this Act;

(2) Alternatives, in lieu of dam removal, for the restoration of the Elwha River ecosystem and the native anadromous fisheries and wildlife of the Elwha River Basin, consistent with the management plan of the Park, the rights of any Indian tribe secured by treaty or other Federal law, and applicable State law. The report shall include feasibility studies for each alternative considered and a definite plan for removal. Such definite plan shall include the timetable after conveyance for removal of the dams and

the plans for removal and disposal of sediment, debris, and other materials consistent with all applicable environmental laws and a detailed explanation of all costs of removal. In conducting the feasibility studies and in the preparation of the definite plan, the secretary is authorized to use the services of any Federal agency on a reimbursable basis and the heads of all Federal agencies are authorized to provide such technical and other assistance as the secretary may request. For each alternative considered, the secretary shall estimate total costs, environmental risks and benefits, the potential for full restoration of the Elwha River ecosystem and native anadromous fisheries, and the effect on natural and historic resources (together with any comments made by the Advisory Council on Historic Preservation for any properties which are listed, or eligible for listing, on the National Register of HIstoric Places).

(3) Specific proposals for management of all lands or interests therein acquired pursuant to this Act which are located outside the exterior boundaries of the Olympic National Park. The secretary shall specifically address the suitability of such lands, or portions there of, for addition to the National Wildlife Refuge System; National Park System; transfer to the Lower Elwha Klallam Tribe in trust for tribal housing, cultural, or economic development purposes in accordance with a plan developed by the Lower Elwha Klallam Tribe in consultation with the secretary; and development and use by the State. Upon acquisition, all lands and interests therein within the exterior boundaries of the Park shall be managed pursuant to authorities otherwise applicable to the Park. For the purposes of protecting the Federal investment in restoration, that portion of the river outside the Park on which the Federal Government will acquire both banks shall, upon such acquisition, be managed in accordance with the declared policy of section 1(b) of Public Law 90–542, except that modifications necessary to restore, protect, and enhance fish resources and to protect the existing quality of water supplied from the river are hereby authorized.

(4) Specific proposals and any Federal funding and the availability of that funding that may be necessary to protect the existing quality and availability of water from the Elwha River for municipal and industrial use from possible adverse impacts of dam removal.

(5) Identification of any non-Federal parties or entities, excluding Federally recognized Indian tribes, which would directly benefit from the commercial, recreational, and ecological values that would be enhanced by the restoration of the Elwha River ecosystem and fisheries, if the secretary believes that such parties or entities should assume some portion of the cost involved in the restoration, together with the specific cost-share provisions which the secretary deems necessary and reasonable.

(d) In preparing his report, the secretary shall consult with appropriate State and local officials, affected Indian tribes, the Commission, the Environmental Projection Agency, the secretary of Energy, the Administrator, the Pacific Northwest Power Planning Council, the secretary of Commerce, and the Advisory Council on Historic Preservation, as well as interested members of the public. In addition, the secretary shall afford an opportunity for public comment on the report prior to its submission to the Congress.

(e) Upon the appropriation of the sum provided for in section 3(b) for the acquisition of the Projects and the determination that dam removal is necessary, the owner and local industrial consumer shall convey to the United States, through the secretary, title to the Projects, including all property and all other rights and interests. Upon such conveyance and payment of the consideration

as provided in section 3(b), and without further action by the United States, title shall transfer and vest in the United States. The owner and local industrial consumer shall be released from any further liability, to the United States, as provided in section 3(b), and the acquisition from the owner and local industrial consumer shall be deemed to be completed.

SEC. 4. ECOSYSTEM AND FISHERIES RESTORATION.

(a) Effective sixty days after submission of the report referred to in section 3(c) and following the conveyance in section 3(e), the secretary is authorized and directed, subject to the appropriation of funds thereof, to take such actions as are necessary to implement–

Effective date.

(1) the definite plan referred to in section 3(c)(2) for the removal of the dams and full restoration of the Elwha River ecosystem and native anadromous fisheries;

(2) management of lands acquired pursuant to this Act which are located outside the exterior boundaries of the Park; and

(3) protection of the existing quality and availability of water from the Elwha River for municipal and industrial uses from possible adverse impacts of dam removal.

(b) The definite plan referred to section 3(c)(2) must include all actions reasonably necessary to maintain and protect existing water quality for the City of Port Angeles, Dry Creek Water Association, and the industrial users of Elwha River water against adverse impacts of dam removal. The cost of such actions, which may include as determined by the secretary , if reasonably necessary, design, construction, operation and maintenance of water treatment or related facilities, shall be borne by the secretary. Funds may not be appropriated for removal of the dams, unless, at the same time, funds are appropriated for actions necessary to protect existing water quality.

(c) Nothing in this section shall be construed as an entitlement for which a claim against the United States may be made under the Tucker Act.

SEC. 5. PROJECT OPERATION AND REPLACEMENT POWER.

(a) Notwithstanding any other provision of law, neither the Federal Energy Regulatory Commission nor any other agency of the Federal Government shall have the authority or jurisdiction to issue a permanent license or similar order with respect to either Project prior to conveyance as provided in section 3(e), except that the Commission shall have jurisdiction under the Federal Power Act and is hereby authorized and directed to issue or maintain in effect annual licenses or authorizations for both Projects, authorizing continued operation of both Projects by the owner and local industrial consumer, such operation to be under such terms and conditions and in accordance with such practices as existed on September 1, 1992, until (1) the date the secretary has acquired title to the Projects or (2) if the secretary's report required in section 3(c) does not provide for dam removal, five years after the expiration of the current annual license or authorization then in effect, after which time the Commission shall have authority under the Federal Power Act to issue appropriate licenses with respect to such Projects to the extent the Commission has jurisdiction over such Projects under such Act on the date of enactment of this Act.

(b) To ensure the availability of adequate electric power supplies to the operating facilities of the local industrial consumer, the Administrator shall, following acquisition of the Projects pursuant to this Act, deliver all project

replacement power required by the operating facilities of the local industrial consumer through the local preference customer at a rate equal to the priority firm rate, or the rate which is then the equivalent of the priority firm rate if that designation is no longer used by the Administrator, as such rate is fixed by the Administrator from time to time, without regard to any new large single load determinations or similar factors. The local industrial consumer shall pay the local preference customer for such project replacement power at the same rate as all other industrial consumers of the local preference customer.

(c) Upon conveyance of the Projects to the Untied States, the secretary shall maintain the dams in a safe condition for the period prior to their removal.

SEC. 6. LEASE OF FEDERAL LANDS.

(a) LEASE OF LANDS TO THE CITY OF PORT ANGELES.—After the secretary makes the determination to remove the dams and actually acquires the projects and funds are appropriated for such conveyance and removal, the secretary is authorized to issue a lease to the City of Port Angeles, Washington, for those lands situated on Ediz Hook, Clallam County, Washington, currently leased to the City under Lease No. DOT–CG123–4811–72, dated April 4, 1972, as amended, except for that parcel of land described in subsection (b)(2). Such lease shall be issued pursuant to the Act of June 14, 1926, as amended (43 U.S.C. 869), for a period of 99 years, beginning on a date to be determined by the secretary, without right of patent.

(b) LEASE OF LANDS TO THE LOWER ELWHA KLALLAM TRIBE.—

(1) After the secretary makes the determination to remove the dams and actually acquires the Projects and funds are appropriated for such conveyance and removal, the secretary is authorized to lease to the Lower Elwha Klallam Tribe that parcel of land situated on Ediz Hook, Clallam County, Washington, described in paragraph (2) for the purposes of the construction and operation of a tribal cultural facility, such as a longhouse or a museum, and associated interpretive and parking facilities. Such lease shall be issued pursuant to the Act of June 14, 1926, as amended (43 U.S.C. 869), for a period of ninety-nine years beginning on a date determined by the secretary, without right of patent.

(2) The parcel of land to be leased to the Lower Elwha Klallam Tribe is that parcel of land lying south of the existing roadway and extending southward to the southern boundary of the land currently leased to the city of Port Angeles (Lease No. DOT–CG13-4811–72, dated April 4, 1972, as amended) and beginning at the north-south line 200 feet east of the western boundary of Out Lot 6 and running easterly 600 feet to the north-south line 300 feet west of the eastern boundary of Out Lot 6.

(3) In addition to the general terms and conditions applicable under the Act of June 14, 1926, as amended (43 U.S.C. 869), the lease to the Tribe shall be subject to the following terms and conditions:

(A) There shall be public access to the beach along the south side of the parcel at all times.

(B) The City of Port Angeles shall have the right to construct and maintain a waterfront trail adjacent to the existing roadway along the north side of the parcel, the location of which shall be determined in conjunction with the secretary.

(C) Parking facilities on the parcel shall be open to the public at all times.

(4) In addition to the terms and conditions described in this section for

the leases to the City and the Tribe, the secretary shall incorporate by reference into each lease the Agreement entered into on August 11, 1992, between the City and the Tribe regarding the use of the adjacent leaseholds.

SEC. 7. TRIBAL LAND ACQUISITION AND DEVELOPMENT.

(a) After the secretary makes the determination to remove the dams and actually acquires the Projects and funds are appropriated for such conveyance and removal, the secretary is authorized to acquire by purchase, and hold in trust in reservation status for the benefit of the Lower Elwha Klallam Tribe, lands in Clallam County, Washington, for housing, economic development, and moorage for the Tribal commercial fishing fleet.

Appropriation authrozation.

(b) There is authorized to be appropriated an amount not to exceed $4,000,000 to carry out the land acquisition purposes of this section.

SEC. 8. SAVINGS.

(a) Nothing in this Act shall abridge or modify existing rights to Elwha River water.

(b) Nothing in this Act shall affect the rights of any Indian Tribe secured by Treaty or other law of the United States.

(c) This Act does not modify any of the Administrator's obligations or require the Administrator to take any actions regarding the protection, mitigation, or enhancement of fish and wildlife or expand those provided for under the Pacific Northwest Power Planning and Conservation Act, Public Law 96–501. Notwithstanding any other provision of law, the Administrator shall not be required to make any expenditures from the Bonneville Power Administration fund for the operation, maintenance, rehabilitation, improvement, or removal, breach, or bypass of the Projects.

SEC. 9. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the secretary of the interior for expenditure through the Assistant secretary for Fish, Wildlife, and Parks and to the secretary of Commerce for expenditure through the National Marine Fisheries Service such sums as may be necessary to carry out the purposes of this Act: *Provided*, That such authorization shall not become effective until sixty days following submission of the report provided for in section (3)(c) of this Act.

Effective date.

Approved October 24, 1992.

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NPS D-253A, June 1995

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