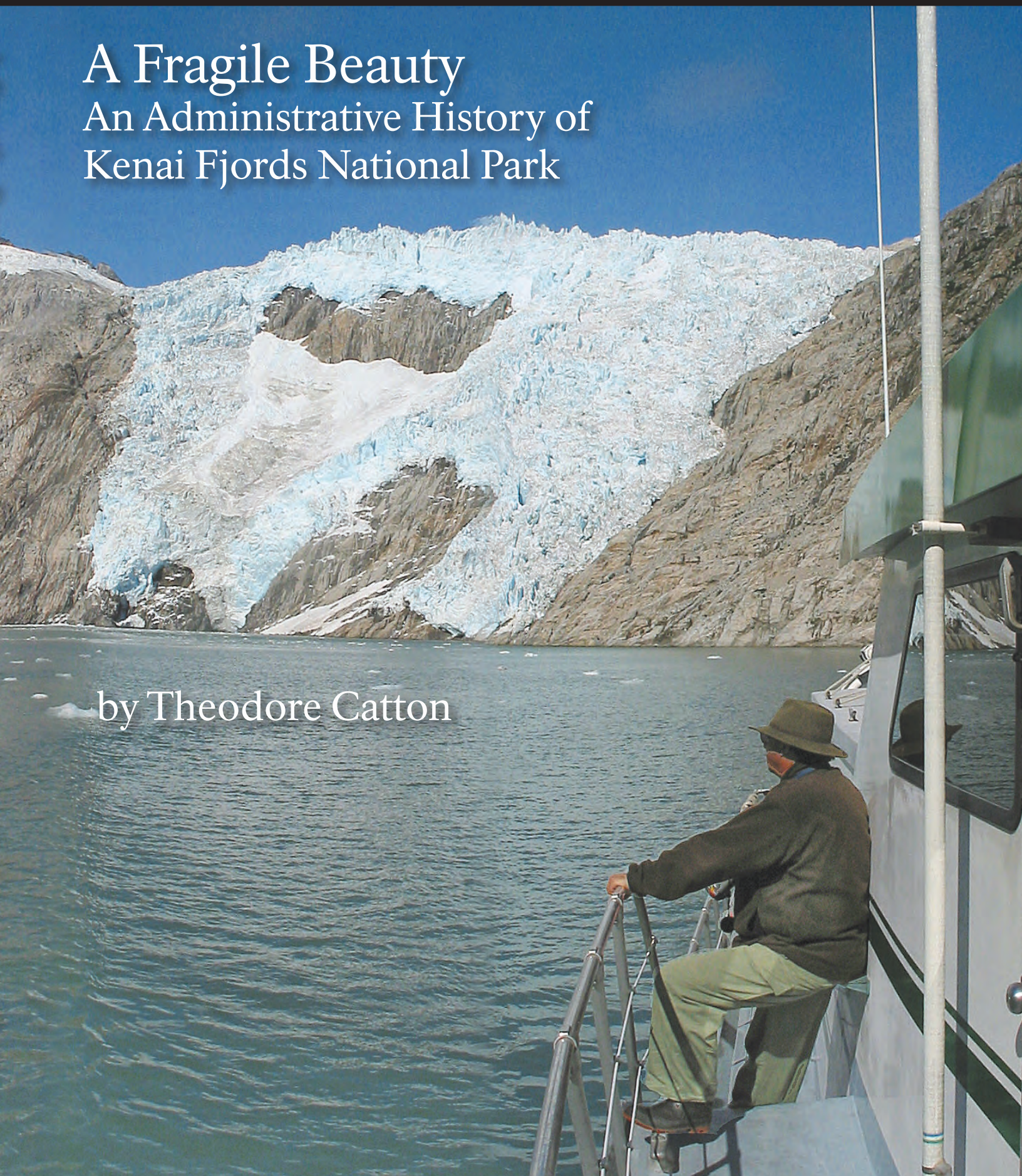
Kenai Fjords National Park

National Park Service
U.S. Department of Interior

A Fragile Beauty
An Administrative History of Kenai Fjords National Park



by Theodore Catton

Cover photo: Park Ranger Doug Capra views Northwestern Glacier from the MV Serac, 2004 *NPS Photo by Jim Pfeiffenberger*

A Fragile Beauty:

An Administrative History of Kenai Fjords National Park

by

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Introduction

Kenai Fjords National Park was established in 1980 by the Alaska National Interest Lands Conservation Act (ANILCA). Section 201(5) designated the park and stated that it would be managed for the following purposes, among others:

> To maintain unimpaired the scenic and environmental integrity of the Harding Icefield, its outflowing glaciers, and coastal fjords and islands in their natural state; and to protect seals, sea lions, other marine mammals, and marine and other birds and to maintain their hauling and breeding areas in their natural state, free of human activity which is disruptive to their natural processes. In a manner consistent with the foregoing, the Secretary is authorized to develop access to the Harding Icefield and to allow use of mechanized equipment on the icefield for recreation.[1]

ANILCA designated a total of ten new national parks, preserves, and monuments, and one new historical park in Alaska. It also made additions to three out of four existing national park system units in Alaska (Fig. 1). The designation of these new areas marked the culmination of a long process of land allocation and land-use planning in Alaska that began with the Alaska Statehood Act of 1958, continued with the Alaska Native Claim Settlement Act of 1971 (ANCSA), and practically ended with ANILCA. The public land conveyances that were made during this two-decade process were breathtaking in their sweep: 103 million acres to the state of Alaska, 44 million acres to Alaska Native corporations, 43.6 million acres to the national park system, 53.8 million acres to national wildlife refuges, and 1.2 million acres included in wild and scenic rivers. One writer referred to this vast partitioning of the public domain in Alaska as “carving the last

[1] Public Law 96-487, December 2, 1980, 94 Stat. 2371.

melon."[2] Indeed, the passage of ANILCA had mythic significance for the whole nation. Much more than a redrawing of political lines on the map of Alaska, it represented the 49th state's transformation from "the last frontier" to "the last wilderness."

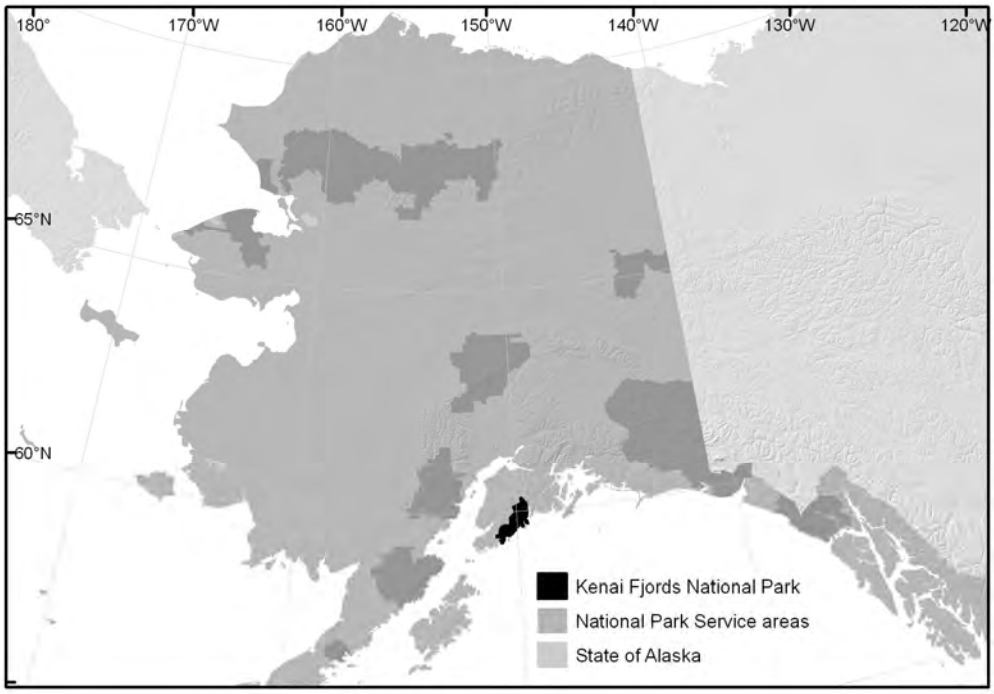

Figure 1 Kenai Fjords National Park and other National Park Service areas in Alaska.

ANILCA was intensely controversial, and as one of the ANILCA parks Kenai Fjords was established in a climate of controversy. At the time, most Alaskans opposed what they saw as an enormous "lock up" of their state's natural resources by the federal government. Many thousands of U.S. citizens outside of Alaska saw the state's land question differently. Dozens of national conservation groups, acting on the basis of broad grassroots support to protect wilderness values in Alaska, came together during the 1970s to form the Alaska Coalition, the strongest environmental lobby that Congress had ever seen. In 1978, when Congress stalled on the legislation, President Carter used his authority under the Antiquities Act to proclaim numerous national monuments. Two years later, Congress finally passed the Alaska lands bill over the state's congressional delegation's strenuous objections, an unusual break with House and especially Senate tradition, where members usually defer to one another on land issues affecting a delegation's own state. However, the state's two senators and one congressman and their congressional allies did manage to extract many concessions from the bill's supporters. The result was a complicated act containing numerous compromises, exceptions, and

[2] William K. Wyant, *Westward in Eden: The Public Lands and the Conservation Movement* (Berkeley: University of California, 1982).

internal contradictions. Among the law's most distinctive provisions, it allowed for subsistence use in most national parks, sport hunting in all national preserves, and traditional forms of access in designated wilderness.

Following passage of ANILCA, the National Park Service (NPS) initiated administration of Kenai Fjords National Park and the ten other new areas under conditions of great adversity. Not only were the ANILCA parks met with deep skepticism by Alaskans, they were given short shrift by the incoming Reagan administration as well. All of the ANILCA parks operated on shoestring budgets through most of the 1980s. By the end of the decade that began to change. In 1988, Kenai Fjords National Park had a miniscule staff of 16 people, which included all permanent, seasonal, part time, and volunteer personnel. Over the following decade, the staff quadrupled in size. Despite remarkable growth in the 1990s, however, Kenai Fjords along with other Alaska parks continued to operate with relatively small staffs and budgets compared to units in the national park system in the Lower 48. For example, the ratio of resource managers to park acres was far lower in Alaska parks than in any park in the Lower 48. But such comparisons were difficult to make. "Alaska national parks are different," it was frequently said – a remark that could apply in one context to ANILCA's subsistence or wilderness provisions and in another context to the ANILCA parks' primitive character. Indeed, this truism was still current in 2009.

Whether offered as a defense or an indictment, a boast or a jab, the statement that *Alaska national parks are different* speaks to an inherent tension within the National Park Service. Some people maintain that the differences introduced by ANILCA are appropriate for the political, economic, and environmental conditions found only in Alaska. In this view, ANILCA properly softened federal protections on parklands in Alaska in the same way that the Alaska Statehood Act and ANCSA had properly conveyed unprecedented amounts of land to the state government and the state's aboriginal peoples respectively. Others complain that the differences go too far or that they are potentially undermining of standards and policies in the rest of the national park system. They distinguish between so-called "hard parks" and "soft parks," the latter characterized by allowance of subsistence hunting, motorized access, and other "traditional uses." The internal tension grew sharper in response to continual sniping by Alaskans who accused the Park Service of bringing in unit managers who were not familiar with the ANILCA exceptions. It led to two perspectives on the future, with one side anticipating that the ANILCA exceptions would not last forever and the other side thinking that the mission to preserve covered those very differences that ANILCA codified. Some in the agency perceive the primitive qualities of the Alaska parks as limitations, while others see those same qualities as the parks' greatest asset.

From an administrative perspective, Kenai Fjords National Park is in many respects the least "Alaskan" of the 49th state's thirteen national parks, preserves, and monuments. By and large, the Alaska national parks, preserves, and monuments are vast

and undeveloped. They are still relatively challenging places for the public to access and enjoy and they are difficult places in which to station personnel. In these respects Kenai Fjords is not typical. In land area, Kenai Fjords is like a big national park in the Lower 48, not gargantuan like so many other Alaska parks and preserves. At 669,983 acres, it is about seven-eighths the size of Yosemite or a little more than double the size of Grand Teton, whereas it is a mere tenth the size of Denali and ranks in eleventh place among the thirteen natural-area units in Alaska. Kenai Fjords is also relatively accessible compared to other Alaska parks. One of just three natural-area units in Alaska accessible by highway (together with Denali and Wrangell-St. Elias), it is the closest of the three to Anchorage. Moreover, the park can be approached via passenger rail and cruise ship, both of which serve the gateway community of Seward. With a population of around

Table 1. National Parklands in Alaska

Unit	Visitation	Rank	Unit	Acreage	Rank
Klondike Gold Rush NHP	975,043	1	Wrangell-St. Elias NP&P	13,175,796	1
Denali NP&P	458,308	2	Gates of the Arctic NP&P	8,472,506	2
Glacier Bay NP&P	438,211	3	Noatak NPres	6,569,904	3
Sitka NHP	304,799	4	Denali NP&P	6,075,029	4
Kenai Fjords NP	284,604	5	Katmai NP&P	4,093,239	5
Katmai NP&P	82,634	6	Lake Clark NP&P	4,030,025	6
Wrangell-St. Elias NP&P	61,085	7	Glacier Bay NP&P	3,283,247	7
Yukon-Charley NPres	11,567	8	Bering Land Bridge NPres	2,697,392	8
Gates of the Arctic NP&P	10,942	9	Yukon-Charley NPres	2,526,512	9
Lake Clark NP&P	5,549	10	Kobuk Valley NP	1,750,716	10
Noatak NPres	1,384	11	Kenai Fjords NP	669,983	11
Kobuk Valley NP	847	12	Cape Krustenstern NM	649,085	12
Bering Land Bridge NPres	796	13	Aniakchak NM&P	601,293	13
Cape Krustenstern NM	745	14	Klondike Gold Rush NHP	12,996	14
Aniakchak NM&P	26	15	Sitka NHP	112	15

Visitation figures are from 2007. Acreage figures represent gross areas. (Source: National Park Service Public Use Statistics Office website.)

3,000 people, Seward offers tourists a plethora of motels, restaurants, gas stations, and other conveniences, as well as a shuttle service to Exit Glacier, a variety of tour boats and water taxis to the fjords, and charter air service for taking scenic flights over the Harding Icefield. With its hospital, schools, public library, and other amenities, Seward also presents a sizable community for park staff. Kenai Fjords National Park personnel do not live in "bush Alaska" nor do they administer the park from afar, as do the staffs of several other Alaska units.

In terms of visitation, Kenai Fjords ranks third among the natural areas behind Denali and Glacier Bay, receiving about a quarter of a million visitors each year. This places it far ahead of Wrangell-St. Elias, which receives about 60,000 annual visitors, and even farther ahead of all the other natural-area units established by ANILCA, most of which receive fewer than 10,000 visitors each year. A large portion of Kenai Fjords visitors come from Anchorage or towns on the Kenai Peninsula. Much like a typical national park in the Lower 48, it draws a significant number of local and in-state visitors.

Kenai Fjords National Park is the only natural-area unit in Alaska that does not have federal subsistence use. All other new areas and additions established under ANILCA allow subsistence hunting, gathering, and fishing by local, rural Alaskans. ANILCA's Title VIII provisions for subsistence use derive from ANCSA, which extinguished Alaska Natives' aboriginal title in the public domain while assuring Alaska Natives the continued right to practice a subsistence lifestyle on public lands. The reasons why ANILCA does not provide for subsistence use in Kenai Fjords will be explained in later chapters. The absence of subsistence use in Kenai Fjords tends to make administration of this park somewhat simpler than in other Alaska parks where subsistence use is an important factor in resource management. Still, despite this crucial difference from other Alaska parks, Kenai Fjords remains profoundly affected by ANCSA and the legacy of Alaska Natives' aboriginal rights in the land. The park has important relationships with two Alaska Native villages, Nanwalek and Port Graham, whose residents claim ancestral ties to the area, as well as Chugach Alaska Corporation, the Native regional corporation established under ANCSA. The two village corporations and the regional corporation each have ownership interests in lands located within the boundaries of the park.

As all of the foregoing suggests, the Alaska context is central to the administrative history of Kenai Fjords National Park. The Alaska context frames this historical inquiry in two ways. First, it begs the question, "Why are Alaska national parks different from national parks in the rest of the United States?" And second, it sets up the inverse question: "How is Kenai Fjords National Park different from other parks, preserves, and monuments in Alaska?" In the final analysis it will be seen that the Alaska context makes Kenai Fjords National Park different from national parks in the Lower 48 but not as different as one might imagine. Insofar as people distrust those ANILCA-based differences and want them to go away, the administrative history of Kenai Fjords

National Park might be viewed as a bellwether, a model for how other ANILCA parks might develop should their park visitation reach a comparable level or should they become connected to the road net. On the other hand, for those who approve of the legal strictures and other qualities that make Alaska parks different, the administrative history of Kenai Fjords might be viewed as a cautionary tale, reflecting forces of modernization and cultural convergence that are not altogether welcome. Most readers will probably respond with some of each perspective.

Alaska historian Stephen W. Haycox, in his book *Frigid Embrace: Politics, Economics, and Environment in Alaska*, identifies a "culture of opposition" in the 49th state. What he is describing is a widespread mentality of antagonism, which he finds to be rooted in the state's historical experience as a remote northern colony of the United States. He finds Alaskans preoccupied by "struggles between indigenous and non-indigenous peoples, between transient and permanent residents, between the region and the nation, between the desire to control the development of their natural resources and the realities of the global market, and finally, between popular culture and the realities of northern economies."[3] Above all, Alaskans are antagonistic toward the federal government. This culture of opposition led most Alaskans to reject the American people's interest in preserving a portion of their state in wilderness after it achieved statehood. Even when some 80 to 100 million acres of public domain were withdrawn and held in limbo through the 1970s pending action by Congress, most Alaskans would not concede the possibility that there was a legitimate national interest in preserving Alaska wilderness. Not until ANILCA became law and several more years had passed did a significant number of Alaskans come to support the new area designations.

The culture of opposition described by Haycox created a difficult political environment for the large team of NPS planners who went to Alaska in the early 1970s to commence work on the Department of the Interior's proposals, including one proposal for a Harding Icefield-Kenai Fjords National Monument. Before taking up that story, however, it is necessary to make a brief survey of the park's natural and cultural setting. This is the environment that makes Kenai Fjords such a unique place, and it is an environment that no park visitor has any difficulty recognizing as profoundly Alaskan.

[3] Stephen W. Haycox, *Frigid Embrace: Politics, Economics and Environment in Alaska* (Corvallis: Oregon State University Press, 2002), 15.

1

Landscape in Motion

Natural and Cultural Setting to 1971

Ice World – First Peoples – Enterprises on the Edge – Seward and Statehood – The National Park Service in Alaska, 1917-1971

Ice World

The Kenai Mountains on the south coast of the Kenai Peninsula rise to elevations of around 3,000 to 6,000 feet above sea level. Moist air masses moving inland from the Gulf of Alaska collide with colder air over the mountains, causing heavy precipitation mostly in the form of snow. With one of the wettest climates in the sub-polar regions, the Kenai Mountains receive from 400 to 800 inches of snow each year. The accumulated snow compresses into ice, replenishing the vast Harding Icefield, which forms a giant cap over all but the highest peaks in the center of the range. By force of gravity the thick mass of ice spills off the mountain platform in all directions, feeding numerous valley glaciers. Some of these glaciers flow inland onto the plain north of the Kenai Mountains; others flow south toward the ocean, a few reaching tidewater. The carving action of the glaciers has formed long, deep valleys. As the entire area rests on the edge of a tectonic plate that is tilting into the Pacific Ocean, the southward projecting valleys and ridges of the Kenai Mountains run into the sea, making a jagged coastline of fjords and finely crenulated peninsulas.

This is a stark, watery landscape of drowned valleys, partially submerged ridges, and protruding mountaintops. Where the mountaintops protrude darkly out of the gleaming Harding Icefield they are known as *nunataks*. Where the sunken peaks protrude out of the sea off the ends of each peninsula they form steep-sided islands. The Chiswell Islands lie off the end of the Harris Peninsula. The Pye Islands are separated from the mainland east of Nuka Bay by a narrow strait, McArthur Pass. Smaller groups of islands define the sunken ends of the Aialik and Resurrection peninsulas. These offshore islands, storm-battered and inaccessible to most mainland predators, provide important sanctuary for marine mammals and birds.

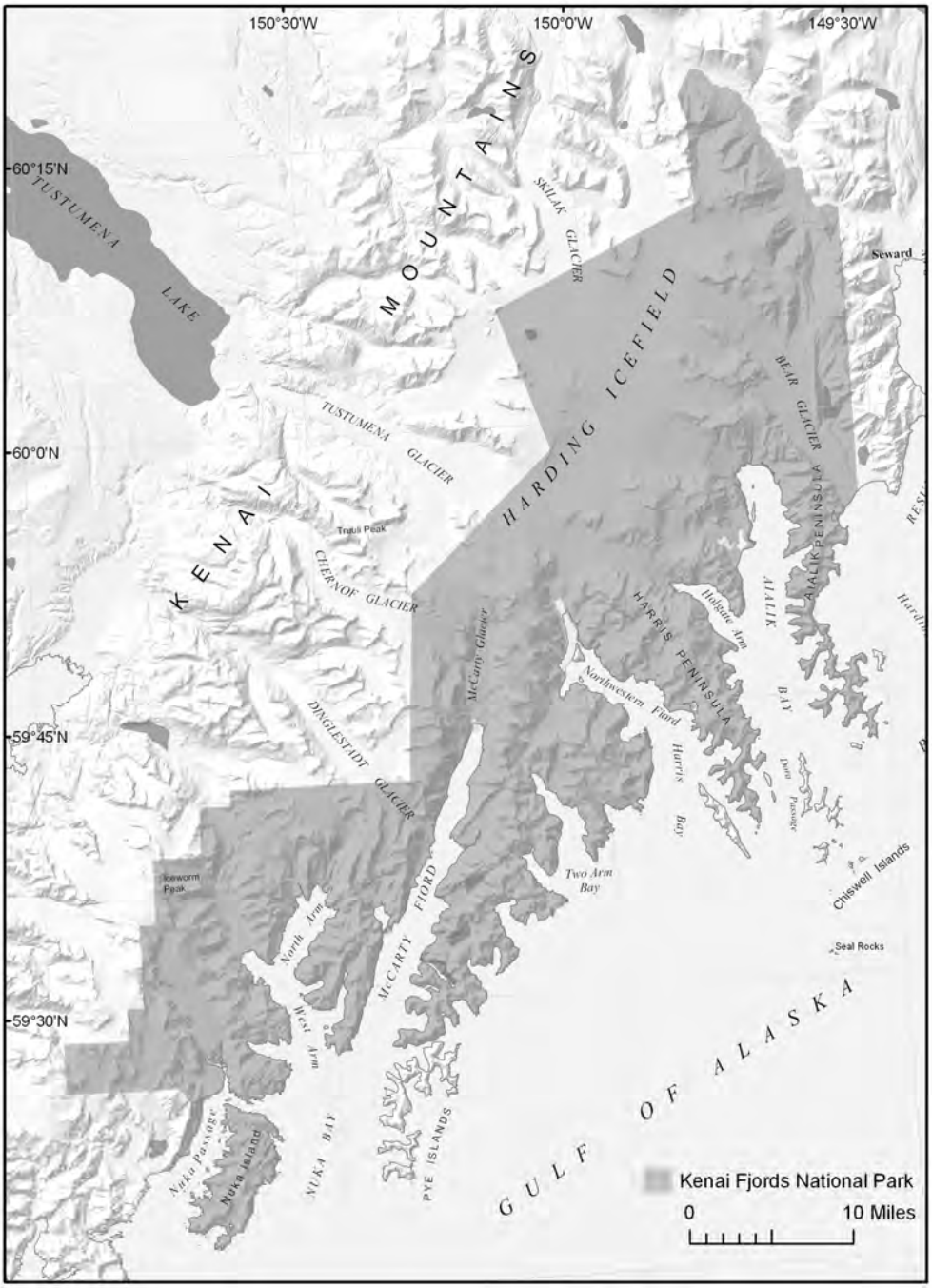

Figure 2. Physical geography of Kenai Fjords National Park and surrounding area.

Viewed from the air, the Kenai Mountains' dominant feature is the Harding Icefield. Ice fields are a rare phenomenon in the United States. They represent a coalescence of valley glaciers, constrained by topography yet shaping it through glacial erosion. Although there are bigger ice fields located along the border of Alaska and Canada, the Harding Icefield is the largest one located entirely within the United States. The Sargent Icefield lies to the east, while the Grewingk-Yalik glacier complex nearly joins it on the west, separated from the Harding Icefield by the Nuka and Bradley rivers. The Harding Icefield is approximately 50 miles long by 20 miles wide, covering an expanse of some 689 square miles.[1]

No fewer than 38 glaciers emanate from the Harding Icefield. The majority of glaciers, including the large Tustumena Glacier, flow northward into the Kenai National Wildlife Refuge. Ten named glaciers flow off the west or south flanks of the ice field and are contained within the park, and of these, four extend to tidewater. The tidewater glaciers are Aialik and Holgate glaciers in Aialik Bay, Northwestern Glacier in Northwestern Lagoon, and McCarty Glacier in McCarty Fjord. Bear Glacier, the largest glacier in the park, terminates in a lake separated from the ocean by a long moraine.

Compared to most glaciers found in higher latitudes the glaciers emanating from the Harding Icefield are dynamic, fast-flowing rivers of ice with high rates of accumulation at the top and rapid rates of melting in their lower reaches. Tidewater glaciers are more prone to rapid retreat than land glaciers, and in the past century and a half they have retreated dramatically. According to early navigation charts from the mid-nineteenth century, both the McCarty and Northwestern glaciers, which now terminate far up their respective fjords, then flowed out to the Gulf of Alaska. The area's glaciers were systematically studied for the first time by two men of the U.S. Geological Survey, U. S. Grant and D. F. Higgins, between 1905 and 1909.[2] By that era the McCarty Glacier terminated about half way up McCarty Fjord and the Northwestern Glacier terminated up the full length of Harris Bay where a submerged terminal moraine marks the entrance to Northwestern Lagoon. In the century since Grant and Higgins mapped the area, these two tidewater glaciers have each retreated an additional six to twelve miles. Glacial recession on the north slope of the Kenai Mountains is less spectacular than in the fjords but these glacial landscapes are dynamic, too. The outwash plain below the foot of Nuka Glacier, for example, undergoes dramatic changes from year to year, depending on how the water flows out of the melting glacier. Since this glacier terminates on a gentle divide between two watersheds, lateral shifts in the creek channels running through the outwash plain influence how much water the glacier discharges into either the north-flowing Bradley River or south-flowing Nuka River.

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[1] Dorothy K. Hall, Bruce A. Giffen, and Janet Y. L. Chien, "Changes in the Harding Icefield and the Grewingk-Yalik Glacier Complex, Kenai Fjords National Park," April 19, 2005, technical paper available at Alaska Resources Library & Information Services, Anchorage, Alaska.

[2] Linda Cook and Frank Norris, *A Stern and Rock-Bound Coast: Kenai Fjords National Park Historic Resources Study* (Anchorage: National Park Service, Alaska Support Office, 1998), 5-7.

Two terrestrial ecosystems are found in the area. The Chugach-St. Elias Mountains ecosystem extends from approximately 1,000 feet elevation above sea level upwards. Where mountain slopes are devoid of ice, snow and active scree, the cold, moist climate and thin, rocky soils support an alpine plant community of sedges, grasses, and low shrubs, which in turn provide habitat for mountain goats, hoary marmots, pikas, and ptarmigans. In some glacier-sculpted mountain valleys, deeper soils have formed in unconsolidated morainal and fluvial deposits and support alder shrub and mixed forests. Fauna found in these areas include moose, brown bear, and black bear. The Gulf of Alaska Coast ecosystem occupies a narrow fringe between the intertidal zone and approximately 1,000 feet above sea level. Most of this area in the park is steeply sloping; hence the ecosystem's narrow width. The vegetation is characterized by temperate rain forests of hemlock and spruce interspersed with open wetlands, especially around lagoons. Forest animals in this ecosystem include brown and black bears, bald eagles, and river otters.[3]

The community of life in this glacial landscape, like the ice itself, is dynamic. Some plant communities are in early stages of succession, reclaiming areas that were recently covered by ice. As glaciers have retreated and vegetation has taken hold, new habitat has opened up for terrestrial wildlife. Some species thrive in this narrow wisp of rainforest better than others. Mountain goats range throughout the Arctic-alpine zone in summer, descending to around tree line in winter, where they forage on shrubs as well as sedges and grasses. Dall sheep, on the other hand, do not occur on the coastal side of the Kenai Mountains. All-year grazers, Dall sheep require a relatively dry habitat where grasses and other low vegetation are available through the winter. According to research in the 1970s, Dall sheep had been observed in summer venturing out over the Harding Icefield to graze on alpine vegetation found on nunataks, but if the sightings were accurate then the nunataks marked the extreme southern limit of the sheep's range on the Kenai Peninsula and the animal was only an occasional visitor inside the park. Black bears are abundant along the coast, whereas brown bears are rare because the area contains few salmon streams and not enough other food to sustain them. Both black bears and brown bears are common in the Resurrection River watershed, where salmon do form an important part of their diet. Moose are plentiful north of the Kenai Mountains but are found only in the Nuka drainage. The Harding Icefield presents a barrier for wildlife migrations to much of the coastal area.[4]

The coastal marine ecosystem includes beaches, sea cliffs, islands, lagoons, and bays. It is important habitat for numerous species of marine mammals and birds, as the language in ANILCA specific to Kenai Fjords National Park makes note. There are

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[3] Gregory Nowacki, Page Spencer, Michael Fleming, Terry Brock, and Torre Jorgenson, *Ecoregions of Alaska* (U.S. Geological Survey Open-File Report 02-297, 2001).

[4] Alaska Planning Group, U.S. Department of the Interior, *Final Environmental Statement, Proposed Harding Icefield-Kenai Fjords National Monument, Alaska* (Washington: Department of the Interior, 1975), 62.

Figure 3. Sea lions on an offshore island just outside Kenai Fjords National Park. (Web photo.)

breeding colonies of sea lions on the Chiswell Islands (which, together with the Pye Islands, lie outside the park and form part of the Alaska Maritime National Wildlife Refuge) and other offshore islands dotted along the coast. Other marine mammals found in the area include whales, porpoises, dolphins, seals, and sea otters. Breeding populations of seabirds include tufted and horned puffins, the common murre, and the black-legged kittiwake, among others.[5]

First Peoples

Despite the abundance of sea mammals and birds, the area supported only a sparse Native population before European contact. The area was thinly inhabited by humans chiefly because of the dearth of salmon streams, the scarcity of suitable sites for villages, and the difficulty of coastwise navigation. Over the longer term, glacial advances and catastrophic earthquakes may have depopulated the coast periodically. Nevertheless, archeological investigations now indicate that the coast supported an intermittent population of at least a few hundred people over the past 800 to 1,000 years or more. The area constituted an "edge environment" for the Alutiiq Chugach people, the easternmost group of Eskimo along the Pacific Coast, whose population centered both east and west of the outer Kenai coast in such areas as Prince William Sound, Kachemak Bay, and originally on Kodiak Island. Ethnographic sources identify this subgroup of the Chugach as the Unegkurmiut, or "people out that way."[6]

Like their parent group, the Unegkurmiut followed a pattern of seasonal rounds that was oriented to obtaining a large part of their subsistence from the sea. Skilled hunters of sea mammals, they pursued their quarry in long, skin boats or kayaks. They used darts and harpoons to kill whales, bows and arrows to capture smaller sea mammals. They used observation points on high headlands to spot whales as they migrated along the coast. These observation points also served to keep sentinel for the approach of their enemies. The Unegkurmiut also hunted terrestrial mammals on the Kenai Peninsula,

[5] Ibid, 71.
[6] Aron L. Crowell, "The Outer Coast Project: Kenai Fjords Oral History and Archaeology (2002-2006)," Digital Files, Kenai Fjords National Park (hereafter KEFJ), 68; Aron L. Crowell and Daniel H. Mann, "Archaeology and Coastal Dynamics of Kenai Fjords National Park, Alaska," Research/Resources Management Report ARRCR/CRR-98/34 (Anchorage: Department of the Interior, National Park Service, Alaska Support Office, 1998), 1.

traveling inland over a network of trails, portages, and inland waterways, which they used both for hunting and trading expeditions. Their trade network extended inland to the Cook Inlet region and far along the coast of the Gulf of Alaska. Together with other Chugach groups, the Unegkurmiut had intertribal trade and warfare with the Koniag of Kodiak Island, the Dena'ina of the Cook Inlet region, and the Tlingit far to the southeast.[7]

Based in part on what is known about the Chugach people, archeologists think the Unegkurmiut located their permanent winter villages on the shores of bays that offered protection from winter storms while still giving access to the sea. Their winter dwellings were made of wooden planks and insulated with packed moss. Sometimes the dwellings were built over pits, as indicated by recent excavation of a village site in Aialik Bay. Over millennia, occupation sites may have dotted the area (with only a few existing at any one time) but probably few of these sites will ever be discovered and the length of human occupation in the area may never be known. Archeologists theorize that tectonic subsidence has resulted in the destruction or burial of most former occupation sites. The massive earthquake of 1964 caused the shoreline in Aialik Bay to drop six feet, and radiocarbon dating of fossil tree stumps suggests that a similar magnitude earthquake occurred about 900 years ago. By the cumulative effect of such events, the coastline may have subsided as much as 300 feet over the past 15,000 years.[8] Still, recent surveys have identified numerous archeological sites, including winter village sites, with most of these dating to within the past 1,000 years.[9]

In the 1780s, Russian fur traders or *promyshlenniks* arrived in the area, pushing eastward from their Aleutian Island bases. By the early 1800s, the Russians had begun to recruit Chugach Natives to hunt sea otter for them, and the Unegkurmiut who inhabited the south coast of the Kenai Peninsula no doubt participated in these large expeditions, which could number as many as 500 kayaks. The fur trade disrupted the Native economy, leaving villages all but deserted during the long hunting expeditions and undermining the Natives' ability to provision themselves for the winter. The Europeans inadvertently introduced the Native population to Old World diseases, such as smallpox, for which the Natives had no natural immunities. Epidemics swept through the Native population, killing as many as one in three people. Under this onslaught of economic dislocation and disease, many Native villages were abandoned as reduced populations consolidated in larger settlements. While clear documentation is lacking for precisely what happened to Unegkurmiut villages in the nineteenth century, probably they succumbed to this pattern. Former coastal inhabitants resettled in larger communities

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[7] Cook and Norris, *A Stern and Rock-Bound Coast*, 23-25.
[8] Aron L. Crowell, "The Outer Coast Project: Kenai Fjords Oral History and Archaeology (2002-2006)," Digital Files, KEFJ, 68; Aron L. Crowell and Daniel H. Mann, *Archaeology and Coastal Dynamics of Kenai Fjords National Park, Alaska*, Research/Resources Management Report ARRCR/CRR-98/34 (Anchorage: Department of the Interior, National Park Service, Alaska Support Office, 1998), 5.
[9] Aron L. Crowell, "Archeological Survey of the Nuka Bay Area, Kenai Fjords National Park," 2007, Digital Files, KEFJ.

such as English Bay (the historical name for Nanwalek) and Port Graham. The last known village in what is now Kenai Fjords National Park was the village of Yalik, perhaps located in Nuka Bay, which persisted until the end of the nineteenth century.[10]

Simultaneous with the period of the maritime fur trade, various European and American explorers visited the area. The Russian, Alexsei Chirikov, was the first explorer to sight the Kenai Peninsula in 1741. The great English explorer, Captain James Cook, sailed along the coast and explored Cook Inlet in 1778. Over the next twenty years, a score of Russian, British, Spanish, and American explorers slowly added to the nautical charts of the Gulf of Alaska and the Kenai Peninsula. In 1792, the Russian, Alexandr Baranov, chose Resurrection Bay as the site for the construction of a fort and shipyard. The facilities anchored the operations of the Russian American Company on the coast for about a decade, until the Russians moved their center of administration to Sitka in the early 1800s.[11]

Enterprises on the Edge

For most of the nineteenth century, the Kenai Peninsula was a backwater within the remote Alaskan territory. The Russians mined coal along the Cook Inlet side of the peninsula, giving rise to the settlement of Port Graham. Other new settlements included English Bay and Seldovia. In 1844, the Russian Orthodox Church established a mission at what would become the town of Kenai. After the Russians sold Alaska to the United States in 1867, the Kenai Mission remained while the Alaska Commercial Company, an American outfit, became the dominant enterprise in the region. With a trading station at English Bay, the company operated a number of village stores and warehouses on the peninsula, including one at the former village of Yalik from about 1873 to 1885.[12]

Frank Lowell, an American trader associated with the Alaska Commercial Company, employed Native hunters along the outer coast from English Bay to Resurrection Bay in the latter part of the nineteenth century. With his wife Mary, who was of Native and Russian extraction, Frank Lowell settled at the head of Resurrection Bay, near the site of the present-day Alaska SeaLife Center. Frank and Mary were divorced in 1895, and Mary filed for the homestead in 1903. By then she had raised nine

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[10] Cook and Norris, *A Stern and Rock-Bound Coast*, 69-70 and passim. A resurvey of the suspected Yalik village site in 2007 yielded no nineteenth century Russian/American trade goods, a surprising find leading to the conclusion that this was not the site of the historic village as previously thought. Since Russian/American trade goods were found at sites in Aialik Bay, archeologists have recently proposed that the historic village was located in Aialik Bay and that the similar pronunciation of place names led to confusion about the historic village's location. See Shannon Kovac, "Archeological Survey of the Nuka Bay Area, Kenai Fjords National Park, 2007," March 17, 2008, copy provided by Shannon Kovac, Office Files, KEFJ.

[11] Cook and Norris, *A Stern and Rock-Bound Coast*, 35-53.

[12] Ibid, 58-63, 67-70.

children at this location. The Lowell family were the only permanent residents of the area at the time of Seward's founding in 1903. After selling most of the homestead property to town site developers, Mary Lowell continued to reside in Seward and was active in the community until her death in 1906. Many topographic features in the area are named for members of Seward's "first family" including Lowell Point, Mount Alice, and Mount Eva, among others.[13]

In the meantime, major gold discoveries in Alaska and the Yukon brought the far northern territory its first economic boom. A gold rush occurred on the Kenai Peninsula around Hope on Turnagain Arm in the summer of 1895, attracting perhaps 3,000 men and women. Prospectors fanned out to other parts of the peninsula, and in 1910 a prospector named B. F. Redman and his brother struck gold on the Resurrection River, which led to the first mining development within the present area of Kenai Fjords National Park. Redman relinquished his claims after just a few years and despite several changes of ownership the property saw little further development until about 1945, when a man named Bill Bryan and one or two partners built a cabin now known as the Placer Creek Cabin. By that time, the property was valued less for its mineral potential than as a base for hunting and trapping.[14]

The other section of the park in which gold mining took place was in Nuka Bay. Gold seekers made claims as early as 1909, but they did not arrive in any numbers until the mid 1920s. Eventually there were working mines and mills at Beauty Bay and Surprise Bay as well as several prospects at other locations in North Arm, Quartz Bay, Yalik Bay, and West Arm. The district saw its heyday in the 1930s. One property, the Glass and Heifner Mine in Beauty Bay, finally produced some gold much later beginning about 1965. All of the mining operations around Nuka Bay were small scale. By 1980, all but three claims had been abandoned. Henry Waterfield leased the Glass and Heifner Mine and conducted annual assessment work on that property, while John Kinney held the Surprise Bay No. 1 through No. 5 claims together with the former Sonny Fox Mining Company located on Surprise Bay, which he used illegally as a base for commercial fishing while also doing a small amount of mining.[15]

Alaska's mining industry prompted several railroad development schemes aimed at linking the southern coast with the interior. One such plan was that of Seattle businessman John Ballaine, who promoted a route that would begin at an ice-free port on the Kenai Peninsula, pass east of the Kenai Mountains, thread west along Turnagain Arm, and then swing north up the Susitna River to the Tanana River valley and the gold fields around Fairbanks. In 1902, Ballaine selected the head of Resurrection Bay for the location of a port and talked a number of Seattle investors into forming the Alaska

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[13] Diane Olthuis, "Seward," in *Alaska's Kenai Peninsula: The Road We've Traveled* (Hope, Alaska: The Kenai Peninsula Historical Association, 2002), 27.
[14] Cook and Norris, *A Stern and Rock-Bound Coast*, 205-209.
[15] Ibid, 176-179, 187-194; Logan Hovis, interview by Theodore Catton, August 21, 2008.

Railway Company. In 1903, he acquired Mary Lowell's homestead at the head of Resurrection Bay, built a dock, made a plat of the future town, and recruited 83 pioneers who arrived on board the steamer *Santa Ana*. The ship docked on August 28, 1903, a day celebrated ever since as the date of Seward's founding.[16]

The challenging climate, topography, and remoteness of the Kenai Peninsula proved to be formidable obstacles for building a railroad with private capital. Over the next five years, Ballaine's company completed a line over the Kenai Peninsula, including one steep section at the head of a drainage in which the railroad had nowhere to go except to loop back over itself several times in order to gain the summit. With construction costs soaring, the railroad builders finally ran out of money before the tracks reached Turnagain Arm. Although the company did not last, the town of Seward did. By 1907, the town not only supported more than a dozen restaurants and saloons but a large number of social halls, including one, the Arctic Brotherhood Hall, with bowling lanes. Seward promoted itself as the beginning of the Iditarod Trail. This trail was laid out by the Alaska Road Commission to provide an all-winter route to the newly discovered Iditarod gold fields. During the long winters, mail arrived by steamship from "Outside" and was transferred to dog sled to be carried inland to the gold camps.[17]

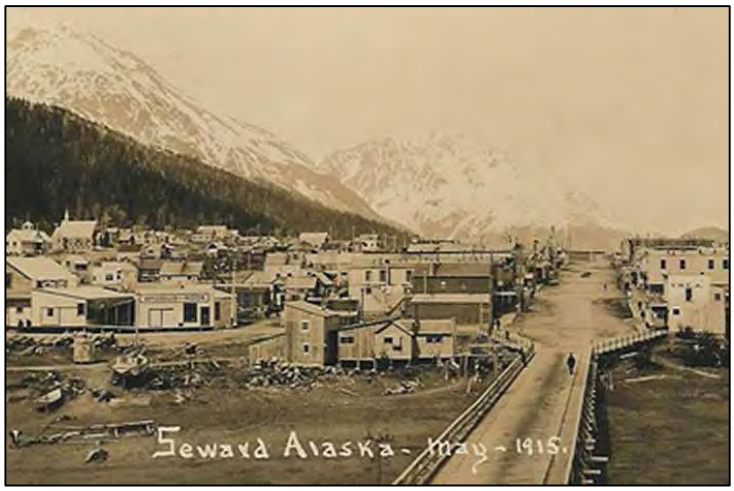

Figure 4. Seward in 1915. (Web photo.)

By 1912, there was talk of the federal government taking over the job of building a railroad to Alaska's interior. Congress appropriated $35 million for it, and with the advice of the Alaska Engineering Commission, which would oversee construction, President Woodrow Wilson selected the route. The townspeople rejoiced when Wilson announced in April 1915 that the Alaska Railroad would commence in Seward. But the town soon suffered a blow when the Alaska Engineering Commission made its headquarters in a railroad construction camp at Ship Creek, soon to become the city of Anchorage. The Alaska Railroad was completed in 1923. President Warren G. Harding

[16] Ibid, 83-84.
[17] Olthuis, "Seward," 28-29.

made a trip to Alaska to drive the golden spike near Nenana.[18] The people of Seward were so excited by the presidential visit that they named Harding Icefield in his honor.[19]

It was during these years that the federal government took its first measures to conserve Alaska's natural resources. In 1907, President Theodore Roosevelt proclaimed the Chugach National Forest. At first the reserve barely included the eastern edge of the Kenai Peninsula. In 1909, just two weeks before leaving office, Roosevelt greatly expanded the Chugach National Forest in all directions. At that point, it encompassed the southern portion of the Kenai Peninsula as well as a vast area around Prince William Sound. At 11,280,640 acres, it was the largest national forest in the system. The national forest boundary was modified again in a proclamation by President Wilson on August 2, 1915, which added a tract on the northeast side of the Resurrection River but deleted the entire area from Seward over to Kachemak Bay. This brought the boundary of the Chugach National Forest nearly to its present configuration. Meanwhile, the General Land Office made a separate withdrawal to protect timber resources in the Seward area: Alaska Timber Reserve No. 1 came to include a tract five miles on each side of the Alaska Railroad from Seward to the Knik River, as well as a vast territory to the north in the Susitna and Nenana river drainages. This reserve was later revoked by executive orders in the 1920s.[20]

The Forest Service recommended measures to protect game resources on the Kenai Peninsula. By the time Forest Service officials arrived in the area, game populations were already thought to be dwindling. Market hunters, who supplied meat to the gold camps in the interior, found the Kenai Peninsula to be an area rich in big game. Sportsmen were also attracted to the area. Market hunters were mostly responsible for the slaughter of caribou, which were eliminated from the peninsula by about 1913, while sport hunters probably took the biggest toll on Dall sheep, which were at one time fairly abundant in the Kenai Mountains north of the ice field. Early proposals to establish a game refuge did not succeed, however. In the 1930s, concerned individuals working for the Alaska Game Commission and the U.S. Fish and Wildlife Service began investigating the moose population, and finally on December 16, 1941, President Franklin D. Roosevelt signed an executive order establishing the Kenai National Moose Range. The conservation unit covered much of the western side of the peninsula, with its southern boundary taking in the northern slope of the Kenai Mountains and a portion of the Harding Icefield. An administrative office for the moose range was established in Kenai in 1948, and David L. Spencer was appointed the area's first manager.[21]

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[18] Claus-M. Naske and Herman E. Slotnick, *Alaska: A History of the 49th State*, 2nd edition (Norman: University of Oklahoma Press, 1987), 96-97, 100.
[19] President Harding had been a promoter of Alaska since 1921 and proposals to name the icefield after him actually predated his visit by a year. The U.S. Geological Survey made the name official many years later.
[20] Cook and Norris, *A Stern and Rock-Bound Coast*, 315-318.
[21] Ibid, 333-335.

The few wealthy sportsmen who trickled through Seward on their way to the Kenai game lands were soon followed by a growing stream of tourists. The tourist industry in Alaska took off after the First World War. Steamships plied the Inside Passage and called at ports in south central Alaska. Increasing numbers of tourists ventured inland. A popular inland trip was the Golden Belt Tour. Ship passengers debarked in Cordova, took a train to Chitina, and traveled by auto stage onward to Fairbanks. From there, tourists rode the Alaska Railroad south to Mount McKinley National Park, then on south through Anchorage to Seward where they once again went aboard ship. A variant of this tour debarked at Valdez and took an auto stage up the Richardson Highway to Fairbanks. The entire tour could be done in the other direction, starting in Seward.[22]

Billing itself as the "Gateway to the Interior," Seward began to show the trappings of a tourist town. A captive black bear named Carrie Nation was displayed for tourists arriving in port, while a six-foot totem pole (out of place that far north) graced the front porch of the Alaska Shop. In the early 1920s, the stately Van Gilder Hotel opened to tourists. A number of hunting guides made their homes in town. Meanwhile, Seward grew up around nearby extractive industries: commercial fishing, salmon and halibut canneries, gold mining, fox farms, and logging. Standard Oil Corporation built a dock, oil tanks, and buildings to service the growing commercial fishing fleet.[23]

During World War II, the U.S. military established many defense installations in Alaska, including some on the southern Kenai Peninsula. The defense buildup heralded Alaska's second economic boom, and in a matter of a few years the population of Seward doubled to about 2,000. As the southern terminal of the Alaska Railroad, Seward occupied a strategic location. The U.S. Army built gun emplacements and observation sites on the outer shores of Resurrection Bay and each installation had a command post and radio station connected with it. The Aircraft Warning Service (AWS), a part of the U.S. Army Signal Corps, was assigned the task of establishing a network of stations along the coast of Alaska for detecting enemy aircraft. One AWS station occupied Outer Island in the Pye Islands. Soldiers lived on the remote island from early 1943 to mid 1944. In addition to these defense installations, the U.S. Army Air Corps established Fort Raymond just north of town. Toward the end of the war, all of these installations, including Fort Raymond, were decommissioned. Fort Raymond stood vacant from 1945 until 1947, when it was sold as Army surplus. However, three years later the Army established a U.S. Army Recreation Center on part of the former tract. The facility served troops based at Fort Richardson and Whittier. Later, the U.S. Air Force built a similar facility nearby. In 1989, the two camps were combined and they are now known as the Seward Military Recreation Camp.[24]

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[22] Ibid, 324.
[23] Olthuis, "Seward," 30-31.
[24] Cook and Norris, *A Stern and Rock-Bound Coast*, 222-229.

A highway between Anchorage and Seward was completed in 1951. Combined with the opening of the Alcan Highway, the new highway connection brought a modest increase in tourism. The most popular tourist activities around Seward in the 1950s were boating and fishing. Charter boats mostly confined their activity to Resurrection Bay; very few boaters or sport fishing charters visited the outer coast in this period. Beginning in 1956, the town held an annual Silver Salmon Derby in August, which drew additional fishing enthusiasts. In 1957, boaters formed the Anchorage-Seward Yacht Club to promote improvements in the small boat harbor. The club sponsored sailboat races and other events. (The name of the club was soon changed to the Alaska Yacht Club and it is now known as the William H. Seward Yacht Club.) Still another tourist draw was the Mount Marathon Race held each Fourth of July. The grueling ascent of the 3,022-foot Mount Marathon and skittering return down loose scree and steep gullies to the foot of the mountain was said to be one of the most rugged cross country/mountain climbing races in the world. The annual meet drew a growing number of contestants and spectators.[25]

Seward after Statehood

When Alaska became a state on January 1, 1959, Seward had a population of just under 2,000 – a few hundred less than when the decade began – and a troubled economy. With its deepwater harbor, railroad terminal, and highway access to the interior, Seward's economy revolved around transportation. Other industries in Seward included four fish processing plants and a timber mill. But since World War II, the port of Seward had been steadily losing business to the port of Anchorage. Moreover, towns in the western part of the Kenai Peninsula were experiencing a boom from oil exploration in Cook Inlet, but Seward was too remote from that activity to share in the oil wealth. Still, the townspeople were looking to the future with optimism. At the beginning of the new decade Seward embarked on a five-year plan to pave all of its downtown streets.[26]

On March 27, 1964, a massive earthquake shook southern Alaska. Measuring 8.4 on the Richter scale (9.2 on the moment magnitude scale), it was the largest earthquake in North America ever recorded and its epicenter was located not far away in Prince William Sound. The earthquake devastated Seward. The seismic shocks were followed by a huge tsunami and then by a fire as two damaged oil storage tanks spilled oil into the harbor and the oil caught fire. Twelve people were killed in the disaster, 86 buildings were destroyed, the fishing fleet was crippled, and Seward's transportation infrastructure

[25] Ibid, 336-337. The Mount Marathon Race was first run in 1908 and became an annual event in 1915.
[26] Scott Goldsmith and Stephanie Martin, *ANILCA and the Seward Economy*, Report prepared for Alaska State Office, National Audubon Society (Anchorage: Institute of Social and Economic Research, University of Alaska Anchorage, 2001), 3-4; Olthuis, "Seward," 33.

– harbor facilities, the railroad, the highway – were all wrecked or badly damaged. Although the town rebuilt itself (turning much of the old waterfront into city park) and the U.S. Army Corps of Engineers designed a new small boat harbor in a safer location, some of the damage to Seward's economy was irreparable. With its port rendered inoperable for nearly two years, the flow of goods in and out of interior Alaska was diverted to the port of Anchorage and Seward would never see most of that commerce again. The number of transportation related jobs dwindled to a fraction of what they had been before the earthquake. Similarly, the canning industry was nearly wiped out. With so many fishing boats knocked out of service, only one of the town's four fish processing plants reopened after the earthquake. Unemployment ran high and the town's population declined by about 20 percent. In 1970, Seward had a population of 1,587.[27]

At the beginning of the 1970s – the crucial decade for Alaska's transformation into the nation's "last wilderness" – the people of Seward were much less interested in preserving wilderness than they were in rebuilding their town's economy around Alaska's extractive industries: fishing, timber, coal, and the black gold that now loomed in the state's future, oil. But the town was not indifferent to Alaska's growing tourism economy. In the aftermath of the earthquake, the Seward Chamber of Commerce coined a new name for the community, "Fun Capital of Alaska." In that spirit, expansive thinking about the area's recreational possibilities was strongly encouraged. Two promotional schemes were of particular significance for the future national park. The first initiative involved building a road to Exit Glacier; the second one was to provide snowmobile rides to tourists on the Harding Icefield.

The person most credited with promoting construction of a road to Exit Glacier was Herman Leirer, a longtime Seward resident, former dairyman, and the city's garbage collector in 1965. Leirer argued that the road would make the nearby glacier a tourist attraction, helping to rebuild Seward's broken economy. According to Forest Service records, civic leader Bill Lantz was also instrumental in launching this idea and discussed the plan with the Chugach National Forest district ranger, John Galea, who explained the Forest Service's requirements for a permit to build the road across Forest Service land. Another proponent was local resident Jack Werner. In October 1965, Seward's city manager, Fred Waltz, and the city council voted to establish a committee to oversee the project. Leirer spearheaded the largely volunteer effort while the city assisted by providing free use of heavy equipment.[28]

Operating without much money, the road builders made slow progress. The foot of the glacier lay eight miles up the Resurrection River valley. The route followed a narrow, heavily-timbered bench with steep slopes rising on one side and the unstable

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[27] Olthuis, "Seward," 33-34; Goldsmith and Martin, *ANILCA and the Seward Economy*, 3-4.
[28] Cook and Norris, *A Stern and Rock-Bound Coast*, 346; "Harding Icefield-Kenai Fjords National Monument, Resurrection River Road," November 1977, File Proposed Harding Icefield-Kenai Fjords National Monument, Box 125, Record Group 79, National Archives – Alaska Region (hereafter RG 79, NAAR); "Roadblocks to Leirer's road continue to mount," *Anchorage Times*, June 29, 1980.

floodplain of the river hemming it in on the other. In some places the hill slope was blasted down as much as 40 feet to make a shelf for the road; in other places Leirer took his bulldozer out onto the gravel bars and pushed the loose rock around to divert the river and make a roadbed there. Commenting on the road's alignment to a reporter many years later, Leirer said he just followed common sense. "No other place to go," he explained simply. Referring to those sections where the roadbed nudged the floodplain, Leirer stated, "The river's always moving around anyhow."[29]

Exactly when Leirer built the road is not entirely clear. It appears that the first four-mile stretch, which was outside the Chugach National Forest, was constructed between October 1965 and about 1969, and that the next three-mile stretch, which lay across the Chugach National Forest, was built under Forest Service special use permit in the fall of 1970. The third and last segment, across public land that would eventually be included in the national park, was also cleared and leveled in 1970. Working a step behind Leirer and his bulldozer, the State Department of Transportation occasionally sent a crew to make improvements on the original road alignment. Driblets of federal and state money began to appear in the fall of 1970 and by October of the following year approximately $400,000 of public funds had been expended on the road. This included nearly $100,000 in federal funds, with the rest having come from the city, borough, and state.[30]

By the end of 1971, a rough road was complete all the way to the glacier except there was no bridge across the Resurrection River. Tourists could drive approximately eight miles up the canyon to an excellent viewpoint of the glacier just short of the river crossing. But with no easy way to ford the river and more than a mile of road still remaining from that point to the foot of the glacier, very few tourists were interested in driving the rough road. Proponents of the road, intent as ever on making the Exit Glacier a tourist attraction, turned their efforts in the coming decade to acquiring a bridge and getting the road improved.

The second plan to develop a new tourist attraction near Seward began as the brainchild of William C. Vincent, owner of a plumbing and heating shop and a resident of Seward since 1950. In 1966, Vincent made his first visit to the Harding Icefield and immediately had the inspiration of developing a recreation center on the edge of it. His idea was to offer a variety of activities – snowmobile tours, glacier skiing, summer ski racing camps, Outward Bound camps, mountaineering courses – with access to the ice

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[29] "Roadblocks to Leirer's road continue to mount," *Anchorage Times*, June 29, 1980.
[30] Cook and Norris, *A Stern and Rock-Bound Coast*, 347; "Harding Icefield-Kenai Fjords National Monument, Resurrection River Road," November 1977, File Proposed Harding Icefield-Kenai Fjords National Monument, Box 125, RG 79, NAAR; "Roadblocks to Leirer's road continue to mount," *Anchorage Times*, June 29, 1980.

field provided by way of a dock facility at Bear Glacier. Vincent got three other people interested in his idea and the team put together a five-year business plan.[31]

While Vincent's plan did not materialize, it inspired others. Jim Arness, owner of a snowmobile rental shop in North Kenai, and Joe Stanton, owner of Harbor Air Service in Seward, decided on a joint business venture. In the summer of 1969 they installed a "shack" or warming hut together with a fleet of three Ski-doos on the ice field, and Stanton flew customers to the site. The operation was located about three miles west of what is now the end of the Harding Icefield Trail. After a short but successful first season, the partners beat a hasty retreat off the ice field as snowstorms buried the building and one of the Ski-doos before they could be removed. They returned the following May with another prefab warming hut and ten Ski-doos. The operation received good publicity and over the course of three months they had some 200 to 300 customers. Arness and Stanton began to think about a much bigger operation in the future, with access via a gondola lift system, a more elaborate summit station, a T-bar lift for summer skiers, and a terminal at the foot of Exit Glacier.[32]

Unfortunately, Arness and Stanton had launched their enterprise without any thought of obtaining a permit from the landowner, the Bureau of Land Management. Indeed, in view of Alaska Natives' land claims and the strictures on public land entry then in place, it was doubtful that the BLM would have been able to approve a permit for such a thing even if Arness and Stanton had applied for one. The BLM informed Arness of the violation on July 9, 1970 and gave the men 30 days' notice to close down the operation. The *Seward Phoenix Log* came to the two men's defense in an editorial and a candidate for governor, H. A. "Red" Boucher, made a personal visit to the ice field on July 20, after which he vowed to overturn the BLM's order. The BLM responded by extending the deadline to vacate from August to November. Regardless of this reprieve from the BLM, snowstorms chased the operators off the ice field in September. As in the previous year, the weather changed so quickly and violently that Arness and Stanton were unable to retrieve all of their equipment. Accounts of the losses vary, with one account stating that their second warming hut and two snowmobiles were buried up on the ice field, and another account saying that three snowmobiles were lost in crevasses as the men tried to drive them out via Bear Glacier.[33]

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[31] Cook and Norris, *A Stern and Rock-Bound Coast*, 350. A number of people, mostly local residents, took an interest in traversing the Harding Icefield on skis at this time. A party of seven made a successful traverse in 1968. (E. J. Vin Hoeman, "Crossing the Harding Icefield," *Alaska: Magazine of Life on the Last Frontier* (May 1971): 45-47, 63.

[32] Cook and Norris, *A Stern and Rock-Bound Coast*, 351. The probable location of the site was identified by Mike Tetreau based on photo point comparisons. See Mike Tetreau, "Probable Location of 1970 Snowmachine Operation on Harding Icefield," December 5, 2005, Digital Files, KEFJ. The abandoned shack melted out in 2009.

[33] Cook and Norris, *A Stern and Rock-Bound Coast*, 351-352.

Figure 5. Jim Arness and Joe Stanton offered snowmobile tours on Harding Icefield in 1969 and 1970. (Digital Files, KEFJ.)

Seward's disappointment over the federal government's stance on the Harding Icefield recreation center may have been one factor explaining why the town threw its support behind a proposed Seward National Recreation Area in 1971. The proposed area would have designated approximately 1,400,000 acres of Forest Service and BLM lands for purposes of public outdoor recreation and use and enjoyment. It included lands from the head of Resurrection Bay northward to Turnagain Arm and eastward to Whittier. The southwest corner of the reserve included Exit Glacier and the northern third of the Harding Icefield evidently with a view to opening the door for recreational development along the lines pioneered by Arness and Stanton. The whole area would have been set up according to the principles of multiple use, with allowance for logging and mining.[34] Senator Ted Stevens (R-AK) introduced the bill in March 1971, and Congressman Nick Begich (D-AK) introduced a companion bill in the House. Although the measure was supported by both the Forest Service and the BLM, it was overwhelmed by the larger issue of Native land claims, which Congress would address at the end of the year in the Alaska Native Claims Settlement Act. The proposal for a national recreation area would be revived in the mid 1970s.

[34] U.S. Senate, *A Bill to establish the Seward National Recreation Area in the State of Alaska, and for other purposes*, 92nd Cong., 1st sess., S. 1356, March 24, 1971.

The city of Seward supported the proposed Seward National Recreation Area because it would have been under Forest Service management and the town had a long relationship with that agency. In 1971, the Forest Service was viewed as a warm friend of the lumbering industry and a key partner with city government in supporting Seward's economy. The Chugach National Forest conducted timber sales on Montague Island and elsewhere around Prince William Sound and log rafts were barged into Resurrection Bay for processing in the local sawmill. Forest Service officials who were based in Seward served on the city council. Darryl Schaefermeyer, a Seward native who worked in the sawmill in the summer of 1968 and would serve on Senator Stevens' staff in the mid 1970s, recalls a string of Forest Service officials who were active in city government in the 1960s and 70s.[35] Doug Capra, a teacher, writer, and longtime interpretive ranger of Kenai Fjords National Park who moved to the area in 1971, states that Seward at the time of his arrival had the feel of "a Forest Service town."[36]

The National Park Service in Alaska, 1917-1971

The National Park Service was an unfamiliar entity to residents of Seward and the Kenai Peninsula at the beginning of the 1970s. Although the NPS had been present in Alaska since 1917, it was still a bit player among the numerous federal agencies involved in Alaska resource development. Director George B. Hartzog, Jr. was the first director of the NPS to see the potential for creating many more national park units in Alaska; however, it was not until near the end of Hartzog's directorship, when Congress passed the Alaska Native Claims Settlement Act (ANCSA) of 1971, that the NPS was suddenly vaulted into the limelight. Section 17(d)(2) of the act directed the Secretary of the Interior to withdraw up to 80 million acres of unreserved public lands in Alaska for possible inclusion in the national park, forest, wildlife refuge, or wild and scenic rivers systems. As soon as the Secretary announced the withdrawals, it became clear that the National Park Service and the U.S. Bureau of Sport Fisheries and Wildlife (hereafter referenced by its current name, Fish and Wildlife Service) were the two federal agencies positioned to inherit most of the so-called "D-2 lands." The problem for the NPS was that it did not have much standing with Alaskans in 1971. John M. Kauffmann, one of the Park Service's few personnel with experience in the 49th state, had anticipated this problem as early as 1964 when he wrote in an internal memorandum, "After more than forty years as an organization, the Service is the *Cheechako* of all federal agencies at

[35] Darryl Schaefermeyer, interview by Theodore Catton, October 24, 2008.
[36] Doug Capra, interview by Theodore Catton, September 15, 2008.

work in Alaska." As all of Kauffmann's readers could appreciate, *cheechako* was the Alaskan term for greenhorn.[37]

The NPS administered one national park and three national monuments in Alaska prior to ANILCA. The first of these units to be established, Sitka National Monument, was created by presidential proclamation in 1910. This small unit, which protected historic resources at the site of a battle between Tlingits and Russians, existed without any on-site administration until it was assigned its first custodian in 1917. That was also the year that Congress began to fund the new National Park Service and the year in which Congress established Alaska's first national park, Mount McKinley. Covering 2,200 square miles, Mount McKinley National Park's two-fold purpose was to showcase the highest mountain in North America and to protect the abundant wildlife found in the foothills and taiga-covered flatland north of the Alaska Range. The impetus for the park came not from residents of the territory but from wealthy sportsmen who lived in the contiguous United States. The NPS appointed the first superintendent for the park in 1921, and with Park Service funds the Alaska Road Commission began building a park road the following year. The 90-mile, dead-end road was finally completed nearly 20 years later. Mount McKinley National Park's enabling legislation allowed mining and prospecting in the park, and the road was used both by tourists and miners for getting in and out of the Kantishna mining district.[38]

Alaska's third NPS unit, Katmai National Monument, was proclaimed by President Wilson in 1918. Spanning a territory larger than Yellowstone, this rugged and remote area featured the Valley of Ten Thousand Smokes, which was named for the many fumeroles that still vented steam long after a massive volcanic eruption in 1912. The national monument was created largely on the advice of Robert F. Griggs, a young botanist and leader of a National Geographic Society expedition to the area. Katmai was administered only from afar and remained virtually undeveloped for public use until 1950.[39]

The fourth pre-ANILCA unit, Glacier Bay National Monument, was proclaimed by President Coolidge in 1925. As with the other areas, the push to establish this public reservation came from outside Alaska, this time from a young professor of ecology, William S. Cooper, and his fellow academics in the Ecological Society of America. Cooper was drawn to Glacier Bay by the dramatic recession of its tidewater glaciers. The rapid retreat of the ice cover had created a vast and unparalleled outdoor laboratory for the study of primary ecological succession. On his second visit to Glacier Bay in 1916,

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[37] Kauffmann quoted in G. Frank Williss, *"Do Things Right the First Time": The National Park Service and the Alaska National Interest Lands Conservation Act of 1980* (Denver: U.S. Department of the Interior, National Park Service, 1985), 34.
[38] Theodore Catton, *Inhabited Wilderness: Indians, Eskimos, and National Parks in Alaska* (Albuquerque: University of New Mexico Press, 1997): 117-18, 125.
[39] Frank Norris, "A Lone Voice in the Wilderness: The National Park Service in Alaska, 1917-1969," *Environmental History* 1, no. 4 (October 1996): 70-74.

Cooper established nine one-meter quadrats at various distances from the glaciers – each with a different, known "subaerial age," or length of exposure to air since the ice had left – with the intent of studying successional change at each specific location over the coming decades. Cooper's permanent quadrats bolstered his claim that Glacier Bay was of great interest to science and ought to be protected in a national monument, and indeed the park continues to have a strong mandate for scientific research based in no small part on that long history of scientific observation which Cooper began. (Parts of Kenai Fjords National Park exhibit the same combination of receding glaciers and primary ecological succession, but they do not have the long history of scientific observation.) A large addition to Glacier Bay National Monument in 1939 made the area, like Katmai, immense by traditional national park standards. Glacier Bay, also like Katmai, did not have any on-site administration until 1950.[40]

The few Park Service officials who visited the four Alaska areas before the 1950s agreed that they contained fantastic scenery and wildlife viewing, but Katmai and Glacier Bay in particular were simply too remote to stimulate much tourism. With no on-site administrative presence in either of the large national monuments, the NPS had no record of recreational visits to Glacier Bay from 1925 to 1940 and it counted just 32 to Katmai over the same period. Mount McKinley could be reached by the Alaska Railroad and attracted as many as 1,500 visitors annually. But if that was a lot of people compared to Glacier Bay and Katmai, it was a paltry amount compared to most national parks in the rest of the nation. Between 1920 and 1940, Mount McKinley generally recorded the lowest visitation of any U.S. national park.[41]

The first time the NPS took a comprehensive view of its role in Alaska was in 1938 when it headed a study of the territory's recreational resources. The Park Service's John Cameron co-authored the study with the Alaska Railroad's Paul W. Gordon and the Forest Service's Robert Marshall. Their report, *Alaska – Its Resources and Development*, focused on how the Park Service could assist in the design and construction of tourist facilities along an anticipated Alaskan Highway. The highway would run through Canada and connect with the highway system in the states, presumably introducing a new stream of automobile-born tourism to the Far North. Still at an early planning stage in 1938, the highway's construction would be accelerated during World War II, and yet it would never become the conduit for mass tourism that the authors envisioned. The 1938 report was notable mainly for the dissenting view put forward by one of the three authors. Robert Marshall, who had co-founded The Wilderness Society a few years earlier, argued that Alaska wilderness was a unique national asset that should be preserved on a broad scale for future generations. He proposed that the federal government establish a vast area – in fact, all of Alaska north of the Yukon River except for a small area around

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[40] Catton, *Inhabited Wilderness*, 20-21; Theodore Catton, *Land Reborn: A History of Administration and Visitor Use in Glacier Bay National Park and Preserve* (Anchorage: National Park Service, 1995), 136-37.
[41] Norris, "A Lone Voice in the Wilderness," 70.

Nome – in which the federal government would simply desist from funding or authorizing development of any kind on the public domain. Marshall's minority view was the first official expression in favor of preserving Alaska wilderness in a comprehensive way.[42]

During construction of the $140 million Alcan Highway, the NPS received a small slice of the project funding with which to update its recreational planning for Alaska. The 1944 study echoed the earlier one, focusing again on the development of infrastructure such as hotels and gas stations to support the automobile tourist rather than examining Alaska wilderness in a different light. Park Service planning assumed that Alaska was on a path similar to other western states that had progressed from territory to statehood 50 to 100 years earlier: it was looking for wealth to develop its resources and more people to settle the frontier and populate its towns and cities. Rather than thinking expansively about Alaska wilderness preservation like Marshall, the agency continued to focus narrowly on appropriations with which to develop hotel accommodations in Mount McKinley, Glacier Bay, Katmai, and now along the Alcan Highway. The Park Service's conception of its role in Alaska did not change much during the Mission 66 era; indeed, it opted out of the single large gain for Alaska wilderness preservation in these years when it suggested that, in view of Native subsistence rights, the Arctic National Wildlife Range would be better administered by the Fish and Wildlife Service than the NPS.[43]

As previously noted, George Hartzog brought a new take on the Park Service's future in Alaska. Director of the Park Service from 1964 to 1972, he was the most energetic and idealistic leader that the agency had had since the Mather-Albright years. His "Parkscape U.S.A." aimed at dramatically expanding the national park system and broadening its appeal to non-traditional constituencies, especially the urban underprivileged classes and the nation's youth. Hartzog states in his memoir that he had a "simple credo" for adding new areas to the national park system: "take it now, warts and all." What this meant was that the agency should not fuss too much about boundaries or adverse uses; those problems could be addressed after the unit had become part of the system. Hartzog asserts that he went after new areas in Alaska aggressively, beginning with his appointment of a task force in 1964 to reevaluate the NPS program in Alaska.[44]

The task force report, *Operation Great Land*, laid out a vision that would be influential as Alaska wilderness preservation moved onto the national agenda a few years later. What was most impressive about the 76-page report was its sense of urgency – an urgency that echoed Marshall's plea thirty years earlier to consider Alaska wilderness as a singular national asset. Like Marshall, the authors of *Operation Great Land* stressed Alaska's unique frontier character. Alaska's population had grown from approximately

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[42] Catton, *Inhabited Wilderness*, 131-32, 144-45.
[43] Ibid, 146-49.
[44] George B. Hartzog, Jr., *Battling for the National Parks* (Mt. Kisko, New York: Moyer Bell Ltd., 1988), 205.

60,000 in the 1930s to more than four times that number in 1965, yet Alaska still remained a "rugged pioneer land." The way to preserve this quality of Alaska, the authors urged, was to make recreation the engine of Alaska's economy. This would reduce the pressure for other kinds of economic development that would tend to degrade the environment. Frontier peoples usually overlooked the economic potential of wilderness and scenery in their rush to exploit minerals, timber, and other raw materials, but Alaskans were different; they were awakening to the value of recreational resources in their state. It was the Park Service's responsibility and opportunity to cultivate this outlook and to help Alaskans realize their goal of a recreation-based economy.[45]

The important difference between *Operation Great Land* and Marshall's minority report in 1938 was the role that the federal government would play. Marshall had recommended a policy of restraint that would essentially institute inaction by zoning an area in which the federal government would fund no road construction, lease no mineral lands, and patent no mining claims. *Operation Great Land* called for bold action by the federal government, projecting a program cost of $150 million over ten years just for the development of existing parks. A major thrust of development would be toward public education with the establishment of visitor centers in Anchorage and Fairbanks and lesser information stations in several Alaskan towns. NPS interpreters would direct their message to Alaskans as much as to out-of-state visitors. The mission would be to sell this "pioneer" Alaska to Alaskans. The message would be "that Alaska is our finest, most extensive, recreation resource – our greatest reservoir of latent natural [and] cultural values."[46]

Hartzog did not share *Operation Great Land* with the governor of Alaska, deciding that its aggressive tone could be seen as self-aggrandizing in a state that was notoriously wary of federal controls. He did move, however, to establish an Alaskan Field Office in Anchorage, which opened in April 1966. Anchoring the office's small staff were landscape architect Bailey Breedlove and wildlife biologist Richard Prasil. The following year, Hartzog sent a "briefing book" about the NPS program in Alaska to Governor Walter J. Hickel. Mellower than *Operation Great Land*, it nevertheless announced the Park Service's plans for expansion. "Each year – as jet travel brings Alaska within easy reach of increasing thousands of visitors from the 'lower 48,'" Hartzog wrote in his cover letter to the governor, "it becomes more and more apparent that this faraway land of superlative natural wonders has become a national heritage of significance to all Americans." Here was a foreshadowing of the federal government's claim to "national interest lands" in Alaska a few years later. Hartzog went on to note that the four existing units in Alaska were now complemented by 15 newly registered

[45] George Collins, *Operation Great Land*, report prepared for the National Park Service (Washington: National Park Service, 1965), 2-4, 75-76.
[46] Collins, *Operation Great Land*, 63.

National Landmark sites. While not federally owned or administered, these designations pointed to areas of potential interest in the future.[47]

National Landmark studies proved to be a useful vehicle for developing more information about outstanding natural and historical areas in Alaska. The studies added to information gleaned in earlier surveys including the one performed for *Operation Great Land*. Prasil administered the program, which began with a $20,000 allotment in 1967 and grew over the next two years. Most of the studies were done by university faculty in Fairbanks and Anchorage. In May 1968, Prasil contracted with Dr. Ruth A. M. Schmidt, a geology professor at Anchorage Community College, to evaluate the eligibility for National Landmark listing of the Harding and Sargent ice fields. Schmidt reviewed the scientific literature, flew over the ice fields, and prepared a brief report that explained what an ice field was and placed these two in context. Noting that the ice fields were remnants of a larger ice mass that had existed in the Pleistocene Era and that they represented "vanishing geologic phenomena" and "rare examples of our country's natural heritage," she concluded that they were eligible for listing. The Alaska Field Office submitted Schmidt's report to the Washington Office but the NPS took no further action on it. In the long run, the study served a more important purpose as a stepping stone leading to the Department of the Interior's first Kenai Fjords-Harding Icefield National Monument proposal following passage of ANCSA.[48]

Hartzog took two further initiatives to establish new national parks in Alaska, the first abortive and the second hugely consequential. In the first case, Hartzog worked with Secretary of the Interior Stewart Udall to prepare a list of proposed areas that President Johnson might proclaim as national monuments as a "parting gift" to the nation before leaving office. Hartzog recommended three areas in Alaska and four in Utah. The three in Alaska included additions to Mount McKinley and Katmai and two rectangular tracts in the Brooks Range to be called "Gates of the Arctic." Johnson finally balked at the sizable acreage of the Alaskan areas and limited his executive action to the Utah areas.[49]

Hartzog's second initiative was to seize the opportunity presented by the Alaska Native land claims movement. Alaska Natives were politically aroused in the 1960s by the new state government's headlong rush to develop natural resources, especially its determination to tap the state's newfound oil wealth on the North Slope. Alaska's Native population, although ethnically diverse and widely dispersed, came together very effectively during the decade to demand a land settlement and to block state land selections while their demands were heard. In 1966, Secretary of the Interior Stewart

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[47] U.S. Department of the Interior, National Park Service, "The National Park Service Program in Alaska," October 10, 1967, Box B, Accession 85-42, DSC Alaska – Alaska Admin. History, Harpers Ferry Center (hereafter HFC).

[48] Williss, *"Do Things Right the First Time,"* 45, 50; Cook and Norris, *A Stern and Rock-Bound Coast*, 355.

[49] John P. Crevelli, "The Final Act of the Greatest Conservation President," *Prologue: The Journal of the National Archives* 12, no. 4 (Winter 1980): 177.

Udall imposed a "land freeze" in Alaska, halting conveyances of public domain to the state of Alaska until the Native land claim issue was resolved. As the contest between the state government and Alaska Natives intensified over North Slope oil development, and over the state's preparations for construction of the Trans-Alaska Oil Pipeline in particular, environmentalists began to see that their own interests and Alaska Natives' interests were somewhat aligned. Hartzog had no hesitation jumping into this political cauldron; in fact, he relished the chance. "Alaska," he wrote in his memoir, "was ripe for the taking."[50]

The idea of inserting a provision in the Alaska Native claims settlement legislation to address environmentalists' concerns apparently originated with David Hickok, a wildlife expert on the Federal Field Committee for Economic Development in Alaska.[51] Hartzog soon learned of the idea and made it his own. The NPS director enjoyed the challenge of working with members of Congress, and he was good at it. Advised that the key legislator he needed to win over was Senator Alan Bible (D-NV), chairman of the Senate Subcommittee on National Parks and Recreation, he wasted no time in going to work on the senator. Hartzog persuaded Bible to accompany him on a trip to Alaska that summer. Accompanied by their wives and joined for part of the trip by Edgar and Peggy Wayburn of the Sierra Club, the party visited the proposed Gates of the Arctic National Park, the proposed additions to Mount McKinley and Katmai, the Kenai Fjords area, and the historic town of Skagway. By all accounts the trip was crucial in securing Bible's support.[52] Afterward, Hartzog, acting with the counsel of Secretary of the Interior Rogers C. B. Morton, provided draft language to Senator Bible that became ANCSA's Section 17(d)(2)(A).[53] Bible, for his part, sought additional input from The Wilderness Society and the Sierra Club, Representatives John Saylor (D-PA) and John Dingell (D-MI), and Senators Henry M. Jackson (D-WA) and Gaylord Nelson (D-WI), who co-sponsored the so-called Bible amendment.[54] Hartzog later professed sharp disappointment that the NPS, at the end of the day, did not receive a larger proportion of the national interest lands. Be that as it may, the NPS director had successfully positioned his agency to support a huge expansion of the national park system in Alaska. This was a significant change from the minor role played by the agency heretofore in Alaska.

Under Hartzog's leadership, the NPS was reasonably well prepared for the huge demands placed on it by ANCSA's Section 17(d)(2) when ANCSA became law. The Alaska Field Office had been working on a list of areas it would recommend for possible inclusion in the national park system over the previous two years. It had been doing so in

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[50] Hartzog, *Battling for the National Parks*, 205.
[51] Robert Cahn, *The Fight to Save Wild Alaska* (Washington: National Audubon Society, 1982), 11.
[52] Hartzog, *Battling for the National Parks*, 213.
[53] George B. Hartzog, Jr., to Rogers C. B. Morton, March 6, 1972, File Withdrawals March 1972, Box C, Accession 85-42, DSC Alaska – Alaska Admin. History, Harpers Ferry Center (hereafter HFC).
[54] Williss, *"Do Things Right the First Time,"* 75-82.

cooperation with the Federal Field Committee, which was cooperating in turn with the State of Alaska and the Bureau of Land Management to rationalize state land selections under the Alaska Statehood Act. In January 1971, the Alaska Field Office sent its preliminary list to the regional office in Seattle. The list included ten natural areas and fifteen (mostly small) historical areas. This list identified a number of areas that would eventually become ANILCA parks, including Gates of the Arctic, Wrangell-St. Elias, Lake Clark, and the Denali additions. It did not include the Harding Icefield-Kenai Fjords area. The Alaska field team suggested that these areas might be added to the system a few at a time over the next ten to fifteen years. Anticipating that something like ANCSA's Section 17(d)(2) would soon come their way, the Alaska field team noted that "competition for land uses and special reserves in Alaska will become intense in a short period of time between various federal and state land management agencies." Feeling confident that the American public would demand that a sizable chunk of Alaskan real estate be set aside for wilderness preservation, the Alaska field team prepared for the coming scramble over Alaska lands.[55]

[55] General Superintendent, Alaska Office, to Director, Pacific Northwest Region, January 29, 1971, Box B, Accession 85-42, DSC Alaska – Alaska Admin. History, HFC.

2

The Scramble for Alaska

Establishment, 1971-1980

Origins of the Harding Icefield-Kenai Fjords National Monument Proposal – NPS Management of the Kenai Fjords Proposal, 1974-1979 – Recommendations on Boundaries – Subsistence and Sport Hunting – Kenai Fjords National Monument – Kenai Fjords Becomes a National Park

Origins of the Harding Icefield-Kenai Fjords National Monument Proposal

By 1971, the Park Service had developed a small cadre of personnel who had worked in Alaska long enough to acquire familiarity with its politics and culture as well as the harsh environmental conditions found in the Alaska wild. Known informally as its "Alaska hands," these people became a vital human resource for the Park Service during its transition from bit player to equal partner among the "four conservation systems" that would soon claim much of the remaining public domain in the 49th state.[1]

On December 21, 1971, a few days after ANCSA became law, Hartzog appointed one of these Alaska hands, Assistant Director Theodor Swem, to oversee the Park Service's Alaska planning effort. Swem had worked on assignments in Alaska in the 1960s, notably on the task force that produced *Operation Great Land*. This time he would direct the effort from the Washington office. On December 27, Swem phoned land use planner Richard Stenmark of the Alaska Field Office and requested that he fly back to Washington to work on the preliminary identification of NPS interest areas. Stenmark completed a list for review on January 4, 1972. This list was based substantially on the Alaska Field Office's "National Park System Plan" that had been submitted to the regional office nearly a year prior. Stenmark dropped three natural areas and added five others for a total of twelve natural areas, which totaled 42,201,000 acres.

[1] The "four conservation systems" were the national forest system, the national park system, the national wildlife refuge system, and the national wild and scenic rivers system. As the latter three were administered by different agencies within the Department of the Interior (NPS, Fish and Wildlife Service, and Bureau of Outdoor Recreation), those three agencies were supposed to work together in developing area proposals. In fact, the NPS and the Fish and Wildlife Service conducted all of the field work for Interior.

He also pared the historical and archeological areas from fifteen to nine for a total of 86,000 acres. As before, Harding Icefield-Kenai Fjords did not appear on the list.[2]

The Kenai Fjords proposal did appear among Stenmark's working papers at this time. A two-page typed memo with Stenmark's name on it, headed simply "DRAFT: 1-26-72" and stamped "CONFIDENTIAL," would seem to be the first mention of a Kenai Fjords national park or monument in writing. According to this brief memo, Stenmark envisioned an area of about 800,000 acres featuring rugged and scenic coastline, part of the Harding Icefield, and significant populations of marine mammals and sea birds. Stenmark noted three problems: the northern portion of the Harding Icefield was already included in the proposed Seward National Recreation Area, the area was also under consideration as an addition to the existing Kenai National Moose Range, and visitor access would be limited to aircraft and watercraft, the latter capable of navigating on the often rough water of the Gulf of Alaska.[3]

Perhaps because of these problems, the NPS did not include Kenai Fjords in the list of withdrawals it recommended to Secretary of the Interior Morton. The Fish and Wildlife Service did include a part of what would become Kenai Fjords National Park in its own list, calling the area "Aialik." Aialik was the last in a list of 22 areas totaling 54,190,000 that the Fish and Wildlife Service recommended for withdrawal. The preliminary lists put forward by the two agencies included about 5,717,000 acres of overlap, all located elsewhere in the state. Over the next six weeks, Swem and Stenmark worked with officials in the Fish and Wildlife Service and the Office of the Secretary of the Interior to reconcile the two lists. When Secretary Morton announced the preliminary set asides under ANCSA on March 15, 1972, the 80 million acres that were withdrawn under Section 17(d)(2) included four separate areas on the southern Kenai Peninsula: two rectangular areas centering on the Chiswell Islands and Pye Islands and including portions of the Aialik and Harris peninsulas and rocky headlands around Nuka Bay respectively, and two irregularly-shaped areas taking in the northern and southern limits of the Harding Icefield. Interior officials were clearly of two minds about whether "Aialik" or "Kenai Fjords" should be a wildlife refuge or a national park, since the D-2 lands encompassed sections of the ice field as well as offshore islands. The reason the initial withdrawals on the southern Kenai Peninsula were so fragmentary was that much of the remaining area in between was taken up by Alaska Native deficiency land

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[2] Williss, *"Do Things Right the First Time,"* 95-98.

[3] Richard Stenmark, untitled memorandum headed "DRAFT: 1-26-72," File Withdrawals March 1972, Box C, Accession 85-42, DSC Alaska – Alaska Admin. History, HFC. NPS planners coined the term "Kenai Fjords" sometime before this. According to Follows, Bailey Breedlove noted the similarity of this coastline to Norway's fjords while on a commercial flight from Anchorage to Seward in 1967. Breedlove and Stenmark subsequently studied the area's suitability for the national park system, referring to it informally as Kenai Fjords. (Keyman to Chief, Professional Services, May 9, 1977, Box H, Accession 85-42, DSC Alaska – Alaska Admin. History, HFC.)

selections – lands reserved for possible inclusion in the Alaska Natives' 40-million-acre entitlement.[4]

On May 15, 1972, the Park Service formed an Alaska Task Force, and on June 5 this task force assembled in Alaska and began field operations. The task force was under the direction of Project Leader Albert G. Henson and consisted of a small permanent staff and five study teams. While the permanent staff occupied a small office in Anchorage (at a separate location from the Alaska Field Office), the study teams were placed at large, each being assigned three or four study areas. Each study team comprised a team captain and two or three assistants, all on detail assignment. Each of the five team captains had a different subject specialty: there was a park planner, a landscape architect, an ecologist, an interpretive planner, and an anthropologist. Similarly, the other team members were drawn from a variety of disciplines and included land specialists, a sociologist, an engineer, a mineral specialist, a park management specialist, photographers, and draftsmen.[5] Kenai Fjords, which was designated Study Area 11 at this time, was assigned to Team One led by Paul Fritz, the landscape architect.[6]

Fritz was immediately impressed by Kenai Fjords but took the view that continued NPS interest in the area was only justified if the possibility existed to join the four separate land parcels into a larger, compact unit. Fritz discussed the land question with Cecil Barnes, executive director of Chugach Natives, Inc., the newly created Native regional corporation (the name would change to Chugach Alaska Corporation), which claimed most of the Native deficiency lands in between the four D-2 tracts. Barnes indicated that those lands were of low priority to the Native corporation and would be readily exchanged for lands on the Chugach National Forest around Prince William Sound if the Forest Service cooperated. While Fritz did not expect much cooperation by the Forest Service on that score, he decided that the NPS should remain interested in Kenai Fjords in case the Native deficiency lands were vacated. "The area is superb in inland-island fjord scenery; it caters to the hardy visitor who must be aware of the adverse climate and terrain; and is important for its big game and marine mammals," he wrote.[7]

In January 1973, Fritz worked with Bob Stephens of the Fish and Wildlife Service on a joint memorandum concerning Kenai Fjords. The resulting document considered

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[4] U.S. Department of the Interior, "Secretary Morton Announces Preliminary Set-Asides for State, Native and Federal Land Selections in Alaska," news release, March 15, 1972, File Withdrawals March 1972, Box C, Accession 85-42, DSC Alaska – Alaska Admin. History, HFC. For a map showing the four parcels, see U.S. Department of the Interior, *Recommendations Regarding Alaska Native Claims Settlement Act 17(d)(2) Withdrawals*, report prepared by National Park Service (Washington: National Park Service, 1972).

[5] "National Park Service, Alaska Task Force Office," undated memorandum, Box 1 of 2, Accession 84-39, DSC Alaska, HFC.

[6] Team Captain No. 1 to Project Leader, November 17, 1972, File L58, Box 50, Alaska Regional Office, Alaska Task Force General Files 1972-78, RG 79, NAAR.

[7] Team Captain No. 1 to Project Leader, January 13, 1973, September through December 1973 Reading File, Box 67, Alaska Regional Office – Alaska Task Force General Files 1972-78, RG 79, NAAR.

advantages and disadvantages of four management options for the "Kenai Fjords" area. These national interest lands could be managed by (1) the Forest Service, (2) the Park Service, (3) the Fish and Wildlife Service, or (4) placed under joint management by the latter two agencies. The Forest Service option was not a viable option by itself because the Forest Service was only interested in one of the four D-2 areas, the one that covered the northern part of the Harding Icefield. The fourth option also seemed to present more disadvantages than advantages, mainly because of the inherent difficulties of joint management. Of the two remaining options, the arguments presented in this memorandum leaned toward setting up the area as a wildlife refuge rather than a national park. Key to the analysis was the uncertainty surrounding the final disposition of Native land selections in the area. If the land area separating the four separate blocks should become part of the Native estate, then Park Service interest in the four isolated blocks seemed unwarranted as they would not compose a whole biotic entity. Even if the intervening lands should become available, however, the Park Service had "mixed feelings" about making the area a unit of the national park system:

> Weighing heavily against such status are the area's extreme fragility and climatic austerity. Topography and food resources combine to concentrate a very substantial proportion of critical wildlife habitat along the beach. The same factors, plus presence of wildlife itself, will tend to concentrate human activity in the same manner. This conflict will be satisfactorily resolved only by retaining near-shore human use at very low levels. Austere weather and sea conditions prevalent in the area further reduce the area's utility for recreation. It seems likely that only large, stabilized cruise vessels could provide a comfortable, rewarding and scheduled recreational experience for appreciable numbers of visitors.[8]

The Park Service and the Fish and Wildlife Service reached tentative agreement that the area would be best managed by the latter, especially if the D-2 lands remained disconnected.

One month later, the Office of the Secretary of the Interior overruled the two agencies. While stopping short of saying that the area should definitely be considered for inclusion in the national park system, Deputy Assistant Secretary Douglas P. Wheeler insisted that the NPS serve as lead agency in developing the area proposal and environmental impact statement. The explanation Wheeler gave for his directive was that the two agencies proposed substantially different boundaries for the area and since

[8] Quoted in "Kenai Fjords," undated 3-page memorandum filed with untitled and undated 5-page memorandum on Bureau of Sport Fisheries and Wildlife letterhead, KEFJ 13289/001/054, Alaska Task Force Collection, Archives, KEFJ. Note that Fritz refers to these memoranda being in progress in his January 13 letter cited above.

the NPS required a larger acreage, it needed to take the lead. Meanwhile, both agencies would be responsible for producing their own master plans.[9]

Wheeler's directive was decisive in placing Kenai Fjords in the NPS column. While both agencies continued to talk about joint management, neither agency had much enthusiasm for it and the Fish and Wildlife Service gradually pulled back on this proposal, going so far as to delete "Aialik National Wildlife Refuge" from its Alaska Coastal National Wildlife Refuges proposal, which it submitted to the Secretary of the Interior in September 1973.[10] Meanwhile, the Harding Icefield-Kenai Fjords National Monument proposal gained supporters. Notably, the Advisory Board on National Parks, Historic Sites, Buildings and Monuments endorsed the concept. The advisory board's Chairman Melvin M. Payne made the important point that the area was within an easy drive of Anchorage and that nearby Seward was accessible by road, rail, aircraft, and car ferry. "Because of this accessibility factor," he wrote, "the proposal possibly offers the greatest potential for visitor use of all of the Alaskan National Park System proposals." Noting that ninety percent of the land in the NPS proposal was made of Native deficiency lands, Payne urged the NPS to plan for joint management with the Fish and Wildlife Service as well as subsistence use by Alaska Natives "since close cooperation with the Natives must be maintained."[11]

In December 1973, the Nixon administration sent a comprehensive legislative proposal to Congress as required by ANCSA. The administration's bill, a first draft of what would eventually become ANILCA, would have designated a Harding Icefield-Kenai Fjords National Monument consisting of about 300,000 acres made up of three units: one covering the ice field plus two smaller units covering the Chiswell and Pye island groups and the associated tips of peninsulas. In addition, the bill provided for including the lands in between if the Native land selections were vacated. The two southern units would be administered jointly by the NPS and the Fish and Wildlife Service under a cooperative agreement.[12]

An interesting feature of the administration's bill was the designation of Areas of Ecological Concern. For each proposed park or refuge, the Area of Ecological Concern (AEC) consisted of lands and waters adjudged to be part of the total ecosystem for that park or refuge, which, if compromised, would endanger resources within the area. In other words, the AEC designations identified additional lands outside the D-2

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[9] Deputy Assistant Secretary for Fish and Wildlife and Parks to Area Director, Bureau of Sport Fisheries and Wildlife and Project Leader, National Park Service, Alaska Task Force, February 16, 1973, KEFJ 13289/001/048, Alaska Task Force Collection, Archives, KEFJ.

[10] U.S. Fish and Wildlife Service, "Alaska Coastal National Wildlife Refuges, A Proposal," prepared by Alaska Planning Group, U.S. Department of the Interior, September 1973, KEFJ 13289/001/048, Alaska Task Force Collection, Archives, KEFJ.

[11] Chairman, Advisory Board on National Parks, Historic Sites, Buildings and Monuments, to Secretary of the Interior, August 8, 1973, KEFJ 13289/001/030b, Alaska Task Force Collection, Archives, KEFJ.

[12] Secretary of the Interior to Speaker of the House, December 17, 1973, Box B, Accession 85-42 DSC Alaska – Alaska Admin. History, HFC.

withdrawals themselves (over and above the 80-million-acre guideline) where adverse uses could undermine park or refuge purposes. In the event Native or state land selections within each AEC were vacated, the Secretary of the Interior would be authorized to recommend to Congress that those lands be added to the park or refuge. The AEC for Kenai Fjords included all of the Harding Icefield, adjacent coastline, and adjoining waters, as well as a large rectangular block of land covering the Grewingk-Yalik Glacier Complex at the southern end of the Kenai Mountains.[13]

The NPS completed a master plan and environmental impact statement for the Harding Icefield-Kenai Fjords National Monument to accompany the legislative proposal. These documents fleshed out a vision and secured a commitment to the area on the part of the Park Service. They gave local people something more than lines on a map to digest. The master plan, released in December 1973, came to 48 pages. The EIS, released in draft in the spring of 1974 and published in final in 1975, came to 147 pages of text plus 119 pages of appendices and 328 pages of public comments.

The administration's bill met with criticism from all sides, but the strongest criticism came from environmentalists who complained that the bill did not sufficiently protect national interest lands. The more contentious parts of the legislative package had to do with other areas. Provisions to allow sport hunting in some of the new national parks, for example, dismayed environmentalists. NPS historian G. Frank Williss comments that the administration proposal had "serious shortcomings," which stemmed in large part from the fast deadlines that Interior followed to comply with ANCSA. But he credits the administration proposal for developing the Areas of Ecological Concern, which allowed NPS officials to "make public what they considered to be ideal boundaries for the proposed park units," and he argues that the bill's recommendation to designate some 83 million acres of national interest lands – exceeding the 80 million acres stipulated by Section 17(d)(2) – was important in that it "broke a psychological barrier."[14] A spate of alternative bills followed the administration bill, some from the Alaskan delegation with a greater orientation to multiple use, others from senators and congressmen seeking more generous terms for wilderness preservation. During this period, Congress and the Nixon administration were increasingly embroiled in the Watergate scandal and without a sustained effort on both sides the Alaska lands legislation languished.[15]

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[13] Department of the Interior, National Park Service, Alaska Planning Group, "Master Plan, Harding Icefield-Kenai Fjords National Monument, Alaska," December 1973, Box C, Accession 85-42 DSC Alaska – Alaska Admin. History, HFC.

[14] Williss, *"Do Things Right the First Time,"* 154-55.

[15] Haycox, *Frigid Embrace*, 109. Another underlying cause of this "hiatus" on the road to ANILCA was that members of Congress were not getting enough pressure from constituents to act. It took three years of grassroots organizing by the Alaska Coalition to bring politicians back to the table. See Daniel Nelson, *Northern Landscapes: The Struggle for Wilderness Alaska* (Washington: Resources for the Future, 2004), 168-77.

NPS Management of the Kenai Fjords Proposal, 1974-1979

After the administration bill was submitted to Congress there was a changing of the guard on the Alaska Task Force. Most of the personnel on the original planning teams, including Paul Fritz at the head of the Harding Icefield-Kenai Fjords proposal, returned to their regular jobs. The permanent staff in Anchorage struggled with ongoing commitments such as refining the many proposals and providing legislative support data for Congress. Project leader Al Henson pressed for another infusion of staff to keep the proposals on track. Finally, in May 1975, the newly appointed NPS Director Gary Everhardt approved a budget request for the Alaska Task Force to recruit ten full-time people for two years. These individuals were designated "keymen" whose primary responsibility would be to shepherd one proposal apiece.[16]

The person recruited to shepherd the Kenai Fjords proposal was Don Follows, an interpretive planner for natural areas with the Denver Service Center. In the telephone call from Anchorage leading to his appointment, Follows was informed that there would be two parts to his job. The first part was to make himself the expert on the proposed Harding Icefield-Kenai Fjords National Monument. This task would include getting thoroughly acquainted with the Seward community as well as the resource itself. The second part was to make his own specialty, interpretive planning, an asset to the whole Alaska Task Force and the ten other proposals. He would provide "talks, media and writings as requested to help 'sell' the new proposals." The other nine keymen would each contribute a different specialty to the team as well. Follows arrived in Anchorage with the other keymen in August 1975.[17]

Each keyman worked with a technical assistant. Follows' assistant was Chuck Gilbert, a young writer from southern California who had come to Alaska seeking outdoor adventures the previous year. Kicking around Anchorage for a job, Gilbert had gotten hired by the Alaska Task Force as a technical writer to work on its raft of environmental impact statements accompanying the eleven proposals. As the person in the office with the most seniority when the proposal work entered this new phase, Gilbert had his pick of the litter and chose Kenai Fjords. A sea kayaking enthusiast, he was drawn to the area by its maritime aspect as well as its proximity to Anchorage.[18]

Gilbert, Follows, and others in the office made several trips to Kenai Fjords in the summer and fall of 1975 to gain a more intimate knowledge of the resources. They were, in effect, exploring an unknown landscape, albeit on a micro scale. For example, they could see from the USGS 7.5 minute quad that the narrow Aialik Peninsula, which humps

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[16] Williss, *"Do Things Right the First Time,"* 246-47.
[17] Interpretive Park Planner to Management Assistant, March 1, 1976, KEFJ 13289/001/07, Alaska Task Force Collection, Archives, KEFJ.
[18] Chuck Gilbert, interview by Theodore Catton, August 21, 2008.

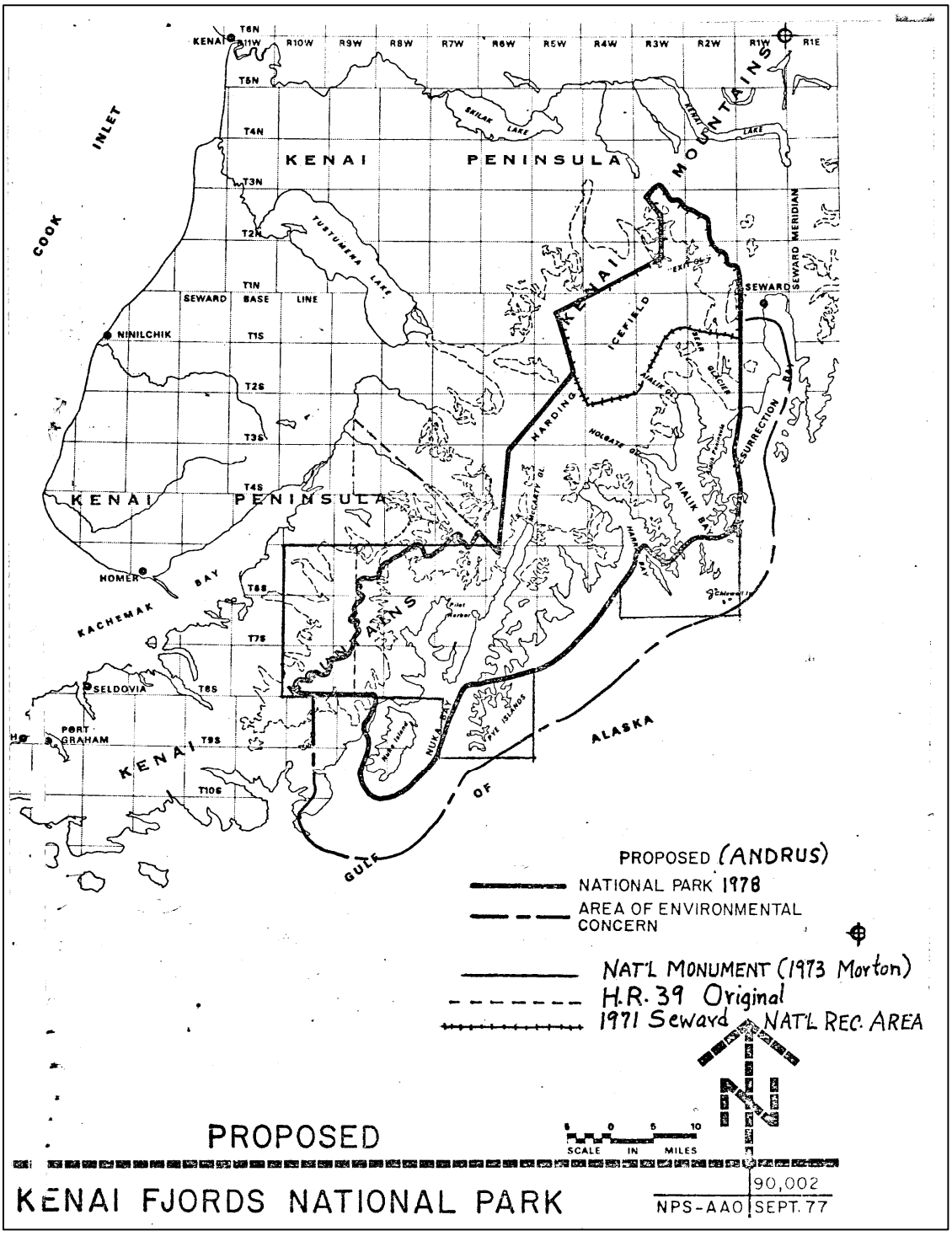

Figure 6. Proposed area boundaries in 1978 and earlier proposals. (File 13289/001/019a, Alaska Task Force Collection, Archives, KEFJ.)

out of the Gulf of Alaska like a column of vertebrae, is nearly pinched in two where Agnes Cove lies opposite Paradise Cove. If it were possible to land a kayak safely in Agnes Cove and portage over the peninsula – perhaps with the aid of a fixed boat landing and short hiking trail – it would make Aialik Bay more accessible to visitors. A reconnaissance of the area quickly dispelled this idea. In his first trip report, Gilbert described the steep headwall around Agnes Cove which made it impossible.

> A few rivulets cascaded down the steep wooded slopes. At its further most recess we hoped to land and portage across to Paradise Cove, over the approximately 250 foot summit. As we approached the spot, it became apparent that not only were the sides extremely steep, but that the rocks would make it impossible for us to land and get the kayaks out of the water.[19]

They found conditions at Chat Cove, a little farther down the peninsula, no better. Even though the headland facing the Gulf of Alaska provided some protection from heavy seas, there was still too much surge to permit a safe landing on the cove's rocky shore. Other small discoveries, meanwhile, were more favorable. On a two-day trip around Aialik Bay aboard the charter boat *Jayleen*, Gilbert and Follows found a suitable place to locate a ranger station in Coleman Bay and a good location for a backcountry lodge on the spit near the foot of Pederson Glacier.[20] Both sites would eventually be utilized as the men imagined.

These trips also gave them firsthand impressions of the area's wondrous marine life. Gilbert described their first encounter with sea lions:

> After passing Cape Aialik we headed for Chiswell Island, still under blue skies and upon calm seas. Coming up on the north side of Chiswell Island we spotted the enormous sea lion colony. Perhaps more than 500 individuals were packed on the sloping rocks in a 150 meter length of the island. They were alert and barking at the approach of our boat, and as we neared to within 100 feet they began slipping into the water. Pandemonium reigned, as they barked at us from the water and shore. Some squabbles developed as territories were apparently violated in the confusion. This is certainly one of the most interesting spots within the proposal area.[21]

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[19] Charles Gilbert, "Kenai Fjords Trip, Thursday, 6/12/75," KEFJ 13289/001/018, Alaska Task Force Collection, Archives, KEFJ. For another view on the feasibility of the dock-trail development, see Engineer to Project Leader, October 6, 1975, same file.
[20] Charles Gilbert, "Kenai Fjords Trip, August 4 & 5, 1975," KEFJ 13289/001/018, Alaska Task Force Collection, Archives, KEFJ.
[21] Ibid.

And the team was also discovering the area's most fabulous beauty spots, as Gilbert recorded in this description of his first visit to Northwestern Lagoon:

> Harris Bay and Northwestern Lagoon are spectacular visual areas. Glaciers tumble down in a very raw rock terrain. Northwestern Glacier is visually interesting, as it pours down in a circuitous route between rock outcrops. Smaller glaciers merge with it. Seals rest on the calved ice floes. With a chartering [sic] of the terminal moraine at the entrance of Northwestern Lagoon so that safe passage is assured, this area could be one of the principal sightseeing attractions of the Kenai Fjords.[22]

These trip reports make enjoyable reading today because they capture the sense of amazement that the NPS planners experienced as they explored the area. While exalting in the scenery and reveling in their experience, they also gave earnest thought to the real challenges ahead in making the area a national monument or park. For all of the area's charms, it was an extreme environment. Rough seas, fickle weather, and an almost impassable coastline would tend to discourage much public enjoyment of the fjords. And it was doubtful whether the land could sustain much recreational use anyway. As the task force's Chuck Hewett wrote in a trip diary while exploring the Aialik Peninsula, "What should we do with this beautiful but steep, inviting but treacherous, peaceful but violent landscape?"

Few people would want to spend much time ashore, Hewett believed, answering his own question. What little recreational use occurred would have to be carefully screened. The NPS would need to limit parties to no more than four to six people, and each party would have to prove that it had a high level of survival skills and a strong wilderness ethic. Later in his diary, after a beautiful day spent bushwhacking and scrambling to the crest of the peninsula, Hewett returned to this theme. "The remarkable thing about most of the terrestrial flora that we've seen is its amazing delicacy and fragility," he wrote. "The mosses and other plants common to these moist, steep hillsides just cannot stand being walked on." Indeed, the thought of more wilderness users following in his footsteps made him uneasy. "A small party per night in any of these areas would be a ruinous amount of use," he noted. He closed his diary entry that day with these ruminations:

> Our day was well spent in fantastic country but it will be difficult (if not impossible) to give many people the experience we had without ruining the area. Perhaps this area should be administered so that it may be explored only on occasion by those most deserving. This unit would make a great ecological study

[22] Charles Gilbert, "Kenai Fjords Trip, 9/3/75 & 9/4/75," KEFJ 13289/001/018, Alaska Task Force Collection, Archives, KEFJ.

> area and might be worth a landmark designation as an NPS ecological reserve. The class two designation for part of this portion of the Aialik Peninsula seems illogical on the basis of what we've seen so far.[23]

In mentioning a "class two designation" Hewett was referring to the master plan, which classified most of the Harding Icefield and the entire coastline as class II or "general outdoor recreation area."[24]

The following summer, the NPS arranged a joint bird survey of the southern coast of the Kenai Peninsula with the Fish and Wildlife Service. Don Follows and Chuck Gilbert were joined by bird biologist Ed Bailey and an assistant Nina Faust. The party of four chartered a boat in Seward and motored around the coast to the coastal village of Seldovia where they gassed up for the return trip. Aided by a long spell of calm weather, the survey party took three weeks to come back around to Seward, investigating every section of coastline and counting every bird and marine mammal they saw. The study confirmed the remarkable richness of the bird colonies in the area. Ed Bailey recommended that the Fish and Wildlife Service reconsider its position on the offshore islands, which led to the decision to make the islands part of the Alaska Maritime Wildlife Refuge proposal.[25]

Besides doing field reconnaissance of the area, Follows and Gilbert gathered data from every imaginable source. They interviewed residents of Seward who were knowledgeable about the area. They visited English Bay and Port Graham and consulted village representatives about Native ties to the area. They talked to people in the mining community. They went to the offices of the Alaska Department of Fish and Game and compiled data on fish and wildlife populations from harvest tickets. They extended the literature search begun by Paul Fritz's team. "We beat the bushes trying to get the best information we could," Gilbert stated.[26]

Follows tried to involve a Sierra Club expedition in his reconnaissance. Keen to learn more about the feasibility of establishing a recreational hiking trail through Nuka Pass in the southwest corner of the proposal area, he corresponded with a trip leader in San Jose, California as well as U.S. Army Corps of Engineers officials who were familiar

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[23] Chuck Hewett, "Kenai Fjords Study Area, Aialik Peninsula," KEFJ 13289/001/016, Alaska Task Force Collection, Archives, KEFJ.

[24] Alaska Planning Group, U.S. Department of the Interior. *Final Environmental Statement, Proposed Harding Icefield-Kenai Fjords National Monument, Alaska* (Washington: National Park Service, 1974), 398.

[25] Gilbert interview. Also see Project Leader to Area Director, February 27, 1976, and other memos in File 13289/001/07, Alaska Task Force Collection, Archives, KEFJ.

[26] Gilbert interview. Also see Don Follows to Martin Kasser, March 23, 1976, and Assistant to Keyman, April 8, 1976, KEFJ 13289/001/07, Alaska Task Force Collection, Archives, KEFJ. For reference to visits to English Bay and Port Graham, see Chuck Gilbert to Files, April 7, 1976, KEFJ 13289/001/036, Alaska Task Force Collection, Archives, KEFJ. Also see Charles Gilbert, "Meeting with Don Oldow, Skipper of State Ferry *Tustumena* and Charter boat owner and operator, Seward, Alaska," September 1975, KEFJ 13289/001/03, Alaska Task Force Collection, Archives, KEFJ.

with the Bradley Lake area in the hope that the Sierra Club party would pioneer a route. It seems the Sierra Club expedition never happened, but Follows went so far as to plot a potential trail on a USGS quad map and request easements across Native deficiency lands. In his prospectus for the Nuka River Pass trail, Follows noted that the route would cross the Kenai Mountains at its only ice-free section, through country containing black bear, wolf, moose, bald eagle, and mountain goat, and passing within view of a high, unnamed waterfall. His map showed the trail branching in the upper Nuka River valley, with one branch descending down the Nuka River to Beauty Bay and the other branch going over the saddle north of Storm Mountain and down to North Arm. The "unnamed waterfall" was probably Kvasnikoff Falls.[27]

Follows spearheaded the Park Service's efforts to cultivate local support for the Harding Icefield-Kenai Fjords proposal. His efforts focused on Seward, where the city council passed a resolution in 1975 expressing opposition to the national monument and favoring the creation of a national recreation area instead. Follows requested a place on the city council's meeting agenda, only to have his presentation postponed again and again. Finally, on November 7, 1976, he was given the opportunity to speak. Follows gave a 90-minute talk which he illustrated with slides and maps, the latter presented as a series of mylar overlays pinned on top of a base map. One of his central messages was that the proposal area contained no commercial timber or significant mineral deposits. Prepared for a rough handling by the council members, Follows was much relieved to be given a polite reception. "The tsunami wave of opposition has subsided!" he wrote effusively to his boss afterwards.[28] But the presentation marked only the beginning of the Park Service's public relations efforts in the town.

Recommendations on Boundaries

From December 1973 until the proclamation of Kenai Fjords National Monument in October 1978, the boundary of the proposed area kept changing, influenced by a handful of key unknowns. How much Native land would ultimately exist in the area? How much of the area would be included in wildlife refuge? How much land was needed to support the park's core purpose and significance?

To understand the complexities involved in the first unknown – how much of the area would ultimately go into the Native estate – it is necessary to refer back to ANCSA.

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[27] Robin Brooks to Donald S. Follows, November 21, 1977, and Follows to Brooks, May 19, 1978, File 13289/001/01, Follows to Brooks, May 29, 1979, Follows to Chief, Professional Services, April 2, 1979, and Follows to Area Director, March 8, 1978, KEFJ 13289/001/011, Area Director, Alaska to Area Director, Heritage Conservation and Recreation Service, Alaska, May 24, 1978, enclosing map and "Nuka River Pass Prospectus," KEFJ 13289/001/068, Alaska Task Force Collection, Archives, KEFJ.

[28] Keyman to Project Leader, November 11, 1976, KEFJ 13289/001/01, Alaska Task Force Collection, Archives, KEFJ.

Under ANCSA, each Native village corporation was entitled to a certain amount of land based on the village population. Lands in and around the village were to make up the first part of this entitlement, while lands in the surrounding region were to make up the balance. To ensure that each Native village corporation got a fair shake in claiming those more remote lands, the Secretary of the Interior was to withdraw three times the necessary acreage from the nearest public lands. These withdrawals, which were called "Native deficiency lands" because they provided a stock from which each Native village would make up whatever deficiency of acreage it might have, were to be of similar character to the lands on which the village was located. Each Native village corporation was to select from the appropriate stock of Native deficiency lands, with the requirement that the selected lands would form compact or contiguous blocks. Each Native regional corporation had a similar entitlement, except that the formula for determining the size and location of its lands was contingent on the village corporations' selections.[29]

The law described an ideal, but the process on the ground was a lot messier because most Native deficiency lands were eligible for selection by more than one Native village corporation. By the mid 1970s, both Port Graham and English Bay village corporations and Chugach Natives, Inc., the regional corporation, had filed their land selections. As a matter of policy, Chugach Natives, Inc. filed for all eligible lands in the region – deferring the actual selection of its entitlement until later. As far as the national park proposal was concerned, this amounted to seven townships totaling 160,603 acres in the western edge of the Area of Ecological Concern (an area lying mostly to the west of the future national park). Port Graham and English Bay village corporations, meanwhile, filed for most of the lands on the coast within the AEC, from Nuka Bay northward to Aialik Bay. Like the regional corporation, the village corporations exceeded their entitlements when they filed. Altogether, the two village corporations' selections amounted to 116,572 acres. Based on each village corporation's entitlement and the amount of eligible lands located outside the AEC, federal officials estimated that the total entitlement for the two village corporations within the AEC would amount to about 48,000 acres, or 40 percent of lands currently under application.[30]

Thus, the NPS knew that a significant amount of the proposal area which was currently Native selected would never actually be conveyed to Native ownership. The question remained, which lands? (In fact, some thirty years later the question was not entirely resolved and in the meantime the Native regional corporation and the two Native village corporations swapped selected lands and amended their filings numerous times.) Nonetheless, the NPS had reason to discount the potential problems arising from the uncertain land status for a future national park. The lands were remote from the villages and did not appear to contain valuable economic resources. Alfreda Davidson of

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[29] Alaska Native Claims Settlement Act, P. L. 92-203, Section 11 (a) (3) (A).
[30] "Harding Icefield-Kenai Fjords National Monument, Native Selections," November 1976, KEFJ 13289/001/036, Alaska Task Force Collection, Archives, KEFJ.

Chugach Natives, Inc. informed Chuck Gilbert that the Native village selections around Nuka Bay did not really interest the villages and that the village corporations hoped to trade these lands for more desirable lands elsewhere such as in Prince William Sound.[31] In one statement of the problem, probably written by Follows, the author suggested that Native ownership of lands within the area need not impair the integrity of the park, but could actually "complement park objectives." A Native corporation, for example, could develop a boat service and lodge somewhere on the outer coast that could benefit both the corporation and the park.[32] Still, NPS planners had to take stock that key scenic areas in the proposal could end up in Native ownership. The spectacularly glaciated Northwestern Lagoon lay mostly outside the D-2 withdrawals as did McCarty Fjord where the recent retreat of McCarty Glacier had exposed a carved and denuded landscape. The few good anchorages to be found in the Kenai Fjords all lay outside the D-2 lands. For these reasons it was important to refine the Park Service's recommended boundaries for the national monument in case the entire AEC was not attainable.[33]

Keyman Don Follows formed strong views on what constituted the ideal boundary for the proposed unit. He wanted a more inclusive area to keep the glacial system whole. In his view, that meant including the Grewingk-Yalik glacier complex along with the Harding Icefield. Specifically, he resisted the idea of dropping the mountains and coastline surrounding the West Arm of Nuka Bay out of the proposal because this area featured the Nuka River valley where he believed the Grewingk-Yalik glacier complex and the Harding Icefield had once been connected. He also opposed dropping Nuka Island out of the proposal because it was the only example of a sunken mountain island mass of size and significance in the area. Its partially flooded glacial cirques, he maintained, represented a separate stage of tectonic submergence from the Pye and Chiswell islands. For Follows, the ideal boundary gave up nothing in the AEC west of Nuka Bay. It included six townships – approximately 140,000 acres – of rock and ice extending from the Nuka Glacier in the north to the Doroshin Glacier in the south, an area that would have brought the western boundary of Kenai Fjords National Park up against Kachemak Bay State Park.[34]

Crucial to his thinking was his discovery of a USGS map from 1915 that showed the two ice masses as one. Follows referred to this single ice mass as a remnant of the

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[31] Chuck Gilbert to Park Planner, January 16, 1976, KEFJ 13289/001/036, Alaska Task Force Collection, Archives, KEFJ.

[32] "Harding Icefield-Kenai Fjords National Monument, Native Selections," November 1976, KEFJ 13289/001/036, Alaska Task Force Collection, Archives, KEFJ.

[33] "Harding Icefield-Kenai Fjords National Monument, Area of Ecological Concern," November 1976, KEFJ 13289/001/036, Alaska Task Force Collection, Archives, KEFJ.

[34] C. Gilbert, "Ideal Boundary: Harding Icefield-Kenai Fjords National Monument," October 16, 1975, KEFJ 13289/001/027, and C. Gilbert, "Harding Icefield – Kenai Fjords National Monument," December 5, 1975, KEFJ 13289/001/014, and "Native Selections, Nov. 1976," map accompanying "Harding Icefield-Kenai Fjords National Monument, Native Selections," November 1976, KEFJ 13289/001/036, Alaska Task Force Collection, Archives, KEFJ.

great ice field that had once embraced the Sargent Icefield to the east. He proposed calling this former ice field the Truuli Ice Field after Truuli Peak. With a summit elevation of 6,612 feet above sea level, this peak was the highest in the Kenai Mountains and had been so named in 1966 to preserve the aboriginal name for the Kenai Mountains. Follows insisted on spelling ice field as two words, pointing out that the appellation "Harding Icefield" was a misspelling of the geologic term. He wanted to change the spelling of Harding Icefield to Harding Ice Field and to name what is now called the Grewingk-Yalik glacier complex "the Iceworm Peak unit of the former Truuli Ice Field." All of this terminology was important for understanding the glacial history of the area. Follows argued that it was likely that the great ice mass had separated in two in historic times and he proposed that the national monument boundary should encompass the "entire Kenai Mountain spine of permanent ice and snow, plus radiating glaciers," or at least cover the full extent of the "ancestral" ice field.[35]

Turning to the Kenai Fjords portion of the Harding Icefield-Kenai Fjords proposal, Follows applied his skills as an interpretive planner to develop a cogent and comprehensive delineation of what the Kenai Fjords were. He honed his argument into a two-hour presentation which he gave to a geography class at the University of Alaska, and it formed the basis for a series of briefing statements on the proposal. His argument progressed from an overview of "regional geography and selected physiography" to a discussion of tectonics and its effects on uplift and subsidence in the area, then to the effects of climate and glaciers, and finally to the "ecological interface" between mountains and sea. A key element in his analysis was what he called "the zone of maximum subsidence," where portions of the southern Kenai coast had dropped three to six vertical feet in the massive earthquake of 1964. The zone extended from Day Harbor on the east to Port Dick on the west. "Beyond each side of these outside parameters, other influences weaken the rationale for continuing the Kenai Fjords concept," Follows wrote. "The remainder of the Kenai Mountains are in the tectonic cycle of uplift." Another vital part of his delineation of the Kenai Fjords concerned the biota. "Sandwiched between the sterile icefield [sic] and the submerged lowlands along the southeastern Kenai Peninsula is the thin and fragile life zone that explodes with a density and variety of both wildlife and scenic values," he wrote.[36]

The biological component of the Kenai Fjords proposal was as yet its least understood component, but the joint investigation by the Fish and Wildlife Service and the Park Service in June and July 1976 had been a good start, Follows believed, noting

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[35] Donald S. Follows to Area Director, March 10, 1978, File L58-5 Harding Icefield-Kenai Fjords National Monument, Box 11, Alaska Region Administration Subject Files 1964-1984, RG 79, NAAR. Also see Don Follows, "Use of geologic terms in new planning and legislation," April 15, 1978, KEFJ 13289/001/034, Alaska Task Force Collection, Archives, KEFJ.

[36] Keyman to Chief, Professional Services, May 9, 1977, Box H, Accession 85-42, DSC Alaska – Alaska Admin. History, HFC. Also see Donald S. Follows, "Kenai Fjords: Dynamic Frontier," *National Parks & Conservation Magazine* 52 (October 1978): 4-9.

that the cooperative research study had been designed and funded at his own initiative under the Park Service's keyman studies program. Follows was convinced after that reconnaissance that the Chiswell and Pye islands were integral to the proposal and should not be placed in a separate unit under Fish and Wildlife Service administration. He argued that point in a paper afterwards. Much to his chagrin, however, the NPS chose not to publish his paper because it contradicted the current thinking in the Department of the Interior to develop a joint management approach for those islands. The NPS published a paper by Ed Bailey of the Fish and Wildlife Service instead.[37]

All of this work by Follows began to pay dividends after the election of President Jimmy Carter in November 1976. Carter had indicated his strong support for an Alaska lands bill during the campaign, and environmentalists were encouraged by Carter's record on conservation issues as well as by his selection of Cecil D. Andrus, the governor of Idaho, to head the Department of the Interior. The Alaska Coalition, a large collection of environmental groups who combined their efforts to form a united and powerful lobby in Washington, began shortly after the election supplying information to staff of the House Committee on Interior and Insular Affairs, where the new legislative effort was to make its debut. The House bill, H.R. 39, was introduced on January 4, 1977, the first day of the 95th Congress, by Representative Morris Udall and 75 co-sponsors. For the most part, the House bill put forward the same areas that had been proposed in the Nixon administration's bill in December 1973, except that many proposals now involved much more expansive boundaries based on the area of ecological concern for each unit. H.R. 39 provided for the establishment of an approximately 600,000-acre Kenai Fjords National Monument. The proposed boundary was similar to the eventual boundary adopted for Kenai Fjords National Park by ANILCA except in the area around Iceworm Peak, where it would have included the western slope of the Kenai Mountains.[38]

The Park Service, for its part, did not wait for the new administration to take office to begin a review of its own data. In December 1976, selected keymen were brought to Washington to go over the proposals with senior NPS officials and prepare justifications for upcoming legislative hearings. (Follows was not among those who went but he sent the group briefing statements for Kenai Fjords from Anchorage.) By late winter, the group had developed an ideal boundary for each proposal. Meanwhile, the NPS waited to see what new direction would come from the Carter administration. When Andrus testified at his confirmation hearings in April, he promised to have a detailed report on H.R. 39 completed by September. After due consideration of the

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[37] Don Follows to Roger Contor, October 24, 1978, KEFJ 13289/001/032, Alaska Task Force Collection, Archives, KEFJ. Also see Keith Trexler to All Planners, Alaska Task Force, September 5, 1975, enclosing Memorandum of Understanding between the National Park Service and the U.S. Fish and Wildlife Service, KEFJ 13289/001/048, Alaska Task Force Collection, Archives, KEFJ, and Edgar P. Bailey, "Distribution and Abundance of Marine Birds and Mammals along the South Side of the Kenai Peninsula, Alaska," *The Murrelet* 58 (Winter 1977): 58-72.

[38] Williss, *"Do Things Right the First Time,"* 172-74.

options, Andrus decided to use H.R. 39 as a new starting point for developing the administration's legislative proposal rather than go back to the Nixon administration's legislative proposal that was now more than three years old. He directed the Park Service and the Fish and Wildlife Service to conduct separate reviews of H.R. 39. NPS staff completed that task and presented findings to the new NPS director, William J. Whalen, during the first week of August 1977. Whalen reported the findings to Assistant Secretary for Fish and Wildlife and Parks Robert L. Herbst.[39]

Concerning Kenai Fjords, the NPS and the Fish and Wildlife Service came to markedly different conclusions. The NPS argued that H.R. 39 should be amended to establish a Kenai Fjords National Park covering an area of approximately 757,000 acres. The NPS now favored the more impressive national park designation because it would be more apt to generate tourism for Seward. Moreover, accumulated data on the scenic and biological resources of Kenai Fjords amply justified the higher classification. As for joint management of certain lands along the coast, the NPS proposed that the bill simply require the Fish and Wildlife Service to provide "continuing assistance in the management of the wildlife resources of this park."[40]

The Fish and Wildlife Service, meanwhile, recommended that Kenai Fjords, together with five other areas that H.R. 39 would add to the national park system, be added to the wildlife refuge system instead. Assistant Secretary for Fish and Wildlife and Parks Herbst initially accepted this idea but soon changed his mind. On August 18, 1977, he wrote a memorandum stating that the administration would favor including most of the mainland area and some of the islands as Kenai Fjords National Park, while placing the Chiswell and Pye islands and the nearby rocky capes in a wildlife refuge. Secretary of the Interior Andrus accepted Herbst's decision but once more omitted the western slope of the Kenai Mountains around Iceworm Peak, putting it in the Kenai National Wildlife Refuge. The Andrus proposal gave the acreage of Kenai Fjords National Park as 410,000 acres, not counting state and Native land selections within the exterior boundary.[41]

The House subcommittee took the Secretary's recommendations and used them as a substitute text for H.R. 39. After the bill went through mark-up and was submitted to the whole House in May 1978, the bill's proposed boundary for Kenai Fjords National Park was nearly the same as its present boundary, with one notable exception: those peninsular lands that had been included in the original D-2 withdrawals were still lumped

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[39] Ibid, 184-85. On the role of Follows, see Keyman to Project Leader, January 16, 1977, KEFJ 13289/001/014, Alaska Task Force Collection, Archives, KEFJ; Director, National Park Service, to Assistant Secretary for Fish and Wildlife and Parks, August 12, 1977, Box D, Accession 85-42, DSC Alaska – Alaska Admin. History, HFC.

[40] Director, National Park Service, to Assistant Secretary for Fish and Wildlife and Parks, August 12, 1977, Box D, Accession 85-42, DSC Alaska – Alaska Admin. History, HFC.

[41] Williss, *"Do Things Right the First Time,"* 182-83, 191; House, Committee on Interior and Insular Affairs, *Alaska National Interest Lands Conservation Act of 1978*, 95th Cong., 2d sess., 1978, H. Rept. 96-1045, Part 1, 87.

with the Chiswell and Pye islands, which were designated part of the Alaska Maritime National Wildlife Refuge.[42] In the proclamation that established Kenai Fjords National Monument in December 1978, all of the mainland area plus Nuka Island were included and all of the small offshore islands were excluded in order to simplify matters. Congress saw no need to change that arrangement when it passed ANILCA two years later.

Subsistence and Sport Hunting

During the making of ANILCA in the 1970s, NPS planners joined other federal and state officials, Native representatives, environmentalists, and legislators in developing a legal and administrative framework for the perpetuation of subsistence use on most federal lands in Alaska. At the beginning of the process, the NPS had a general notion about the necessity to accommodate subsistence use on lands that were to be added to the national park system, but it was only a preliminary understanding of a complex issue that would be worked out in detail over the course of the decade.[43] While the subsistence issue was central to a number of park proposals, it was peripheral to Kenai Fjords. As the Kenai Fjords proposal evolved in the 1970s, provision for subsistence use dropped out of it. With passage of ANILCA, Kenai Fjords National Park became the exception to the rule, the only natural-area unit of the national park system in Alaska that did not provide for subsistence use.[44]

The first mention of subsistence use in connection with Kenai Fjords was in the Park Service's July 1972 report, *Recommendations Regarding Alaska Native Claims Settlement Act 17(d)(2) Withdrawals*. In the three-page discussion of Kenai Fjords, the report stated simply, "At present, human use of the area tends to be extremely light, with fishermen being the most numerous public intruders."[45] NPS planners evidently conceived of the Kenai Fjords land area as being so austere as to have negligible

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[42] Cecil D. Andrus to John Seiberling, January 13, 1978, Box E, Accession 85-42, DSC Alaska – Alaska Admin. History, HFC; House, Committee on Interior and Insular Affairs, *Alaska National Interest Lands Conservation Act of 1978*, 95th Cong., 2d sess., 1978, H. Rept. 96-1045, Part 1, 87. The report states: "Kenai Fjords National Park will be managed as a natural area of the National Park System. Small clusters of nearly [sic] islands (the tops of largely submerged mountains extending out from the fjords) and two capes will be managed as part of the Alaska Maritime National Wildlife Refuge by the Fish and Wildlife Service. The U.S. Fish and Wildlife Service will also cooperate in the management of fish and wildlife resources within the national park."

[43] Frank Norris, *Alaska Subsistence: A National Park Service Management History* (Anchorage: Alaska Support Office, National Park Service, 2002), 53-54.

[44] Other national park system lands in Alaska that are exempt from subsistence use include the two historical parks, Glacier Bay and Katmai national parks, and the pre-ANILCA portion of Denali National Park. Subsistence use is allowed in Glacier Bay and Katmai national preserves and in the additions to Denali National Park.

[45] U.S. Department of the Interior, *Recommendations Regarding Alaska Native Claims Settlement Act 17(d)(2) Withdrawals* (Washington: National Park Service, 1972), 138.

subsistence resources. The next mention appears to have come in the December 1973 master plan for Kenai Fjords, but it, too, was brief and perhaps even boilerplate considering the fact that the Alaska Task Force scrambled to complete a number of such master plans under ANCSA's compressed timetable. In a section of the master plan for Kenai Fjords on "Management Objectives," the third of four "general" items stated: "Insure continued traditional native lifestyles and subsistence uses while protecting the resources for the benefit of present and future generations."[46] The final EIS for this master plan, published in 1975, at last offered more than a sentence on the issue. By 1975, the Park Service was developing a more sympathetic and nuanced understanding of subsistence use, and this was reflected in the language of the EIS. Still, the thrust of the discussion remained the same: subsistence was a "negligible" factor in Kenai Fjords. The EIS stated:

> The extent to which the lands and waters proposed for inclusion in the Harding Icefield-Kenai Fjords National Monument are used for subsistence purposes has not been determined. It is, however, possible that residents of the villages of Port Graham and English Bay and perhaps, Seward, may hunt in the proposed area, and may use fisheries resources for subsistence….Establishment of the proposed monument would permit subsistence uses of resources to continue throughout the area….Since the monument will be managed to preserve the natural functioning systems, and wildlife and plant resources will be managed with consideration of pertinent State and Federal fish and game laws including the Marine Mammal Protection Act, subsistence activities may be regulated accordingly. This would have the effect of assuring preservation of resources utilized for subsistence purposes. Since current and anticipated subsistence harvests in the proposed monument are thought to be light, the impact of such provisions on subsistence uses will be negligible, both in terms of any adverse impacts from constraints on users and any beneficial impact from protection of significant portions of subsistence resources for future subsistence users.[47]

When the second wave of Alaska planners arrived in 1975, one task for keyman Don Follows and his assistant Charles Gilbert was to explain the Park Service's incipient subsistence use policy to sport hunters. Why would the NPS allow subsistence hunting but not sport hunting? What was the difference between them? How did the NPS define subsistence use? These questions were put to Follows by Stan Frost, president of the

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[46] Department of the Interior, National Park Service, Alaska Planning Group, "Master Plan, Harding Icefield-Kenai Fjords National Monument, Alaska," December 1973, Box C, Accession 85-42 DSC Alaska – Alaska Admin. History, HFC.

[47] Alaska Planning Group, U.S. Department of the Interior, *Final Environmental Statement, Proposed Harding Icefield-Kenai Fjords National Monument, Alaska* (Washington: National Park Service, 1974), 105.

Alaska Professional Hunters Association, Inc., an organization based in Anchorage. Frost wondered if the NPS had an ulterior motive in proposing to allow subsistence use, querying Follows: "Could it possibly be that the Park Service is trying to appease the Natives because of 453,000 acres of Native deficiency withdrawals???" In a draft reply to Frost, which Follows circulated internally for review, he attempted to distinguish the two types of hunting. His reviewers pointed out that the ideas were muddled and it appears that the letter was never sent.[48]

While other keymen on the Alaska Task Force, including Robert Belous, Stell Newman, Ray Bane, and John Kauffmann, were on the cutting edge of deciding how subsistence use would be defined and managed in the future, Follows had a different focus at Kenai Fjords. He was more concerned about proving that sport hunters' use of Kenai Fjords was negligible so that it could be prohibited without too much objection. To that end, he sent Gilbert to compile relevant data from harvest tickets at the Alaska Department of Fish and Game. Gilbert's efforts focused on black bear and mountain goat, the only large terrestrial wildlife species occurring in significant numbers in the proposal area.[49]

The ADFG had relatively good data for black bear for 1974, 1975, and 1976, thanks to a change in the state game law and new reporting procedures instituted in 1973. The records showed a total of eleven bears taken in the proposal area in 1974, eight in 1975, and eleven in 1976. Of the total of 30 animals, seven had been killed in Aialik Bay, nine in Two Arm Bay, and the other fourteen in seven other locations. All but one of the black bears had been killed in May or June. Most hunting was done by boat, with float planes being used in a few instances. The ADFG did not have good data for mountain goat, but officials expressed concern about "heavy pressure" on this animal in Kenai Fjords, especially as they could be hunted from boats where their habitat extended nearly to sea level.[50]

When Follows and Gilbert shared these findings with local residents at public meetings, sport hunters complained that the ADFG data did not present an accurate picture. Allegedly, many hunters and guides did not report kills because they did not want to reveal their "hot spots" to others or cause the ADFG to close areas due to perceived hunting pressure.[51] Several people reputedly spent winters out on the coast hunting black bear and mountain goat and trapping land otter.[52] Such claims were virtually impossible to prove or disprove. Without hard information, people drew their

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[48] Stan Frost to Don Follows, April 1, 1976, and Don Follows to Stan Frost, undated draft letter for review, KEFJ 13289/001/65, Alaska Task Force Collection, Archives, KEFJ.
[49] Keyman to Chief, Professional Services, April 4, 1977, KEFJ 13289/001/65, Alaska Task Force Collection, Archives, KEFJ.
[50] Charles Gilbert to Files, October 15, 1976, KEFJ 13289/001/65, Alaska Task Force Collection, Archives, KEFJ.
[51] Martin Kasser to Don S. Follows, March 17, 1976, KEFJ 13289/001/65, Alaska Task Force Collection, Archives, KEFJ.
[52] Bob White, interview by Diane Krahe, August 13, 2008.

own conclusions based on whatever reality they wanted to impose on the area. NPS planners saw the area as a pristine wilderness; local Alaskans saw it as a storehouse of resources.

Seward had a strong tradition of sport hunting dating back to the early twentieth century when hunting guides led sportsmen to the world-famous Kenai game lands. Perhaps because Kenai Fjords was composed mainly of rock and ice, the proposal did not incur the same pressure for sport hunter access that other proposals such as Noatak and Yukon-Charley engendered. There was no effort to designate Kenai Fjords a national preserve instead of a national park. (Senator Stevens proposed in 1978 that it be made a wildlife range, but he dropped this idea when Secretary of the Interior Andrus objected to it and chose to support the Senate bill that would have made the area a national park.) In fact, local residents requested that the state's wildlife managers close the area between Seward and Exit Glacier to hunting, concerned that the new Exit Glacier Road would make moose and bear populations vulnerable to over-hunting. Starting with the 1974-75 hunting season, the ADFG promulgated an "Exit Glacier closed area." The area covered the west side of the Resurrection River valley from Redman Creek to Lowell Creek. Chuck Gilbert surmised that local residents had more in mind than the prevention of over-hunting. "Perhaps, too, with the Harding Icefield and Exit Glacier promoted by local people as a prime tourist attraction, they are interested in maintaining visible wildlife populations in the vicinity," he wrote. "It would appear that the policies promulgated by the local people of Seward…coincide remarkably with the management policies proposed by the NPS."[53]

The notion that the Kenai Fjords proposal might exclude subsistence hunting as well as sport hunting took root in 1976 as Follows and Gilbert formed the impression that subsistence use of the area might be virtually non-existent. In November 1976, Follows wrote a memo to the files:

> No subsistence uses of the resources of the proposed National Monument are known to occur. The apparent lack of subsistence activities results from two factors. First, Natives and Caucasians in the southcentral region of Alaska primarily depend on the cash economy for supplying their basic needs, and are engaged in subsistence harvests on a very limited scale, or not at all. Second, the plant and wildlife resources of the proposed National Monument are not generally species taken for subsistence purposes. Very few moose, and no caribou, inhabit the lands proposed for National Monument designation. No harvests of marine mammals are known to occur within the proposal area. Commercial fishermen,

[53] Cecil D. Andrus to Ted Stevens, August 4, 1978, Box 10, Accession 85-42, DSC Alaska – Alaska Admin. History, HFC; Chuck Gilbert to Project Leader, October 7, 1975, KEFJ 13289/001/65, Alaska Task Force Collection, Archives, KEFJ.

> both Native and non-Native, may make use of a small part of their catch for subsistence purposes.[54]

Overlooking that there were probably subsistence harvests of seals, at least, the statement was a bit too absolute. It was included in the growing sheaf of material called Legislative Support Data.

The following spring, the NPS contracted for subsistence research for Kenai Fjords. Kevin Hedrdle, a graduate student at the University of Alaska, was assigned the work, which would focus on subsistence use by the Native villages of English Bay and Port Graham as well as the community of Seward. Follows was skeptical, believing that the inaccessible nature of the coast made terrestrial harvest of fauna and flora by the remote Native communities improbable. Since the park would not include any marine fisheries, Follows thought that Hedrdle was unlikely to identify any "true subsistence use for the Harding Icefield-Kenai Fjords proposal."[55]

Hedrdle apparently surveyed subsistence harvesters in the three communities although he did not describe his methodology in the brief, 18-page report. He provided estimated yearly subsistence takes in the proposal area and within the AEC for black bear, mountain goat, seal, bottom fish, and salmon, and he listed edible and medicinal plants taken in the region. (In the case of black bear and mountain goat, the estimate was given as none in the proposal area and two bear and one goat in the AEC.)[56] Follows found the report wanting. In Hedrdle's survey of subsistence users, he had not followed the contract definition for "subsistence," which focused narrowly on the subsistence user's physical need. (Hedrdle wanted to give equal weight to cultural factors.) One of Hedrdle's prime subsistence harvesters, Follows observed, worked part time for a commercial fishing operation that netted approximately $80,000 per season. The data on subsistence use levels were too vague, Follows thought, to assist planners and managers. Follows drew two main conclusions from the report. First, subsistence use was practically non-existent in the proposal area and the AEC. Second, there appeared to be a "strong desire for Native people to establish and expand future subsistence use within the proposal."[57]

The NPS recommended that subsistence use not be allowed in Kenai Fjords in its report on H.R. 39 for Secretary of the Interior Andrus, which Director Whalen submitted

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[54] "Harding Icefield-Kenai Fjords National Monument, Subsistence," November 1976, KEFJ 13289/001/030b, Alaska Task Force Collection, Archives, KEFJ.
[55] Keyman to Chief, Professional Services, April 11, 1977, KEFJ 13289/001/019a, Alaska Task Force Collection, Archives, KEFJ.
[56] Kevin Hedrdle, "Preliminary Report, Subsistence Resource Use, Proposed Harding Icefield-Kenai Fjords National Monument," July 25, 1977, KEFJ 13289/001/019a, Alaska Task Force Collection, Archives, KEFJ.
[57] Donald S. Follows to Area Director, September 12, 1977, KEFJ 13289/001/019a, Alaska Task Force Collection, Archives, KEFJ.

on August 12, 1977.[58] It reiterated that view in recommending line edits to the substitute text for H.R. 39 that Representative John Seiberling (D-OH) submitted to Secretary of the Interior Andrus for review in January 1978. In the original, Section 201(5) would have made subsistence a purpose for establishing Kenai Fjords National Park. The administration recommended amending it by deleting subsistence as a purpose.[59] This change was made. When Chugach Natives, Inc. testified before the House Committee on Interior and Insular Affairs one year later that it desired to have the provision for subsistence use in Kenai Fjords National Park reinserted into the bill, the request was not heeded.[60] And so the exemption of Kenai Fjords from the subsistence provisions was carried first into the Park Service's interim regulations for management of the national monuments (published in 1978) and finally into ANILCA.[61]

While subsistence use was not allowed in the park, this did not lessen the Park Service's interest in developing a sympathetic and cooperative relationship with the Native communities of English Bay and Port Graham. In a statement for management prepared by Follows in 1978, Native peoples were given prominence in the section on cultural resource preservation. For example, a management objective was "to maintain sensitivity for the historical traditions and cultures of Native peoples who might have historically utilized the region."[62]

Soon the park benefited from a more sophisticated and systematic effort to gather information about subsistence use initiated by the ADFG. In 1982, the ADFG's new Division of Subsistence published an interim report on wild food harvests at English Bay and Port Graham by ethnographer Ronald T. Stanek. Characteristic of the new wave of ADFG studies, Stanek's report was based on three main sources of information: personal interviews, field observations, and monthly harvest calendars, which were collected from all households actively harvesting wild resources for domestic use.[63] Stanek's study began with the premise that the gathering of wild foods in rural Alaska occurred within the context of a "mixed economy," and it was this mixed economy that defined the activity as "subsistence." A straightforward example of subsistence might be when an individual brought home wild plant or animal foods and exchanged or consumed them without ever assigning a cash value to them. Subsistence could coexist with wage work,

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[58] Director, National Park Service, to Assistant Secretary for Fish and Wildlife and Parks, August 12, 1977, Box D, Accession 85-42, DSC Alaska – Alaska Admin. History, HFC.
[59] Comments on Substitute Text for H.R. 39 (Print No. 2), January 9, 1978, Box E, Accession 85-42, DSC Alaska – Alaska Admin. History, HFC.
[60] House Committee on Interior and Insular Affairs, *Alaska National Interest Lands Conservation Act of 1979*, 96th Cong., 1st sess., 1979, p. 1135.
[61] Director, National Park Service, "Interim Rules for New Alaska National Monuments Managed by the National Park Service," no date, KEFJ 13289/001/032, Alaska Task Force Collection, Archives, KEFJ.
[62] Draft Statement for Management, Kenai Fjords National Park, Alaska, August 4, 1978, KEFJ 13289/001/024, Alaska Task Force Collection, Archives, KEFJ.
[63] Ronald T. Stanek, "Natural Resource Harvests at Port Graham and English Bay, 1982: An Interim Report," Technical Paper No. 32 (Anchorage: Alaska Department of Fish and Game, Division of Subsistence, 1982), 3.

and subsistence foods could be consumed alongside store-bought foods. However, a mixed economy was not simply the existence of one type of economy alongside the other, with households or communities making some sort of division of time and energy between the two. Rather, in a mixed economy the two economic sectors would act upon each other so that a new, third system was created. Cash earnings enabled the subsistence user to acquire guns, traps, outboard motors, modern fishing gear, all of which increased harvest capabilities. The subsistence user could then harvest more than was needed for household use and turn the excess into cash earnings. Some, if not all, cash earnings would be plowed back into the subsistence sector in order to buy and maintain technology. Subsistence hunting and fishing, meanwhile, acted on the cash sector by allowing the subsistence harvester to engage in wage work only seasonally or intermittently. Most jobs in a mixed economy were part time or seasonal and relatively low paying.[64]

Stanek produced a more detailed report on Port Graham and English Bay in 1985, describing all aspects of the two villages' mixed economies and providing historical as well as current information about subsistence resource use areas. Concerning the Kenai Fjords area, Stanek's study echoed the basic findings in Hedrdle's report. "The historic use area from Gore Point to Resurrection Bay was viewed by the village residents as a 'reserve' area where people will be able to hunt or fish if present areas become overused," Stanek wrote.[65]

Kenai Fjords National Monument

Kenai Fjords National Park, like all ten other additions to the national park system in Alaska in 1980, went through a two-year waiting period as a national monument prior to passage of ANILCA. The rocky road to ANILCA has been described in detail in other places and can be briefly sketched by way of background here.[66] What is important for this administrative history is how the national monument designation affected the park's early years, in particular its relationship to Seward.

The Alaska lands bill easily passed the House in May 1978 by a vote of 279 to 31. With the legislation headed for the Senate, Alaskans were overwhelmingly opposed to the measure, but they were divided over whether to bend to the strong majority view of

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[64] Catton, *Inhabited Wilderness*, 41; James A. Fall, "The Division of Subsistence of the Alaska Department of Fish and Game: An Overview of its Research Program and Findings, 1980-1990," *Arctic Anthropology* 27, no. 2 (1990): 68-92.

[65] Ronald T. Stanek, "Patterns of Wild Resource Use in English Bay and Port Graham, Alaska," Technical Paper No 104 (Anchorage: Alaska Department of Fish and Game, Division of Subsistence, 1985), 121.

[66] Historical accounts of the political battle leading to ANILCA include Williss, "*Do Things Right the First Time,*" Nelson, *Northern Landscapes*, and Stephen W. Haycox, "The Politics of Environment: Cecil Andrus and the Alaska Lands," *Idaho Yesterdays* 36, no. 3 (Fall 1992): 28-36.

the American people or fight it to the last. Governor Jay Hammond and Senator Ted Stevens, fellow Republicans, decided that the state was better off seeking compromises in the bill, while Senator Mike Gravel, a Democrat, took a harder line. With time running out on the D-2 land withdrawals made under ANCSA, Stevens maneuvered the Alaska lands bill to the end of the Senate's calendar, thinking that the pressure of a deadline would make it easier for the Alaska senators to win significant concessions. As the day for floor debate approached, the two Alaska senators worked with the Senate Committee on Energy and Natural Resource through several long bargaining sessions. But Gravel finally broke with Stevens and threatened to filibuster the bill. Stevens tried to talk Gravel out of his threat but Gravel refused to yield, so the majority leader, Senator Robert C. Byrd (D-WV) took the Alaska lands bill off the Senate calendar. As the congressional authority for the D-2 withdrawals was set to expire on December 16, 1978, the Senate's failure to act prompted President Carter to invoke his executive authority under the Antiquities Act and proclaim 17 national monuments in Alaska totaling 56 million acres. Thirteen of the national monuments were additions to the national park system, two were to be managed by the Fish and Wildlife Service, and two by the Forest Service. In addition, Carter put a three-year freeze on other D-2 lands totaling another 61 million acres under the authority of the Federal Land Policy and Management Act of 1976. The proclamations were dated December 1, 1978. President Carter explained his extraordinary action as a means of giving Congress additional time to act. But the national monuments, if not the other former D-2 lands, would stand in perpetuity regardless of whether Congress ever enacted an Alaska lands bill.[67]

Alaskans were outraged by President Carter's sweeping action. Although it remained to be seen how the federal agencies would manage so many new areas without the support of Congress, much less the support of Alaska, on paper at least the national monuments were maximally restrictive. Most of the areas, for example, were closed to sport hunting. Alaskans' anger toward the federal government burned hottest in interior Alaska, where mining and sport hunting interests were most threatened by the new land status. In Fairbanks, protesters burned Carter in effigy. The town of Eagle, located near the newly proclaimed Yukon-Charley National Monument, adopted a resolution that stated: "We do not intend to obey the directives and regulations of the National Park Service."[68] Seward's response was far more measured. Many people in the town still held out hope that Congress would establish a Seward National Recreation Area rather than a Kenai Fjords National Park. These people saw the NPS as obstructionist, and they blamed the NPS for blocking the city's efforts to get highway dollars for improving the

[67] Haycox, "The Politics of Environment: Cecil Andrus and the Alaska Lands," 28, 34-35; Office of the Secretary of the Interior, "National Monuments to Protect Unique Public Lands in Alaska," news release, December 1, 1978, Box 1 of 2, Accession 84-39, DSC Alaska – Bailey Breedlove Papers, HFC. The 17 national monuments included 13 areas to be managed by the NPS, 2 by the Fish and Wildlife Service, and 2 by the Forest Service.
[68] Quoted in Haycox, *Frigid Embrace*, 115.

Exit Glacier Road and bridging the Resurrection River. But a significant number of townspeople had by this time warmed up to the idea of a Kenai Fjords National Park. They were curious to see what the Park Service's next moves would be.[69]

Seward had long identified itself as a "gateway" to Alaska's interior both for commerce and tourism. Two individuals played key roles in recasting that "gateway" identity so as to embrace the national park. The first was Pam Oldow, who had been an arch-opponent of the Park Service as recently as January 1976, when she pushed a resolution through city council that put Seward on record against the Kenai Fjords proposal.[70] Pam, with her husband Don Oldow, was the owner of a 43-foot charter vessel, *Shaman*. Don had been skipper of the car ferry, *Tustumena*, until the state ferry service dropped the port of Seward in favor of a stop at Whittier. Their company, Resurrection Bay Tours, offered sport fishing and sightseeing tours of Resurrection Bay, and Pam took the helm of the company while Don skippered their boat. In 1977, Pam obtained her ocean operator license and began piloting the M/V *Shaman* in her own right when Don was not aboard. In 1978, she agreed to take the NPS planning team on its investigations of the Kenai Fjords and was soon won over to the park idea. Seeing the future in park-oriented tourism, Pam Oldow changed from a former opponent to an outspoken proponent of the national park.[71]

The second individual who was pivotal in affecting a change of local opinion was Seward native Darryl Schaefermeyer. In 1975 and 1976, Schaefermeyer served as a staff assistant to Senator Stevens in Washington. One of his last assignments on Capitol Hill was to redraft the bill to establish a Seward National Recreation Area. (Stevens had introduced similar bills in 1971 and 1974 and this was to be the last such effort.) While preparing a floor statement for Stevens, Schaefermeyer canvassed civic leaders in Seward about the measure, and the town thereafter considered this native son to have been the author of the Seward National Recreation Area proposal. In 1977, Schaefermeyer was back in Seward serving as assistant to the city manager, Johnny Johnson, another Stevens Republican. Johnson and Schaefermeyer effectively kept the city council solidly behind the Forest Service proposal and against the Carter administration proposal through 1977 and the first half of 1978. But following Stevens' lead, they came out in support of the national park in the fall of 1978 when the senator was earnestly seeking compromise

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[69] Don Follows to Area Director, July 27, 1979, KEFJ 13289/001/01, Alaska Task Force Collection, Archives, KEFJ. In 1978, Seward was trying to get a permit from the Bureau of Land Management to improve the Exit Glacier Road. As Darryl Schaefermeyer recalled, the city was within 30 days of obtaining the permit when BLM abruptly pulled the plug on the process. This upset city officials and fed their resentment toward the Carter administration. (Schaefermeyer interview.)

[70] Donald S. Follows to Area Director, March 15, 1976, KEFJ 13289/001/024, Alaska Task Force Collection, Archives, KEFJ. Similar resolutions were introduced in February 1974 and December 1975 but only the last measure passed.

[71] Cook and Norris, *A Stern and Rock-Bound Coast*, 367; Don Follows to Jim Harpster, June 27, 1979, KEFJ 13289/001/01, and Pamela Oldow to John Cook, May 3, 1979, KEFJ 13289/001/02, Alaska Task Force Collection, Archives, KEFJ.

legislation. Thus, amidst the public's consternation over the Carter proclamations in the winter of 1978-79, Schaefermeyer took a constructive view of the situation, arguing that the Park Service had come to stay and Seward would do well to make the most of it.[72]

The first positive action Schaefermeyer took after the proclamation of Kenai Fjords National Monument was to make sure that the NPS would locate the monument headquarters in town. On February 20, 1979, he wrote a long letter to Don Follows offering 23 points why Seward could provide useful services for monument visitors and administrative staff. He invited the NPS to consider use of the former Jesse Lee Home, a former BIA school and now a vacant city property, as an administrative headquarters. He closed his missive by challenging Follows to explain how any other community could better serve as the "gateway community" for Kenai Fjords National Monument.[73]

Schaefermeyer was responding to a letter from Follows to the city manager in which Follows appeared to question whether Seward could provide the basic support services the Park Service needed. This was not the first time Schaefermeyer and Follows had gotten crosswise. In the spring of 1977, Follows had made an ill-advised statement to the city council that Schaefermeyer construed as retaliation for the city council's resolution opposing the park. "When you come out negatively and say you want no part of the action," Follows was recorded in the minutes as saying, "then later on you can't come out and demand part of it." Shaefermeyer blistered Follows for his oral remarks in a letter to the editor published in both the *Seward Phoenix Log* and the *Anchorage Times*. "Since when," Schaefermeyer demanded to know, "does opposition to any government agency proposal close the door to any citizen's input to the U.S. Congress?"[74] After that flap, the Alaska area director barred Follows from making any more public appearances in Seward. In Follows' words, the new NPS policy was "go slow, lay low and don't show," but in fact the gag order was directed specifically at him. Follows was finally allowed to give another public talk in the community on January 17, 1979. Schaefermeyer was in the audience, and he used the occasion to accuse the Park Service of defeating the city's recent effort to obtain a permit from BLM for improving the Exit Glacier Road. Schaefermeyer also complained, ironically, that no NPS representatives had presented NPS plans to the city council in years.[75]

These testy exchanges between Schaefermeyer and Follows were not insignificant. Follows wanted to be appointed the first park ranger or superintendent of the new national monument but he carried baggage from his earlier tiffs with city leaders.

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[72] Don Follows to Area Director, July 27, 1979, KEFJ 13289/001/01, Alaska Task Force Collection, Archives, KEFJ; Schaefermeyer interview.
[73] Darryl Schaefermeyer to Donald S. Follows, February 20, 1979, KEFJ 13289/001/024, Alaska Task Force Collection, Archives, KEFJ.
[74] Darryl Schaefermeyer to Editor, May 9, 1977, KEFJ 13289/001/024, Alaska Task Force Collection, Archives, KEFJ.
[75] Keyman to Chief, Professional Services, May 7, 1979, KEFJ 13289/001/01, Alaska Task Force Collection, Archives, KEFJ.

In any case, he was not known for his personable qualities. For these reasons, he was not assigned to the post. Follows' subsequent interactions with city leaders seemed to vindicate that decision. In May 1979, while accompanying a research team on a trip to Aialik Bay, Follows made a courtesy call to City Manager Johnny Johnson in Seward. Johnson pledged full support for the Park Service as soon as Congress would pass the Alaska lands bill. Until then, he advised, it was better for Follows to maintain a low profile with city council members because there were still a few "old-timers" who were committed to the Seward National Recreation Area bill. Once the issue was finally decided, Johnson predicted, the city council would move ahead with a cooperative relationship with the Park Service.[76]

For the next two years, Area Director John E. Cook maintained management authority over Kenai Fjords National Monument. The NPS lacked funding to appoint superintendents to the new areas. In June 1979, Cook brought William Tanner, chief ranger at Chamizal National Memorial, to the Anchorage Area Office to organize a Ranger Task Force that would temporarily staff the monuments that summer. Tanner recruited 22 individuals from 20 different parks in the Lower 48 and the Ranger Task Force assembled in Anchorage in July. Mary J. "Jeff" Karraker, the only female ranger in the group, was assigned to Kenai Fjords. Three rangers went to Wrangell-St. Elias, two to Gates of the Arctic, and one to Lake Clark. The remaining members of the task force divided their time between the various monuments and the Anchorage office. The Ranger Task Force dissolved in September.[77] A second ranger task force was assembled in the summer of 1980 but none of its members was assigned to Kenai Fjords.[78]

Karraker's posting to Seward foreshadowed a critical decision by the NPS that would affect the Park Service's standing in Alaska in years to come. The agency would work aggressively to put its personnel in the field, close to the resources and in the local communities, rather than manage the new areas from remote offices in Anchorage, Fairbanks, and Juneau. In this respect, the NPS would take a markedly different approach compared to the Fish and Wildlife Service and the Forest Service. This reflected, in part, a higher level of funding for the NPS than for those other agencies in Alaska, which made decentralization possible, but the push for a greater staff presence in rural Alaska originated with the NPS.

During her short stint in Seward, Karraker focused on community relations. She tried to reassure local residents that the national monument would not "lock people out." Many townspeople expressed concerns to her about how the monument would affect their interests. While the Exit Glacier area was already closed to hunting, many of them had hunted in the fjords or in other newly designated monuments, she reported. They

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[76] Don Follows, "Trip Report – May 17-19, 1979," May 22, 1979, KEFJ 13289/001/01, Alaska Task Force Collection, Archives, KEFJ.
[77] Chief Ranger, Chamizal National Memorial to Alaska Area Director, no date, KEFJ 13289/001/016, Alaska Task Force Collection, Archives, KEFJ.
[78] Williss, *"Do Things Right the First Time,"* 281.

could not be considered subsistence users, but they often relied on wild meat and fish to help provision the family. "Many stated that they did not waste game and did not hunt for trophies, but were following a tradition of hunting as they had practiced it for years," she wrote sympathetically.[79]

Townspeople reacted with disbelief when Karraker opened a Park Service office in the Phoenix Building on 3rd Avenue at the beginning of August 1979. Although she encountered a little surliness at first, she was generally well-received in face-to-face meetings. For four hours each day she provided information to visitors and townspeople on a drop-in basis, and she spent the balance of her time meeting with city leaders and the media, giving presentations, and making one trip each to Aialik Bay and Exit Glacier. She quickly learned that completion of the road to Exit Glacier was an important issue to local businesses, and perhaps the leading source of Seward's frustration with the Park Service. Quick to involve herself in community life, she joined the volunteer ambulance service and played on a softball team. Although Karraker was clear with people that her assignment was only temporary, the town was disappointed to see her close the office at the end of September.[80]

Kenai Fjords Becomes a National Park

The final leg of the Alaska lands bill's journey through Congress ended in a bittersweet triumph for environmentalists. It began once again in the House with a revised H.R. 39 that would have put even more land into conservation areas. Again the Senate version did not go as far. However, this time there was no threat of a filibuster; Mike Gravel had lost his Senate seat to Republican Frank Murkowski in the mid-term election, and both Senators Stevens and Murkowski agreed on the necessity of passing some sort of bill that would establish these new conservation areas on terms that were more acceptable to Alaskans. By the time the Alaskan senators were done with it, House members balked at agreeing to the much compromised Senate version of the bill and the two houses once again deadlocked. But with the election of Ronald Reagan in November 1980 it was suddenly clear that the bill's supporters had to settle for half a loaf rather than none. The champions of the stronger House bill had to salvage what they could in the Senate version before Carter left office. Congress finally enacted ANILCA and President Carter signed it into law on December 2, 1980. Carter would later muse that ANILCA was the best piece of lame-duck legislation he could remember. But to most

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[79] Jeff Karraker, "Kenai Fjords National Monument, Final Report," September 1979, KEFJ 13289/001/016, Alaska Task Force Collection, Archives, KEFJ.

[80] Jeff Karraker, "Kenai Fjords National Monument, Final Report," September 1979, and Chief Ranger, Chamizal National Memorial to Alaska Area Director, no date, KEFJ 13289/001/016, Alaska Task Force Collection, Archives, KEFJ; "Ranger to administer Kenai Fjords," *Seward Phoenix Log*, August 9, 1979.

environmentalists it seemed that so much had been lost or compromised that they could hardly rejoice in the victory.[81]

ANILCA made Kenai Fjords National Monument a national park and converted most of the other new national monuments into national parks or preserves. Including the pre-ANILCA areas, national parklands in Alaska now encompassed 51 million acres, 13 percent of the state, an area equal to the state of Washington. The vast amount of land created some obvious disparities within the national park system. For example, the area covered by Alaska national parklands amounted to 63 percent of all lands in the national park system, yet in 1983 the number of NPS personnel in Alaska would represent just 2 percent of the total agency workforce.[82]

Because of its many unusual provisions, ANILCA formed the basis for the often-repeated contention that *Alaska national parks are different*. The law's most distinctive feature was its Title VIII on subsistence, which applied to all natural-area additions to the national park system except for Kenai Fjords National Park and an addition to the former Katmai National Monument, which became Katmai National Park. (Title VIII did apply, however, to the adjoining Katmai National Preserve, making Kenai Fjords the only natural-area administrative unit without any subsistence use whatsoever.) Subsistence affected the character of the Alaska national parklands and involved the NPS in a new kind of resource management.

ANILCA defined subsistence according to the tried legal jargon of "customary and traditional use." While the definition of what constituted subsistence *use* was fairly broad, the definition of subsistence *user* was restricted to "rural residents of Alaska." Title VIII began,

> The Congress finds and declares that –
> (1) The continuation of the opportunity for subsistence uses by rural residents of Alaska, including both Natives and non-Natives, on the public lands and by Alaska Natives on Native lands is essential to Native physical, economic, traditional, and cultural existence and to non-Native physical, economic, traditional, and social existence.[83]

Congress included non-Natives in this class of "rural residents" even though the vast majority of subsistence users were Natives. It did so partly as a matter of equity, partly so that ANILCA would square with the state law on subsistence use. But Congress took care to distinguish between Native and non-Native subsistence users, stating that subsistence use was essential to Native "cultural existence." With that narrow distinction, Congress invoked its constitutional authority over Native affairs. Recalling

[81] Catton, *Inhabited Wilderness*, 213.
[82] Williss, *"Do Things Right the First Time,"* 283.
[83] 94 Stat. 2422.

the federal government's aims under ANCSA, Title VIII of ANILCA preserved the federal trust responsibility toward Alaska Natives on all national interest lands where the provision applied.[84]

Other provisions in ANILCA supported Alaska Native interests more overtly. In Title XIII, Sections 6, 7, and 8 had important ramifications for each conservation unit's relationship with neighboring Native communities. Section 6 provided that, to the extent practicable and desirable, administrative sites and visitor facilities would be located on Native lands. Section 7 provided that Native corporations would be given preference in providing visitor services within each area. Section 8 directed the land managing agencies to establish rules for local hire that would be distinct from their normal civil service procedures. This section was not specific to Natives, but applied to "any individual who, by reason of having lived or worked in or near a conservation system unit, has special knowledge or expertise concerning the natural or cultural resources of such unit and the management thereof."[85]

Other provisions in ANILCA protected rights of access to private lands that were surrounded by conservation areas, and access to subsistence use areas where subsistence users were concerned. These provisions opened the door to motorized transportation in wilderness areas.[86] The law also provided for utility corridors, aquaculture, and sundry other things. Another notable feature of ANILCA was the Alaska Land Use Council, a body that brought together federal and state officials and Native representatives to consult on land management issues within the conservation areas. Nowhere else in the United States did park managers have to consult with the state government on such a basis.[87]

People formed two views about ANILCA. According to one view, the law was a delicate compromise that had to be accepted in its totality, warts and all. As such, it successfully grafted the wilderness preservation ideal onto the unique cultural, environmental, and economic conditions found in Alaska. It fulfilled the basic aim of establishing ecologically complete preserves without displacing resident peoples. But according to another view, the law was flawed and needed amending. It had only been passed in its present form as a matter of expedience. Such criticisms of ANILCA came from both directions – both from Alaskans who found the law too restrictive and from

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[84] Catton, *Inhabited Wilderness*, 211-212. The state's subsistence law, enacted at the behest of the federal government, duly gave subsistence use priority over sport hunting and commercial fishing in the state's management of fish and game on federal lands. The state law made subsistence a rural preference rather than a Native preference ostensibly because a Native preference would have violated the state constitution's ban against racial discrimination.

[85] Alaska Federation of Natives, Inc., "ANILCA Title XIII Presentation by Native Representatives to National Park Service – Alaska Superintendents," 1994, RM File 65, RM Library, KEFJ.

[86] Randy J. Tanner, "Subsistence, Inholdings, and ANILCA: The Complexity of Wilderness Stewardship in Alaska," *International Journal of Wilderness* 10, no. 2 (August 2004): 18-22.

[87] For more on how ANILCA specifically affects Kenai Fjords, see the General Management Plan approved in 1984 (pp. 3-4) and the Statement for Management approved in 1983 (Appendix B).

environmental groups who found it too permissive. On behalf of Alaska sportsmen and gun clubs around the nation, Senators Stevens and Murkowski tried to amend ANILCA in 1983 so as to take about 12 million acres in national parks and make those areas into national preserves where sport hunting would be permitted. The bill would have taken approximately 120,000 acres in Kenai Fjords National Park and made it into a national preserve. Given Congress's reluctance to tinker further with ANILCA at that time, the bill never stood a chance.[88] On the other side of the issue, the Sierra Club pushed an initiative several years later to eliminate subsistence (and the Sierra Club's real target, ATV use) in large areas of four national parks – Denali, Wrangell-St. Elias, Lake Clark, and Gates of the Arctic – as well as Aniakchak National Monument. Defying the solid consensus that had formed around ANILCA's Title VIII, the Sierra Club sought "to carve out five new traditional national parks."[89] Not unlike the sport hunting initiative, this proposal went nowhere because people did not want ANILCA to be unraveled. ANILCA was amended over time but the amendments were relatively minor; on the whole the consensus view of the law prevailed and it became the rock on which the national park system in Alaska stood.

[88] Michelle Strutin, "Alaskan Senators: Gunning for the Alaska Lands Act," *National Parks* 57 (July/August 1983): 25.
[89] Quoted in Catton, *Inhabited Wilderness*, 219. For another example of this critique of ANILCA, see T. H. Watkins, "The Perils of Expedience," *Wilderness* (Winter 1990): 23-84.

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The Glory Park

Development and Visitor Services, 1981-1986

Superintendent Dave Moore – Planning – Esprit de Corps – The Seward Visitor Center and the Start of an Interpretive Program

Superintendent Dave Moore

In April 1981, David E. Moore, superintendent at Lehman Caves National Monument in Nevada, received a phone call from Regional Director John E. Cook in Anchorage offering him the position of superintendent at Kenai Fjords National Park. Moore accepted, and in May he joined a freshman class of superintendents gathering in Alaska to take over management of the new ANILCA parks. As Cook informed Moore in their first face-to-face meeting, the register for Kenai Fjords attracted more applicants than any other, and Cook had a strong list of managers from which to choose. Cook had deliberated between giving the job to an up-and-comer or an older, experienced manager, and finally decided on the latter.

Moore had started his Park Service career as a trainee at the Albright Training Center, then served as a law enforcement ranger at Yosemite for three years and a subdistrict ranger at Lake Mead for another three years before going to Lehman Caves as superintendent. He had been superintendent at Lehman Caves for seven years. Like many NPS personnel of his generation, he was a veteran of the Armed Services. An ex-Marine Corps officer, he had performed more than 150 combat missions in Vietnam. He was a results-oriented manager, an experienced boatman (he had a U.S. Coast Guard motorboat operator's license but he had never operated a boat in saltwater), and a straight shooter in his dealings with the local community in Nevada. As a church-going family man with two high-school age sons, his personal circumstances would help him integrate into the Seward community.[1]

Cook's instructions to Moore were simple. He wanted the park to go slow, stay small, and be part of the community. "Make friends, not enemies," Moore remembered

[1] David Moore, interview by Theodore Catton, September 15, 2008. Lehman Caves National Monument is now Great Basin National Park.

Cook as saying. "Do not let the community think that you are trying to take over."[2] Cook gave the same instructions to all of the new superintendents as they came to Anchorage that spring. There were practical as well as political reasons to start humbly. All ten superintendents were setting up shop at once, and the new Alaska Region did not have a lot of staff and funds to go around. He wanted to avoid setting up a fierce competition over scarce resources. But more importantly, he wanted to manage how the Park Service developed a new image in Alaska. Missteps could be costly. Anti-government opinion leaders would be quick to point out the Park Service's errors. There had been an embarrassing incident when the Alaska Region held a superintendents' conference in Katmai earlier that spring before Moore's arrival. Two of the participants had followed a moose in a canoe taking pictures while it was swimming. The moose drowned, and a disgruntled seasonal ranger leaked the story to the local media, which had a field day with it. By the time of Moore's arrival in the state, there were ugly cartoons in the newspapers and even bumper stickers with the nasty invitation to "Save a Moose, Drown a Ranger."[3]

Moore's first official contact in Seward was with the Forest Service. Geof Wilson was district ranger and Kerry Martin was his assistant, and both men were respected members of the community. They immediately proved to be valuable allies, giving Moore an office next to Martin's office with furniture and a phone – the room sufficed as park headquarters for the first eight months – and advertising to the community that the Forest Service fully supported the new national park. The words "Kenai Fjords National Park" were added to the "Chugach National Forest" sign on the front of the building.[4]

As Moore began to make more friends around Seward, he tried to keep things informal and low key. Whenever possible, he conducted the government's business on the strength of a handshake. His interaction with the local air-taxi operator, Keith Knighten, was emblematic of his style. As pilot and co-owner of Harbor Air Service, Knighten had a diverse clientele, transporting loggers, hunters, and sport fishers to remote camps, offering flightseeing trips, and doing medical evacuations. He had four planes equipped for landings on water, snow, and land and flew twelve months of the year. But Moore, as a government employee, could not use Harbor Air Service because Knighten was not certified by the federal Office of Aircraft Services. When Moore suggested that Knighten get OAS certified so that the Park Service could utilize the service, Knighten refused him, saying that he hated the government and would have nothing to do with the OAS. Moore knew another pilot and OAS certifier, and when this fellow came to Anchorage Moore asked him to come down to Seward and talk to Knighten. At first this meeting did not go well, with Knighten again insisting he wanted

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[2] David Moore, interview by Frank Norris, July 21, 2005.
[3] Moore interview (2005).
[4] Moore interview (2008); Superintendent's Annual Report, 1981-1982, Series A2621 Annual Reports, Administrative History Records, Archives, KEFJ.

nothing to do with the OAS. But as the three men stood awkwardly in the Harbor Air Service shack Moore began asking questions about some vintage equipment on hand, and soon Knighten and the OAS certifier were engaged in a lively conversation about Beaver aircraft. That broke the ice. Knighten decided to undertake the certification process after all, and about a month later he became one of the first OAS-certified bush pilots in Alaska. As Moore remembered, "Keith was extremely proud of his accomplishment, but he would never admit it, and the certificate was in the center of all his other awards and diplomas on the wall of Harbor Air Service." Moore not only obtained a reliable air carrier for the Park Service, but a valuable friend in Keith Knighten.[5]

Moore quickly learned that Seward's number one interest in the park was getting the road to Exit Glacier completed. Indeed, the Alaska Regional Office was already working on this problem when Moore arrived. In May 1981, two planners and an archeologist from the regional office inspected the area and made plans for installing a suspension-type footbridge across the Resurrection River, upgrading the primitive road from the river to the foot of the glacier, and making a small, temporary parking area. The following month, the regional office prepared an environmental assessment and sped it through the public review process. In the fall, the NPS signed a memorandum of understanding with the Forest Service, the Alaska Department of Transportation, the Kenai Peninsula Borough, and the City of Seward aimed at improving the Exit Glacier Road and facilities. Pursuant to that agreement, Moore obtained funding for the preparation of a Development Concept Plan (DCP) for the Exit Glacier Area. That effort was barely initiated when the Kenai Peninsula Borough announced that it was putting up $170,000 to purchase a steel pedestrian bridge. Eager to make friends, not enemies, the superintendent forged ahead with both efforts: fast-tracking the temporary footbridge on one hand, while planning a permanent road bridge to allow car access on the other.[6]

The footbridge, temporary though it was, came to have enormous symbolic significance. In the first place, it was the first new infrastructure development in any of the parks established by ANILCA. In the second place, it demonstrated the local community's support for the park. Not only did the borough put up the money, Seward City Manager Johnny Johnson provided use of the town's heavy equipment to get the bridge installed. "Folks at Region couldn't believe that a community was actually

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[5] Moore interview (2005). This interview includes excerpts from an autobiography Moore wrote for his sons that he supplied to Norris after the interview. This anecdote and some other references to the interview below actually come from those excerpts, which Norris put in italics and spliced into the interview transcript. Also see "Harbor Air 'on demand carrier,'" *Seward Phoenix Log*, August 9, 1979.

[6] Ken Schoenberg to Chuck Gilbert, June 1, 1981, Series H4217 KEFJ General, Box 6, Acc. ARCC 00395 Alaska Support Office Administrative Files, Alaska Region Curatorial Center (hereafter ARCC); Alaska Regional Office, "Draft Environmental Assessment of Bridge Installation, Road Improvement and Placement of Temporary Facilities in the Exit Glacier Area, Kenai Fjords National Park, Alaska," June 11, 1981, KEFJ 13289/001/09b, Alaska Task Force Collection, Archives, KEFJ; Memorandum of Understanding between USDA Forest Service, USDI National Park Service, and State of Alaska Department of Transportation and Public Facilities and Kenai Peninsula Borough and City of Seward, 1981, Series D30, Central Files, KEFJ; Gilbert interview.

helping the NPS," Moore remembered. "I had a hard time believing my good fortune." Exactly one year after his arrival, in May 1982, the glacier-blue footbridge was in place. Although the eight-mile road out the Resurrection River valley still needed extensive upgrading – it had been closed by flooding most of the previous summer – the footbridge finally made Exit Glacier the tourist attraction that Seward had long been looking for.[7]

Regional Director Cook called Moore to Anchorage and in the presence of his two deputy regional directors, Doug Warnock and Bob Peterson, asked him if he could arrange a dedication ceremony for the footbridge to coincide with an upcoming visit by Undersecretary of the Interior Don Hodel. Moore said he could arrange a dedication ceremony but it would be hard to get the media to come out to that remote location. Cook told him to lure the media with the promise of a major news announcement, and they would use the occasion to ratchet up the Park Service's commitment to developing the Exit Glacier area in a big way in the coming few years. Moore went back to Seward and began organizing the event, telling everyone that there was to be a major news announcement. When the big day arrived, he had nearly 100 people in attendance at the ribbon-cutting ceremony at the footbridge, and some 300 people at a luncheon in Seward afterward. At the luncheon, Undersecretary Hodel sat at the head table with John Cook, Doug Warnock, Bob Peterson, and Dave Moore of the Park Service and five civic leaders including City Manager Johnny Johnson, City Mayor Don Cripps, and Borough Mayor Stan Thompson. After an elegant meal and just prior to the introductions, with anticipation for the major news announcement starting to build, Hodel had to leave the table to take a phone call. Hodel returned to the room, Cook introduced him, the newspaper reporters all leaned forward in their chairs with pen in hand…and then the undersecretary made some brief, vacuous remarks containing no major news announcement whatsoever. Moore was mortified, feeling that he had been hung out to dry. As he later learned, Hodel's phone call had come from Secretary of the Interior James Watt, who told him to withhold the announcement of a vehicle bridge because the project might not happen.[8]

In spite of Hodel's embarrassingly flat remarks, the dedication ceremony still succeeded as a public relations coup for the Park Service, heralding what the new ANILCA parks could do for Alaska communities. After the event, Bob Peterson ribbed Moore by calling Kenai Fjords "The Glory Park." The tag caught on among the other superintendents in the region, especially as Moore followed up this success with others and soon showed a penchant for getting little extras from the Regional Office when the

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[7] Moore interview (2005); Superintendent's Annual Report, 1981-1982, Series A2621 Annual Reports, Administrative History Files, Archives, KEFJ.

[8] Moore interview (2005). The ceremony occurred May 27, 1982. The bridge was totally funded by the borough and presented to the NPS as a gift. (David E. Moore to Stan Thompson, June 2, 1982, Series A26 Reading File Jan-Feb-Mar 1982, Administrative History Files, Archives, KEFJ.)

ANILCA parks on the whole had to endure a highly skeptical and begrudging mood both in Alaska and at the highest levels of the Interior Department.[9]

The first example of this pattern occurred when Moore received a phone call from Doug Warnock stating that the region had just received ten Pan Abode prefab cabin kits and that they were going to be stored at a warehouse on Elmendorf Air Force Base until the various parks were ready to pick them up and assemble them. Moore requested five of the ten kits; Warnock said he could have two. Moore then made a deal with Bob Peterson's secretary's husband, who was in the construction business in Anchorage, to haul the two kits to Seward, where he arranged with his friends in the Forest Service to store them in that agency's garage on Fourth Avenue. When Warnock learned of Moore's grab he was furious, predicting that the kits would be pilfered at that location before the park got around to assembling them. But as it turned out, it was the other eight kits stored at Elmendorf Air Force Base that eventually got pilfered, while the two in Seward were not missing so much as a nail when they came to be assembled. Moore assigned the cabin construction job to one of his seasonal park technicians, Debbie Sturdevant, who put together a crew of five volunteers and one paid carpenter, and the two Pan Abode cabins were erected in the Exit Glacier area. Each cabin had three interior rooms and a large porch and was equipped with a wood stove. The two were built for a modest labor cost of $21,132. One served as a ranger station, the other as a ranger residence. Completed a few months after the footbridge, the cabins showed that the NPS was serious about developing the Exit Glacier area.[10]

In another example of how Moore was able to finesse the system and get things done for paltry sums of money, he obtained $4,200 from the Regional Office for "cyclic maintenance" to build a cabin in Aialik Bay. In reality, Moore wanted to tear down a ramshackle squatter cabin and build a new ranger station in its place, a job that ordinarily called for design and construction plans from the Denver Service Center, approval from the Washington office, and oversight from the Regional Office. But Moore was anxious to keep the matter strictly a local affair, and the Regional Office helped him by casting the project as a refurbishment of the existing cabin.

The squatter cabin belonged to one Ed Zimmerman. Moore approached Zimmerman for permission to remove the cabin, offering to pay him $500 for his investment in construction materials, an amount shown on an invoice that Zimmerman had in his possession. Zimmerman threatened to call Secretary Watt if the Park Service touched his cabin, but eventually he relented and took the money. Next, Moore paid his friend Keith Knighten, the Harbor Air Service pilot, to tear down the cabin and haul out the material. Meanwhile, Moore turned to his chief ranger, Bruce Kaye, to make a rough sketch of what the new cabin should look like. He then took the sketch to the Alaska

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[9] Moore interview (2005).
[10] Moore interview (2005); Superintendent's Annual Report, 1981-1982, Series A2621 Annual Reports, Administrative History Files, Archives, KEFJ.

Vocational Technical Center (AVTEC) in Seward, where he knew the instructor who taught woodworking and carpentry. This gentleman perfected the drawing and made a list of the materials needed. Moore purchased the materials at Seward Building Supply and had them delivered to AVTEC, where the instructor and his students precut everything to size as a class project. Moore next located a man named Dave Strum, a friend of Knighten's, to serve as foreman for the Park Service's work crew. Just one problem remained: Strum wanted $500 in advance and Moore could spend no more than $250 per invoice using the Imprest Fund. Undeterred, Moore had Strum draw up two invoices for $250 each for the construction of two "boxes." Moore borrowed the Seward Building Supply's truck to haul all of the precut lumber from AVTEC to the boat dock. Finally, Moore got every available person he could find and they went out to Aialik Bay for a three-day work party. Chief Ranger Bruce Kaye noted in the annual report for that year: "With the help of Alaska Regional Office personnel, authorization from WASO to build the cabin was received in what some say was record time." This was written with a wink to his boss, for it was clearly the superintendent's independent spirit that made the project succeed.[11]

For Moore, Kenai Fjords' growing reputation as "The Glory Park" was more than just an inside joke among park managers in the Alaska Region. As an ex-Marine, Moore savored the word "glory" in its martial sense of honorable sacrifice. For him, the park's nickname was tacit acknowledgement that Kenai Fjords was providing political cover for those other new parks in Alaska that would remain essentially wilderness parks. With the development of the Exit Glacier area and the installation of a few public use cabins along the coast, the NPS could say it was not trying to lock up the whole Alaska wilderness. This sort of political cover was important to park superintendents as they tried to tread lightly in the early 1980s, mindful that many Alaskans were hopping mad over ANILCA.

As superintendent of The Glory Park, Moore was willing to take a bullet for his comrades once in a while. On one occasion, he agreed to give a breakfast talk to the Resource Development Council, one of the most stridently pro-development organizations in Alaska. An associate regional director, Janet McCabe, promised to accompany him into this lions' den and offer encouragement, as did Don Follows. The night before the presentation, Moore went to the Fly by Night Club in Anchorage with two fellow superintendents, Mack Shaver and Dave Mihalic, for some serious commiserating. He reported for duty the next morning badly hung over but otherwise well-prepared. He told the Resource Development Council about the park's plan for Exit Glacier, and to his great surprise the audience gave him a courteous reception. His Park Service colleagues were "dumbfounded," Moore recalled. "And all I had was a big headache."[12]

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[11] Superintendent's Annual Report – 1984, Series A2621 Annual Reports, Administrative History Files, Archives, KEFJ; Moore interview (2005). The Aialik Bay Ranger Station was built in June 1984.
[12] Moore interview (2008).

The national parks in Alaska had adversaries in many places in the early 1980s: in state government, in the Alaska Land Use Council created by ANILCA, in Alaska's congressional delegation, and in the Reagan administration. Park superintendents knew that they had no friend in James Watt, the arch-defender of property rights and former head of Mountain States Legal Foundation, even though he was now running the Department of the Interior. Environmentalists complained that Reagan's pick of Watt for Secretary of the Interior was like putting a fox in the chicken house. Moore agreed, saying years later that Watt "seemed to care about the national parks like lumber companies care about the rainforests." Along with other park superintendents in this era, Moore was astonished by the policy directives that came down from the Office of the Secretary through the NPS director and regional director to his desk. "At Kenai Fjords," Moore later wrote, "I really started to have a conscience about what the NPS stood for and the ideals that made this organization special and not just another bureau in the government." As the political environment worsened, Moore's response was to hunker down and inform the Regional Office only about the good things – "never complain and never explain" – in the hope that the Reagan administration's pro-development policy directives could be soft-pedaled or ignored.[13]

Moore's greatest "glory" came in the winter of 1984-85. It began with an offhand remark at a Christmas party at which a large number of Seward's leading citizens were present. Seward business owner Jack Werner commented to Moore, "Seward still has a black mark on its record because of the way we treated the park and it is a disgrace." Moore asked him what he was talking about, and Werner referred to the resolution the city council had passed in 1976 in opposition to the park proposal. Moore asked him what could be done about it, and Werner replied that it ought to be rescinded and taken off the books. Moore called his friend Geof Wilson, the Forest Service district ranger, over to the table and asked what he could do, since Wilson was on the city council. Wilson, in turn, drew Ron Garzini, the city manager, into the conversation. Garzini said he would have a resolution prepared for their next meeting. Moore then brought Jon Sewall, a Kenai Borough assemblyman, into the discussion and suggested that the Kenai Borough might take similar action.

On January 14, 1985, the City Council passed Seward Resolution 85-5, which rescinded the earlier resolution and went on to praise the park as a "good neighbor" for its diligent efforts to promote tourism for the community. On February 19, 1985, the Kenai Borough Assembly passed Resolution 85-25, which rescinded the assembly's earlier resolution and similarly declared the park to be a "good neighbor." Once Moore had been presented with both resolutions, he took them to the regional office and showed them to the new regional director, Roger Contor. Moore then stopped by Bob Peterson's

[13] Moore interview (2005).

office to do a little gloating. Peterson allowed that the resolutions were a good thing for the NPS in Alaska, and another star for The Glory Park.[14]

Planning

In the early 1980s, Kenai Fjords National Park was under pressure to produce several planning documents in short succession. In the first place, ANILCA mandated that the "Secretary shall develop and transmit to the appropriate Committees of Congress a conservation and management plan" for each national park system unit in Alaska.[15] This mandate resulted in the park's first statement for management in 1982 and first general management plan (GMP) in 1984. There was, in addition, an initiative on the part of NPS Director Russ Dickenson, which he announced on December 10, 1980, to produce a resources management plan (RMP) for each national park system unit throughout the nation. The intent of this initiative was to identify resource problem areas, target those areas for additional funding and staffing, and provide justification for those program needs to Congress and the public. By 1982, the Alaska Region was lagging behind some other regions in that effort, which threatened to put it at a disadvantage in competing for scarce resource management dollars.[16] Cook pushed all the superintendents to get their RMP done, and this led to Kenai Fjord's first RMP in September 1982.[17] Yet another initiative, concurrent with these others, was to produce a land protection plan (LPP) for each unit in the national park system. The stimulus for this initiative came from the Office of the Secretary of the Interior, which had decided to put a moratorium on use of the Land and Conservation Fund for land acquisition. The purpose of each land protection plan was to indicate how the Park Service would protect areas containing non-federal lands by means other than acquisition. Kenai Fjords National Park had a draft LPP completed by 1985 although it would not be final until three years later. Besides the GMP, RMP, and LPP, the park was required to prepare a development concept plan (DCP) for the Exit Glacier area, which it trotted out ahead of everything else in draft and then final form between September 1981 and August 1982.[18]

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[14] Moore interview (2005).
[15] Section 1301, quoted in "Draft Statement for Management, Kenai Fjords National Park," Series D18, Administrative History Files, Archives, KEFJ.
[16] Director to All Regional Directors, February 5, 1982, and Regional Director to Superintendents, Alaska Region, March 4, 1982, Series N16 Management of Natural Resources and Areas 1982, Box 18, Acc. ARCC 00395 Alaska Support Office Administrative Files, ARCC.
[17] Superintendent's Annual Report, 1981-1982, Series A2621 Annual Reports, Administrative History Files, Archives, KEFJ. A rudimentary effort, it was nonetheless the only RMP completed by any of the ANILCA parks before 1986.
[18] Superintendent's Annual Report, 1981-1982, Series A2621 Annual Reports, Administrative History Files, Archives, KEFJ.

Superintendent Moore had no love for writing reports and considered this compound planning effort a "nightmare." Normally when park staff worked on planning documents it was in the off-season, but Moore had few permanent staff and some of the timetables for these plans, such as the DCP for Exit Glacier, required more urgent attention. While much of the writing was done by planners in the Regional Office – especially by Chuck Gilbert, the former assistant to keyman Don Follows – ultimate responsibility for each plan rested with the superintendent. Despite that heavy charge, Moore was more interested in getting these plans out of the way than in getting them done well, and each one – with the possible exception of the GMP – had the feel of a preliminary effort.[19]

The 16-page DCP for Exit Glacier laid out the major components for what would be Kenai Fjords National Park's only road-accessible area. The Resurrection River would be spanned by a two-lane vehicular bridge and the road surface would be improved on the existing roadbed for 1.4 miles to a parking area. The parking area would be designed to accommodate 50 cars and several buses with room for expansion. There would be a visitor contact station, comfort station, and ranger residence. A picnic area with cooking units would be located nearby. Three trails would be developed: a loop trail to the foot of the glacier, part of it to be wheelchair accessible; another trail would start at the bridge and follow alongside Exit Glacier Creek, connecting with the loop trail near the creek; and a third trail would ascend the Exit Glacier valley to the edge of the Harding Icefield. An emergency shelter would be provided near the top of this trail. The DCP called for research studies on a number of resources in the Exit Glacier area, including mountain goats, the hydrologic regime, glaciology of the Harding Icefield and Exit Glacier, and flora in the area.[20]

The DCP was notable for what it did not include. ANILCA specifically authorized the Secretary of the Interior to develop access to the Harding Icefield and to allow use of mechanized equipment on the ice field. The DCP noted that in the early 1970s entrepreneurs had run a snowmobile operation on the ice field for tourists but it pointed out that access to the snowmobile operation had been by air taxi from Seward and it said nothing about developing an aerial tramway up to the ice field. In this respect the DCP differed from the Master Plan that the NPS had prepared for the Harding Icefield-Kenai Fjords National Monument proposal in 1973, which proposed an aerial tramway and observation station on the edge of the ice field. In the early 1970s, the NPS had been enthusiastic about tramways, seeing them as a relatively clean and non-intrusive form of visitor transportation. But in the ensuing decade NPS planners and resource managers came to agree with environmentalists that tramways were harmful to

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[19] Acting Regional Director to Superintendent, December 15, 1981, Series D18, Administrative History Files, Archives, KEFJ; Moore interview (2008).

[20] U.S. Department of the Interior, National Park Service, *Kenai Fjords, Exit Glacier Area, Development Concept Plan* (Seward: National Park Service, Kenai Fjords National Park, 1982).

wilderness values. In the environmental assessment for the Exit Glacier DCP, the NPS found that tramway access to the Harding Icefield could not be justified based on the projected level of visitor use, at least in the near term.[21] So the DCP simply did not mention it. Surprisingly, this omission did not provoke much public comment. Even the Resource Development Council, while slamming the plan for its "myopic approach to short term solutions at Exit Glacier," did not expressly call for a tramway.[22] After the DCP became final, Moore continued to discourage any suggestion of a tramway at Exit Glacier. When a local man named Mick Sela became interested in the idea as a business proposition, Moore tried to persuade him that a tramway from Seward to the ice field had better prospects than one starting from the Exit Glacier area.[23]

While the DCP mainly attracted local interest, the Statement for Management provided the first general overview of the park since its establishment and consequently attracted considerable interest from environmental groups such as the Sierra Club and National Parks & Conservation Association (NPCA). Published in draft form in the spring of 1982 and in final form the following winter, it came to a mere 12 pages of text not including appendices. (Both versions contained the same amount of text, and the final contained hardly any revisions despite numerous public comments received on the draft.) The cursory report began with a recitation of the park's location, purpose, and significant resources drawn from ANILCA, and then proceeded to describe "resource uses and trends," including sightseeing flights, sport fishing, sightseeing from boats, kayaking, mining, camping, wildlife viewing, hiking in the Exit Glacier area, winter uses, and mountaineering. This section drew the most public comment. Environmental groups wanted to see more attention given to the protection of wilderness values and the mediation of potential user conflicts, such as between motorized and non-motorized watercraft.[24] Alaska-based organizations focused on extractive resource uses, which they thought deserved more attention. The Citizens' Advisory Commission on Federal Areas (CACFA) wanted the NPS to discuss the importance of salmon and other fisheries as well as spruce forest, minerals, and fur bearers in the section on resources. It objected to the Park Service's statement on sport fishing that Kenai Fjords "cannot be considered great sport fishing country by many Alaskan standards," contending that sport fishing had greatly increased in recent years and was much more popular than sightseeing activities such as viewing a glacier. It added sport hunting to the list of other resource uses that the NPS listed with the statement, "Sport hunting is a resource use which was halted through passage of ANILCA. However, it has a long and active history. Local residents, guides,

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[21] National Park Service, *Draft General Management Plan, Environmental Assessment, Kenai Fjords National Park, Alaska* (Washington: National Park Service, 1983), 50.
[22] Resource Development Council for Alaska, Inc. to John Cook, Regional Director, November 15, 1982, Series D18, Administrative History Files, Archives, KEFJ.
[23] Moore interview (2005).
[24] T. Destry Jarvis to David E. Moore, June 28, 1982, and Sally Kabisch to John Cook, September 16, 1982, Series D18, Administrative History Files, Archives, KEFJ.

and air taxi services all remain interested."[25] The Cook Inlet Aquaculture Association (CIAA) echoed some of this. "We find it difficult to understand why fish, particularly salmon, are not considered one of the significant resources of the Park," the group stated.[26] (The comments from CIAA foreshadowed a proposal that this Soldotna-based group would soon make during the GMP planning process for enhancing certain salmon spawning areas within the park. Since the project was proposed on Native land selections, it would not be easily dismissed.)

The Statement for Management was a warm-up for the more fulsome GMP effort. Moore secured Chuck Gilbert as team captain for the Kenai Fjords GMP. Number two on the team was Jonathan Halpern, an ecologist at the Denver Service Center. The planning effort, though burdensome, did have its lighter side as the Kenai Fjords superintendent had by now entered into a friendly competition with the other Alaska superintendents to be the first one done with his GMP. The Exit Glacier DCP had been the first of its kind in the region – another mark for The Glory Park – and then Moore had gotten into a dead heat with Lake Clark on the Statement for Management and "barely got in under the wire" to finish in first place on that one, too. Lake Clark got ahead of him on the GMP, but Moore thought he could catch up because he did not have the complicated subsistence issue to consider in his plan. The other superintendents complained to him that without subsistence to deal with, the Kenai Fjords GMP planning effort was a cakewalk. Moore responded in kind, saying the subsistence issue was no big deal for them even though he knew that it was. In the end Lake Clark was first out with a draft, but Senator Stevens held it up, so The Glory Park was first across the finish line with a final GMP. It was a Triple Crown triumph.[27]

The 90-page GMP provided a new conception of the park as essentially a three-pronged entity consisting of the fjords, the Exit Glacier area, and the park facilities in Seward. The apportionment of park staff and resources would be basically divided into those three areas. (It was an informal division of the park inasmuch as the staff was too small to justify designation of "management districts" as defined in Section 1301(b) of ANILCA.) The fjords constituted the park's "backcountry" and the Exit Glacier area (together with the visitor center in Seward) constituted its "frontcountry," but what was

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[25] Bettye Fahrenkamp, Chairman, to John Cook, Regional Director, August 31, 1982, Series D18, Administrative History Files, Archives, KEFJ.

[26] Thomas E. Mears to David E. Moore, June 30, 1982, Series D18, Administrative History Files, Archives, KEFJ.

[27] Moore interview (2008). In a letter accompanying the plan when it was submitted for final approval by the Office of the Secretary, Ric Davidge, Special Assistant, made this commendation: "Of special note is the contribution of Chuck Gilbert, the park planner located in the Anchorage Regional Office of the National Park Service. His professional approach and willingness to listen to the concerns of Alaskans, especially State and Native leaders, and his commitment to good park management is in no small part the reason for the success of this plan. Chuck is one of the park planners located in Alaska and as a result, he is generally familiar with the State, its people, and the resources he was responsible for planning." (Ric Davidge to G. Ray Arnett, March 28, 1984, Kenai Fjords NP Land Protection Plan 1988, Office of Planning, National Park Service, Washington, DC.)

distinctive about Kenai Fjords was that the fjords and the Exit Glacier area were so completely separate from one another – one accessed by water and the other by road. The Harding Icefield Trail above the Exit Glacier area would constitute a wilderness threshold for the vast Harding Icefield, but few visitors would venture onto the ice field itself. Seward, meanwhile, was the nearest thing to a wilderness threshold for the fjords, although the GMP recognized that that situation would likely change. "Small development zones will be designated in the fjord portion of the park when cabins are constructed there in the future," the GMP stated.[28]

The GMP was the first full statement of the Park Service's intention to develop administrative headquarters and a visitor center in Seward. The plan noted that the town was the nearest community to the park, offered a variety of retail services to support public use of the park, and additionally could provide permanent and seasonal housing for park staff. It stated that the harbor area was thought to be a good location for a visitor center because it would be near the entrance to Seward and the marina where private and charter boats were moored. The GMP called for construction of a new building to serve as both administrative office space and a visitor center.[29]

The GMP planning team distributed a questionnaire, conducted public workshops in Seward and Anchorage, and sorted through written comments received from numerous individuals, organizations, and agencies. Issues of most concern were the status of State and Native land selections in the park, public use of the fjords, and public access to Harding Icefield. With regard to Native lands, most people supported efforts to develop cooperative management, reserving acquisition as a backup measure if cooperative management did not succeed. The National Audubon Society expressed strong concerns about the State's plans for Nuka Island, especially as the area had the highest density of nesting bald eagles found anywhere on the park's coastline. Public comments generally favored the development of public use cabins in the fjords but public input was divided over whether the NPS should install navigation aids. Conservation groups opposed mechanized access to Harding Icefield and wanted any facilities such as an observation station to be primitive and unobtrusive. The final GMP more or less reflected public input on these issues; notably, it provided for public use cabins but proposed maintaining the status quo at Harding Icefield.[30]

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[28] National Park Service, *General Management Plan, Kenai Fjords National Park, Alaska* (Denver: National Park Service, 1984), 56.

[29] National Park Service, *Draft General Management Plan Environmental Assessment, Kenai Fjords National Park, Alaska* (Washington: National Park Service, 1983), 74; National Park Service, *General Management Plan, Kenai Fjords National Park* (Denver: National Park Service, 1984), 53, 65.

[30] David R. Cline (National Audubon Society) to David E. Moore, August 17, 1983, Series D18, Administrative History Files, Archives, KEFJ. Numerous other comment letters on the GMP, "Task Directive for General Management Plan" (no date) and memo titled "Kenai Fjords National Park, General Management Plan, Public Meetings" (containing summary of comments) are also contained in this series.

Esprit de Corps

In keeping with Regional Director John Cook's request, Kenai Fjords National Park started small. In June 1981, Moore was joined by two seasonal park technicians, John M. Morris and Debra J. Sturdevant, and two months later a second permanent employee was added to the staff, administrative technician Joan A. Alley. The following summer, Sturdevant returned together with two more seasonal park technicians, James M. Gale and Cathleen J. Cook and a few weeks later the park acquired chief ranger Bruce M. Kaye. This core staff was joined by five Young Adult Conservation Corps (YACC) employees, all hired and paid for by the Forest Service and assigned to the park for the summer, and a temporary carpenter, Joseph E. Kenney, who stayed on under the Volunteer-in-Parks (VIP) program. Starting in the third season, the summer of 1983, the number of park technicians increased to five and this modest ranger force was divided into two groups, one focused on interpretation in the Exit Glacier area and Seward, the other dedicated to resource protection on the coast, while six VIPs rounded out the staff. In 1984, the park picked up its first local hire, park technician Ida Murdock and in 1985, it picked up a second, maintenance worker Bill Stevens, while the number of volunteer staff grew incrementally through these years. In 1986, Superintendent Moore's last year at Kenai Fjords, there was one more significant development in the staff: Park technician Bud Rice became the park's first resource management specialist.[31]

Even by the standards of the National Park Service, the small staff at Kenai Fjords National Park had exceptional esprit de corps. At least four factors contributed to high morale. The first factor was effective leadership. Moore was energetic and ambitious and expected a lot from his staff. Bruce Kaye met Moore for the first time at a law enforcement refresher when Kaye, still on the ranger staff at Katmai, was weighing whether to take the chief ranger position at Kenai Fjords. "I talked to Dave and he outlined all his plans and I thought, 'wow, this is a real aggressive person,'" Kaye related. After he took the job, Kaye found Moore to be a "risk taker" who placed a lot of trust in the abilities of his own people. When it came to building a visitor center, for

Figure 7. Small boat harbor area of Seward, 2008. (Photo by Theodore Catton.)

[31] Superintendent's Annual Reports for 1981-1986, Series A2621, Administrative History Files, Archives, KEFJ.

example, Moore eschewed the normal bureaucratic procedures and made the project into something like a barn raising instead. "He realized," Kaye said, "we'd have been waiting for years if we'd put in a '238' and gone to Washington and tried to get a line item." Moore and his staff poured hours of volunteer labor into the building and in the end they got something they could call their own.[32]

Another factor that contributed to high morale was the newness and smallness of the staff operation. Individuals shared responsibilities, performed a wide variety of duties, and were constantly improvising and innovating. One of the first two seasonal park technicians, John Morris, wrote an exuberant "end-of-season synopsis" to share with his counterparts in the other new Alaska areas. He and Sturdevant spent most of their time developing visitor contacts through a variety of venues: giving evening programs in the community library, staffing an information booth during the frenetic seven days of the Silver Salmon Derby, and visiting area schools after the start of the school year. The latter activity took them to schools all over the peninsula in Homer, Kenai, Soldotna, and Seward. In addition, they made several trips into the backcountry to learn about park resources. Back at the office they began to develop interpretive materials.[33]

Park employees were also buoyed by positive interactions with the townspeople, who proved to be on the whole highly supportive of the new park. Moore conveyed to his staff the imperative to "make friends, not enemies." One example of how the staff integrated into the community was its participation in the Silver Salmon Derby, a major annual event in Seward. With the event running around the clock for seven days in a row there was a great demand for judges to weigh and measure fish as they were brought in to the waterfront. Moore encouraged all of the staff to sign up for judging and each person worked several four-hour shifts. Kaye remembered working the eight to midnight shift into the long northern twilight as the fishing boats paraded in with their running lights on. Another example was the Exit Glacier Run, which Kaye organized for the first time in the spring of 1983. There was a 10k run and a 5k run, with different start lines along the Exit Glacier Road and a common finish line out at the Exit Glacier area. The annual event drew more and more participants, including quite a number from Anchorage.[34]

Perhaps the most important factor underlying the park staff's esprit de corps was the sheer adventure involved in working at Kenai Fjords National Park. Even if Seward was a relatively civilized duty station compared to most other places in Alaska where NPS personnel were posted, it still had its challenges. Foremost was the weather. While unpleasant weather conditions – especially rain and sunlight deprivation – tend to be hard on morale, shared adversity tends to be motivating. As rainy days were common, park staff had to be flexible and team-spirited to work around those adverse conditions. And

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[32] Bruce M. Kaye, interview by Theodore Catton, September 17, 2008.
[33] John Morris, "Summer Field Season – 1981, Alaska's National Park Areas, End-of-Season Synopsis," no date, Series H1417, Administrative History Files, Archives, KEFJ.
[34] Kaye interview.

heavy weather was not the only aspect of local climate that was challenging for park staff. High seas posed a problem for safe travel to and from the park's coastal areas. Ironically, fair skies over the southern Kenai Peninsula are often coupled with strong winds in the Gulf of Alaska, creating hazardous conditions for navigation. Indeed, any job involving transportation by plane or boat was contingent on the weather, and frequent bad weather was almost as much of a problem in summer as in other seasons of the year. "Throughout our season," Morris wrote at the end of the summer of 1981, "travel plans were subject to change; although none of our trips were cancelled, each and every one was changed, delayed, or postponed because of weather conditions."[35] Living with this uncertainty kept the work interesting.

It was adventurous, too, of course, to work in such a harsh and desolate landscape as that of Kenai Fjords National Park. Few places could compare with the fjords and ice field for sheer austerity. If anyone needed convincing of that fact, there was the story of Roger Lewis and Denise Harris, who were stranded in Surprise Bay in the winter of 1979-80, a year after the area became a national monument. The young couple had met in the summer of 1978 in Glacier National Park, Montana, where Lewis was a park ranger and Harris was a concession employee. Adrift in Seward in the fall of 1979, the two cheechakos had been drawn into a sketchy mining partnership in which they were to be domiciled in a cabin in Surprise Bay and re-supplied through the winter while they worked some ore out of the gold mine located there. But the couple had a falling out with the third miner, John Kinney, and then the fourth partner, Jack Koglen, failed to show up with the promised supplies. Low on provisions, out of fuel, and with their water source freezing up, the couple made a foolhardy attempt to paddle back to civilization in a canvas kayak. They had no comprehension of the distance involved, for all that they had by way of a navigational chart was a torn corner off of a state highway map, nor did they grasp the severity of winter storms in the Gulf of Alaska. On their second night out along the exposed coast south of Nuka Bay their kayak was destroyed by pounding surf and they barely escaped to a ledge above the beach where they waited out the night. From that point, the young couple desperately tried to proceed onward by land, but after 19 harrowing days they had made little further progress around the rugged coastline. Nearly starved to death, they were finally spotted and plucked off a mountainside by a U.S. Coast Guard rescue helicopter.[36]

Park rangers did not stay out on the coast in winter, but they did grapple with occasional storms, long periods of isolation, primitive accommodations, and intermittent

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[35] John Morris, "Summer Field Season – 1981, Alaska's National Park Areas, End-of-Season Synopsis," no date, Series H1417, Administrative History Files, Archives, KEFJ.

[36] "Couple survives incredible trek," *Homer News*, January 12, 1980. Naturally, the local reaction to the story picked up on the fact that Roger Lewis had worked as a park ranger in Glacier National Park before coming to Alaska. According to Don Follows, "the talk in the cafes and bars was that a park ranger had been caught operating his private gold mine within the monument." (Don Follows to Richard Stenmark, January 21, 1980, Box 13, Alaska Region Administrative Subject Files 1964-1984, RG 79, NAAR.)

communications. Chief Ranger Bruce Kaye modeled the coast ranger operation for Kenai Fjords after the one at Katmai. The coast was divided into a northern sector and a southern sector, and each sector was assigned to a GS-026-5 park technician and a student intern or "ranger sidekick" as Moore liked to call them. The intern was key, because two people posted in a remote location were safer than one. Still, the tenuousness of this operation gave Kaye many sleepless nights. At first, the only communication Kaye had with the coast rangers was by fishing boat. The teams would give correspondence and reports and a list of items they needed to a passing fishing boat, and the communication would be relayed by the fisherman to the chief ranger in Seward. Gradually, communication by sideband radio was established. John Heiser, the first ranger at Aialik Bay, would climb to the ridge top on the Aialik Peninsula to get a radio signal, and in 1984 the park installed a repeater station at that location. Bud Rice, who headed the Nuka Bay team, found that he could sometimes get a radio signal at McArthur Pass. Kaye set up a radio base station in his house in Seward. He and the coast rangers would establish a schedule of call-in times, mostly late at night when radio signals were strongest, and sometimes the connection worked and sometimes it did not.[37]

With or without reliable communications, the coast ranger teams had to be self-reliant. The job required wilderness experience as well as boating skills. Each team used an inflatable boat with 25-horse-power outboard motor to navigate the bay and coastal waters. In addition, a pair of single-person kayaks were shared back and forth between the two locations. Occasionally, the Aialik Bay team took their inflatable boat around the Aialik Peninsula and up the length of Resurrection Bay to Seward, but only if the waters were glassy calm. For the most part, each team was transported by boat or airplane out to its location at the beginning of the summer and then remained out there for the duration of the summer. When the coast rangers sent for more supplies, the two items most sought after were Naval Jelly, a rust remover, and Marine-Tex, an epoxy for fixing things that were broken. The coast rangers did include food in their lists of requested items, but they also extended their food supply by catching fish.[38]

Moore had to beg and plead to get a larger park boat for support operations. Regional Director Cook kept turning down his requests. Finally, Mack Shaver, superintendent of three areas in northwest Alaska, offered Moore his boat, which was stowed in Anchorage because its draft was too much for the shallow rivers around Kotzebue. They worked out a deal whereby Moore "bought" the vessel from Shaver for half of its original cost, or about $20,000. Their arrangement was that Shaver could charge $20,000 in equipment purchases to the Kenai Fjords National Park's budget over the next two years. The regional office found their arrangement "highly irregular," but the two superintendents got away with it. The boat, *The Revenge*, was a 21-foot Boston whaler with twin 90-horsepower outboard engines. It burned gas at a furious rate. To

[37] Kaye interview.
[38] Kaye interview; Moore interview (2008).

travel as far as Nuka Bay it was necessary to take extra gas on board and then have more gas flown in for the return trip.[39]

On February 29, 1984, the park's second vessel, the more ample 32-foot *M/V Kenai Ranger*, arrived in Seward. Built by Modutech of Tacoma, Washington, it was used successfully for hauling supplies to support the coast ranger operations as well as for transporting other park staff, researchers, and visiting guests. It was equipped with radios, overnight gear, cooking utensils, safety equipment, supplies, navigation charts, and survival suits.[40]

Both the superintendent and chief ranger were qualified skippers, but each one had to learn a few things about dealing with the area's enormous tides and navigating in high seas. Moore remembered one of the first times he took *The Revenge* out he had a fairly calm sea and he thought he could land the boat in Bulldog Cove near Bear Glacier. He had not counted on the incoming tide. He cut the engines, raised the props out of the water, and glided into the beach. But just as the bow touched the beach, the next wave rolled and filled up the stern of the boat. He and his two passengers had to jump out, get the boat turned around while they were nearly neck-deep in the water, and then climb aboard and get the engines going. That was Moore's first lesson that "you don't mess with tides and you don't park these kinds of boats on the shore."[41]

The coast rangers, too, had to learn how to deal with extreme tidal variations. Six weeks into their summer at Nuka Bay, Bud Rice and his intern, Thomas Betts, awakened one morning to find that an extreme high tide had lifted their Zodiac inflatable boat (which they had firmly anchored for the night) onto a flat slab above the sloping cobble beach, leaving it high and dry. Marooned there, they took advantage of the long day ahead of them to explore the area on foot, and they were fortunate that the next high tide floated their boat off the slab. Much to their chagrin, they allowed their boat to get beached again the following night, this time by a rapidly falling tide, as they left the Zodiac for a few too many minutes to scramble up to an enticing rock garden abloom with wildflowers. "So, we ate dinner on the cobbles and awaited the return of high tide," Rice recorded in the Nuka Bay Team journal. "At 10:00 p.m. we pushed out and camped one hr. later along the s.w. shore of Ragged Island."[42]

The difficulty of launching and beaching the unwieldy 300-pound Zodiac on rocky shores was one reason why the coast rangers sometimes preferred to use sea kayaks for patrol. Another reason was that the kayaks were quiet. Paddling close to shore without making much sound, the rangers could approach wildlife and people without disturbing them. That stealth enabled them to obtain better wildlife observations and

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[39] Moore interview (2008).
[40] Superintendent's Annual Report – 1984, Series A2621 Annual Reports, Administrative History Files, Archives, KEFJ.
[41] Moore interview (2008).
[42] National Park Service, Kenai Fjords National Park, Nuka Bay Team, "Nuka Bay Journal, 1983," by Bud Rice, KEFJ 1520, Accession KEFJ-00100, Archives, KEFJ, pp. 184-85.

censuses as well as more realistic monitoring of human activities. Rice was especially keen on the use of sea kayaks. Once, as he and his partner glided along a sandy spit, they heard the rumbling of a diesel-powered fishing boat suddenly stop on the other side of the spit. They landed and crossed the spit in time to find a commercial fisherman preparing to shoot sea lions. Rice was convinced that he had not only prevented an offense in that particular instance, but that the use of kayaks for patrol soon made other commercial fishermen who operated in waters adjacent to the park more leery of breaking the law.[43]

Considering all of the hazards involved for park staff and visitors, Kenai Fjords National Park compiled a remarkable safety record. In the park's first five years of operations, there were just three minor injuries, all occurring on building construction sites. There were no boating accidents and there was one car accident in which no one was injured. While keeping safe, park staff shared in a sense of adventure by working in such an awe-inspiring and potentially life-threatening environment. That sense of adventure contributed in no small part to the staff's unusual esprit de corps.

Figure 8. *M/V Commander* high and dry on Pedersen Beach, August 1987. (Photo by Steve Fettig, Acc. 52, Ext. 623, Box 6, No. 12, KEFJ.)

[43] Bud Rice, "The Working Boats: A Lone Ranger and his Kayak," *Blue Water Paddler*, (1986?), copy of article in KEFJ 00204/NRE/B-1, Archives, KEFJ; William D. "Bud" Rice, interview by Theodore Catton, August 21, 2008.

The Seward Visitor Center and the Start of an Interpretive Program

The park's first visitor center and headquarters building was an A-frame located across the street from the small boat harbor and next door to Seward's major outfitting shop, Alaska Marine. The property was leased from the owner of Alaska Marine, Harold Johnson.[44] When the seasonal park technicians arrived in late spring of 1982, they immediately went to work painting the building and getting it ready to serve as a visitor center. A large "Kenai Fjords National Park" sign was mounted on the front façade, and as the building stood in a conspicuous place, curious people began to trickle in. The first thing the staff offered for visitors was a slide show. Many visitors did not plan to go to Exit Glacier or take a boat tour and were simply interested in seeing what was in the park, so the person at the information desk would click through the park's budding slide collection. Townspeople, meanwhile, contributed items for display such as a minke whale skull, a king crab skeleton, and a glass float. Park Technician Cathy Cook created a tide pool exhibit. There were other homemade exhibits and a table with books for sale. In short order, Harpers Ferry Center produced some standup exhibits for the front of the lobby. Park offices and collections occupied the second floor. The A-frame building helped the park become more visible to passing tourists as well as the local community, but it was only a stopgap. By 1983, the small park staff was already overflowing the facility and Moore was making plans for a larger building.[45]

The first issue was where to locate a new facility. Moore wanted to remain close by the current location since it obviously worked well. Not only was the small boat harbor the hub of tourist activity in Seward, the current location also had the advantage of being near the entrance to the town for people driving into Seward from the north. Starting in 1983, Moore entered into protracted negotiations with Alaska Marine and its subsidiary company, Homes Unlimited, Inc., for an option to buy the A-frame building and the lot it occupied with the intention of replacing the building. This effort was made at the request of the Regional Office, which proposed that the City of Seward acquire the property and donate it to the NPS for a headquarters site, with a proviso that the lot would revert to city ownership if the NPS should ever locate the park headquarters elsewhere. These talks were ultimately fruitless.[46] Late in 1984, after studying various other locations next to the harbor, Moore selected a site directly south of the Alaska Marine property. The site was owned by the city and Moore proposed to lease it. The city government decided it wanted to keep that lot for parking, but City Manager Ron Garzini and Kerry Martin, who was on the city council, suggested another city lot across the street and next door to the harbor master's office. The city government agreed to lease

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[44] David Moore to Ron Garzini, December 14, 1984, Series A26, Administrative History Files, Archives, KEFJ.
[45] Kaye interview.
[46] David E. Moore to Ron Garzini, June 27, 1983, Series D30, Central Files, KEFJ.

this lot to the NPS with just one stipulation: the NPS would have to allow for a temporary refreshments booth to be erected on the back corner of the lot during the Silver Salmon Derby, as this was its customary location. The NPS agreed to these terms and eventually went one step better, designing the booth space into the back corner of the building itself.[47]

The new visitor center was built on a phantom budget. Moore barely had the lease in hand when he dove into this new development project with an initial $60,000 outlay of discretionary development funds from the regional office. This was mere pocket change, but it was enough to get a hole dug, a sewer line hook up, and a foundation. In taking this precipitous action, Moore had the full support of Regional Director Roger Contor, whose verbal instructions (to the best of Moore's recollection) went something like, "Just go for it; once we get started they can't stop us." After a few months the regional director doubled down with another allotment of funds, and then another, but there it ended: a mere $150,000 with which to build a visitor center.[48]

Together, Contor and Moore did everything in their power to minimize labor costs by keeping as much work as possible in-house. Brad Richie, regional architect, took charge of the design and construction plans. Dennis Johnson, an engineering technician who worked in the Alaska Region's maintenance group with Richie, purchased all the materials for the project in Anchorage and he and Richie shared the job of delivering materials to the construction site. In Seward, meanwhile, Moore dragooned the park's new boat captain and chief of maintenance, Bill Stevens, into serving as the project's chief carpenter. Stevens had the assistance of a couple of hired day laborers as well as the superintendent and chief ranger, both of whom contributed untold hours on such mundane tasks as hanging sheetrock and painting the interior. As Richie explained, the NPS would normally contract with an architectural and engineering firm to accomplish a project of this size, but it approached this project in a "non-traditional way," scrimping on budget requests and gambling on the determination and perseverance of its own people. The risk in such a venture was that the whole project might flop or simply drag on too long. Therefore, Moore was extremely proud and relieved when the park staff moved into the building on May 1, 1986. A little over one month later, on June 6, the new visitor center opened to the public.[49]

For all of the cost-cutting measures that went into it, the building was a great success. Richie worked directly with Moore on the building requirements. Office windows were oriented as much as possible to the south to get the most out of the area's limited sunlight, while the tall lobby windows faced west to take in the view of Mount Marathon. Richie toured around Seward to get a feel for the vernacular architecture and

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[47] David E. Moore to Ron Garzini, December 14, 1984, Series A26, Administrative History Files, Archives, KEFJ; Brad Richie, interview by Theodore Catton, August 21, 2008.
[48] Moore interview (2008).
[49] Richie interview; Superintendent's Annual Report – 1986, Series A2621, Administrative History Files, Archives, KEFJ.

they came up with a shingle style for the exterior that gave it a maritime feel. The expansive front deck was built with 4 x 12 planks salvaged from the Exit Glacier footbridge when it was torn out to make way for the road bridge.[50]

While this project was underway, Moore went to Contor with a request for another $150,000 for a maintenance barn. Contor said he could not possibly allocate another $150,000 to Kenai Fjords for a maintenance barn on top of the $150,000 already allocated for the new visitor center building, but there might be another way for the park to get that money. He and Moore both knew that Seward city leaders had considerable pull with Senator Stevens. Federal officials were barred from approaching a member of Congress with a budget request, but the superintendent could inform these citizens of the park's need in the hope that one or more of them would get the information to the senator and that the senator would act on it. If the senator was able to put such an "add-on" into an appropriations bill, it would be money coming straight to the park over and above the park's annual operating budget. Contor suggested that Moore find a typewriter that no one could trace back to the NPS, type up the information, and distribute it to four well-connected people in town. Start by informing them about the $600,000 that is already in the administration's budget for development of the Exit Glacier area, Contor said, and state that the park needs another $150,000 for a maintenance barn. If Congress's appropriation for development of Kenai Fjords National Park should come in at $750,000, then Contor and Moore would know that the plan worked.[51]

Figure 9. The visitor center in 2008. (Photo by Theodore Catton.)

Moore carried out his boss's instructions to the letter, and sure enough the next appropriations act included $750,000 for development of Kenai Fjords National Park. This was fortuitous, because by then the directorate in the regional office had begun to learn that the visitor center project was going considerably over budget. Moore learned of the growing cost overrun – and the escalating concern over it in the Regional Office – as each fretful phone call from Anchorage came from a higher-level official. First Moore received a phone call from Mike Finley, associate regional director for park operations, who said he was looking at the numbers on this thing and they were not good. Next he got a call from Bob Peterson, deputy regional director, who complained that the overrun might put the whole regional science program in jeopardy. Finally, the call came from

[50] Richie interview.
[51] Moore interview (2008).

Contor. By this time, Moore knew what he had to do. "Tell you what," Moore said. "That $150,000 that was supposed to be for the maintenance shed? Maybe we could put that into finishing the visitor center up." Contor agreed.[52]

After the new visitor center opened the park recorded a ten percent increase in visitor contacts over the year before. The information desk was staffed seven days a week and the slide show (now automated with a sound track) was shown almost continually in the auditorium to a steady flow of visitors. Altogether the park recorded 21,976 visitors in Seward. The 4,313 visitors who signed the guest register came from 35 different Alaska communities, all 50 states, and 34 foreign countries.[53]

[52] Ibid.
[53] Superintendent's Annual Report – 1986, Series A2621 Administrative History Files, Archives, KEFJ.

4

The Thin Green Line

Resource Management, 1981-1987

Natural Resource Management – Cultural Resource Management – Three Land Use Issues – Visitor Death at Exit Glacier

Natural Resource Management

One of the striking things about Kenai Fjords is how relatively unknown the area was when the park was established. The cooperative seabird survey by the NPS and the Fish and Wildlife Service in 1976 constituted the first significant biological inventory of the Kenai coast. It confirmed what had been previously known only anecdotally – that the area contained prolific breeding colonies of many species of seabirds. Even the marine mammal populations specifically identified in the legislative history of ANILCA had not received much study prior to the park's establishment. As for terrestrial mammals, the legislative support data compiled for Kenai Fjords by the Alaska Task Force vaguely inferred that Dall sheep were still found in the Kenai Mountains and that brown bears were present on the coast, but neither inference was confirmed. When the NPS first put rangers on the coast in 1983 the state of knowledge about the park was still so limited that it was not definitely known whether brown bears inhabited the Nuka Bay area. Bud Rice and Thomas Betts soon discovered that brown bears were in fact present when they found tracks on the beach.[1]

Chief Ranger Bruce Kaye instructed the backcountry teams to inventory and observe the flora and fauna and keep a journal. They would make an official log not just of their activities, fuel consumption, visitor contacts, and such like, but also chronicle their close observations of nature: what species they encountered, when certain plants flowered, when migrating birds arrived, and so on. The journals were to be a resource for future managers.[2] Some rangers liked this assignment more than others. Rice was one of the best. His journal entries revealed careful and perceptive observations, as in this example:

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[1] Rice interview.
[2] Kaye interview.

> Near Wildcat Pass we observed 6 Bald Eagle adults soaring overhead and a couple seemed to have their landing gear lowered as in courtship ritual, but this seems too late for that….We noted NW crows, oystercatchers and another Peregrine Falcon by Kitten Pass. The dearth of seabirds on the cliffs of Rabbit Island surprised me. About 95% of the colony nesters selected the S.E. corner of Pye Island for their home: Tufted Puffins (2000?), Horned Puffins (1500); Black-legged Kittiwakes (3000) and Glaucous-winged Gulls (1500). Truly a winged spectacle. Bronzy and golden Sea Lions fur-line the shores of this island from Kitten Pass to midway around the S. side. We estimated at least 1000 animals. Some have ascended flat granite slopes to about 100 ft. elevation! A rusty gun-mount appears along the S. shore atop a granite ledge…WWII? [3]

The coast rangers also filed end-of-season reports. These included a list of species sighted and identified as well as a narrative section. John Heiser's report for 1983, for example, listed 36 species of birds, 18 species of fish, 7 species of crustaceans, 6 species of echinoderms (starfish), 8 species of mollusks, and 4 species of cnidarians (anemones and jellyfish). His 17-page narrative report included many useful observations. He noted that with the arrival of large schools of salmon smolt in Aialik Bay came increased numbers of seabirds, porpoises, whales, and sea lions. He estimated a resident population of about 300 harbor seals near the Aialik Glacier terminus and about a third as many near the Holgate Glacier terminus. As the former location was a "major calving grounds," Heiser recommended that human "intrusion" in the area "should be kept to a minimum."[4]

This warning about the seal pupping areas underscored an odd feature in the park's enabling act. Section 201(5) of ANILCA gave the protection of marine mammals as one of the purposes of the national park and it even called specifically for their hauling-out and breeding areas to be preserved in their natural state free of human activity disruptive of natural processes. But virtually all such hauling and breeding areas were offshore, either on floating ice or rocky islands. Park Service jurisdiction ended at mean high tide line, while all ice flows and beaches below mean high tide were under state jurisdiction and all offshore islands (except Nuka Island) were under Fish and Wildlife Service jurisdiction. Furthermore, if disruptive human activity was construed to be a violation of the Marine Mammals Protection Act (MMPA) of 1972, then yet another agency, the National Marine Fisheries Service (NMFS) had jurisdiction. The NPS interpreted ANILCA to mean that marine mammals were a bona fide park resource to be properly studied, monitored, and protected, even though any regulatory or law

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[3] National Park Service, Kenai Fjords National Park, Nuka Bay Team, "Nuka Bay Journal, 1983," by Bud Rice, KEFJ 1520, Accession KEFJ-00100, Archives, KEFJ, p. 86.
[4] National Park Service, Alaska Region, *Natural Resources Survey and Inventory Report*, (Seward: National Park Service, 1983), 17.

enforcement activity would require the cooperation of other agencies. For a time, the NMFS actually deputized the Kenai Fjords chief ranger so that he could make arrests for MMPA violations.[5]

The matter of jurisdiction affected the park's ability to protect other resources besides marine mammals. Viewed from an ecological perspective, the mean high tide line was less than an ideal boundary for it ran smack through the rich transitional zone between terrestrial and marine ecosystems. Bears and other terrestrial wildlife prowled the beaches and stream outlets below mean high tide looking for carrion, kelp, and other things to eat that had been washed up by the tides. While on the beach, these animals were in the state's jurisdiction and could be legally hunted. Indeed, hunting guides could operate in the waters around Nuka Bay with impunity in a practice known as "hunting by boat." Although it was against the law to shoot big game from a boat, it was not against the law to spot the animal from a boat and put the hunter ashore to kill it. No one could say, of course, how well the law was obeyed. There were not many stretches of shoreline in Kenai Fjords where a person could disembark easily and stalk an animal. When hunters did go ashore to shoot the animal, it was very likely they would drive their quarry above mean high tide line before taking it. Suppression of poaching under these circumstances was a two-fold problem. First, park rangers had to be extremely lucky to be in the right place at the right time to apprehend a poacher in such a vast expanse of territory. And second, they had to establish that the animal indeed had been taken illegally – either because it was shot from a boat or because it was taken above mean high tide line.[6]

Park managers assumed that the presence of a ranger team in Nuka Bay discouraged poaching in the area and made other user groups – notably commercial fishermen – more law abiding. Assigning two men to patrol 100,000 acres of wilderness did not establish a big law enforcement presence, but it was more than had existed in the area before. Prior to 1983, the only law enforcement on the coast consisted of an occasional fly-over by the Alaska Department of Fish and Game but those planes never landed. In the absence of any real law enforcement, the commercial fishermen had rather reluctantly enforced their own rules. For example, the fishermen took turns setting their seine nets in front of a salmon stream. In a ploy known as "corking," one fisherman might jump in front of another rather than wait his turn. Being a long way from authorities, fishermen were known to fire warning shots across the bow when they thought a rival was corking them. On one such occasion, Rice waited until the shooting ceased and then he went over to the fishing boat to issue a reprimand. Rice told the fisherman it was not appropriate to be firing a weapon in that place; there were people camped on the beach and it was not safe. The fisherman claimed he was only firing

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[5] Chief Ranger Peter Fitzmaurice was deputized by NMFS. By the late 1990s, NMFS had two officers based in Seward so the practice was discontinued. (Jim Ireland email to author, November 19, 2008).
[6] Peter Fitzmaurice, interview by Theodore Catton, September 16, 2008.

Figure 10. Ranger Jeff Carlstrom, Addison Lake, July 1987. (Photo by Steve Fettig, Acc. 52, Ext. 623, Box 7, No. 2, KEFJ.)

cracker shells (shotgun shells that explode loudly in midair), but he would stop all the same. Based on this exchange and others, Rice sensed that the commercial fishermen were generally grateful for the Park Service law enforcement presence in the area as it tended to keep them all in line.[7]

Another group that the backcountry rangers sought to influence was campers. Often ignorant of park regulations, many campers littered and left evidence of their campfires. The rangers followed behind them, collecting and burning their trash and obliterating their fire rings. To get a better handle on this situation, the rangers contacted camping parties at every opportunity to instruct them in leave-no-trace principles of camping. Also, more campers each year voluntarily checked in at the two backcountry ranger stations. (The Aialik Bay team had a ranger station built near Coleman Bay in 1984, while the Nuka Bay team had permission from Henry Waterfield, the owner of a mining claim, to use his cabin.) The park had no means of obtaining an exact annual count of backcountry users, but the number was clearly going up. The backcountry rangers attempted to monitor user impacts, such as scarring of ground vegetation around the most popular campsites. These monitoring efforts would become more systematic in later years.[8]

[7] Rice interview.
[8] Superintendent's Annual Report – 1986, Series A2621 Annual Reports, Administrative History Files, Archives, KEFJ.

With visitor use on the coast increasing, the potential existed for the park to develop a bear problem. In 1986, there were a number of black bear incidents. One bear was shot and killed in Aialik Bay by a guide from Alaska Treks and Voyages. Two bears were shot and killed in McCarty Fjord, one by a state fish biologist who was conducting survey work at Delight Lake, the other by a cook from a fishing boat. In all three cases it was ruled that the persons were acting in defense of life and property but in the latter case the cook failed to salvage the hide and was fined by the Alaska Department of Fish and Game. There were two other instances of aggressive black bear behavior in which the bears escaped unharmed.[9]

As the amount of boat traffic in the fjords increased, it remained to be seen what effect it would have on marine mammals. Greg Streveler, a resource manager in Glacier Bay National Park and Preserve, studied the effects of increased boat traffic on harbor seals at the upper end of Glacier Bay's Muir Inlet, which had seal pupping grounds similar to those at the upper end of Aialik Bay. Soon after Kenai Fjords became a national monument, the Park Service initiated an analogous study of the seal pupping grounds in Aialik Bay. Anne Hoover, a graduate student at the University of Alaska who lived in the Seward area, made a census of harbor seals in the area in 1979. She repeated the census in the following two summers and observed wildlife reactions to various kinds of boating activity as well as low-flying aircraft. She produced a final report in September 1981 with recommended guidelines for large pleasure boats, small pleasure boats (including kayaks), and aircraft.[10] Since the park did not have jurisdiction over the waters of Aialik Bay, the NPS could advertise the guidelines but it could not enforce them.[11]

Another wildlife species of concern was the mountain goat. The animal was known to range throughout the Kenai Mountains as well as the coastal area, but population estimates were very rough. Prior to the park's establishment the Alaska Department of Fish and Game permitted goat hunts in five units that overlapped the park area, but it had only surveyed two of these five. In September 1981, Moore was joined by wildlife biologists Francis Singer and Al Lovaas from the regional office in a helicopter count of the primary goat habitat in the park. With helicopter pilot Bill

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[9] Ibid.

[10] Edward C. Murphy and A. Anne Hoover, *Research Study of the Reactions of Wildlife to Boating Activity Along Kenai Fjords Coastline*, report prepared for the National Park Service (Fairbanks: University of Alaska, Alaska Cooperative Park Studies Unit, Biology and Resource Management Program, 1981); Anne Hoover, *1981 Evaluation of the Population Status of Harbor Seals in Aialik Bay, Kenai Fjords National Park*, report prepared for the National Park Service (Fairbanks: University of Alaska, Alaska Cooperative Park Studies Unit, Biology and Resource Management Program, 1981).

[11] The State of Alaska owns all of the coastline of Alaska below mean high tide line except within federal reservations that already existed at the time of statehood. Thus, the situation in Kenai Fjords is different from the situation in Glacier Bay even though the two areas have similar marine mammal habitat in the vicinity of tidewater glaciers. The NPS always asserted jurisdiction over wildlife management within marine waters in Glacier Bay National Park and Preserve although its jurisdiction was not finally resolved until *Alaska v United States* in 2005.

Roberts at the controls, the three men counted a total of 534 goats within the park and 46 just outside the park for a total of 580.[12]

The park executed a second mountain goat survey in July 1985. This time, Bud Rice and regional wildlife biologist Layne G. Adams spotted while George Knight piloted the helicopter. The second survey differed from the first in that it was done over a period of five days, rather than two, with total flight time over the park adding up to 20 hours compared to 10 hours in the earlier survey. The second survey counted 800 goats in the park and 46 just outside for a total of 846, or 46 percent more than in the first. The increase was attributed to the additional flight time and resulting increase in survey intensity. Other variables entering into the survey results included weather and lighting conditions that affected visibility (bright sunshine at mid-day in mid-summer was nearly as inhibiting as low patchy clouds), the greater amount of snow cover in July as opposed to September as this affected where the goats were distributed, and the method of flying over the survey area. In the latter survey, the helicopter made two passes over each area. As kids were apt to go to ground after the first pass and avoid detection in the second pass, it was thought that the 1985 survey, though more thorough, contained a bias toward counting a higher percentage of lone adult males, which were generally easier to see than groups with young. Certainly the latter survey enumerated a higher ratio of adults to young than the earlier survey had, and this supposed survey bias was thought to account for it. The survey team urged that the park monitor the mountain goat population in the future using sample survey areas and that it do so using consistent survey methods, which it outlined.[13]

Figure 11. Mountain goats above Delight Lake. (Photo by Matt Gray, Digital Files, KEFJ.)

Monitoring the mountain goat population this way was going to prove difficult, but in the meantime the park worked on attaining just that kind of data for another resource: seabirds. In October 1984, Moore initiated discussion with the Fish and Wildlife Service about making another joint survey of all seabirds – and marine mammals – along the southern coast of the Kenai Peninsula. Moore recommended that the survey be conducted during the same time of year (mid-June to mid-July) as the 1976

[12] Superintendent's Annual Report – 1981, Series A2621 Annual Reports, Administrative History Files, Archives, KEFJ.

[13] Layne G. Adams, *Mountain Goat Survey, Kenai Fjords National Park, 1985*, Natural Resources Survey and Inventory Report AR-86/01 (Anchorage: National Park Service, 1986), 1-8; Rice interview.

survey, and that they do it in 1986. "This would give us a ten-year cycle to see if any changes have occurred," he wrote to John Martin, manager of the Alaska Maritime National Wildlife Refuge.[14]

The survey was carried out as planned in 1986. Bud Rice of the Park Service, Mike Nishimoto of the Fish and Wildlife Service, and two assistants made up the survey team. As in the earlier survey, the count was made from a boat and covered the coast from Gore Point to Resurrection Bay. The survey included a count of sea lion pups as well. Overall, numbers of kittiwakes, glaucous-winged gull nests, and bald eagles showed slight increases, while numbers of sea lions, harbor seals, and tufted puffins were lower.[15]

The park initiated a program of glacier monitoring. Preliminary efforts were made to photograph and map the positions of glaciers and track changes over time. Most of the efforts focused on Exit Glacier since it was to serve as the focal point for interpretation and viewing of the national park's glacier phenomena. Time-lapse photography and survey instruments were used to measure rates of flow and surface ablation on Exit Glacier. Gary M. Ahlstrand, a researcher with the Alaska Region, made a study of Exit Glacier's recession in the historical period using evidence from tree rings, or dendrochronology. Mapping the age of alder, black cottonwood, and Sitka spruce stands located at various distances from the glacier terminus, Ahlstrand was able to plot the glacier's retreat over the past two centuries. He identified no fewer than five terminal moraines, and his multi-year study provided information on plant succession in the newly de-glaciated environment as well.[16]

As the foregoing suggests, much of the resource management at Kenai Fjords in these early years was conducted by biologists in the regional office. The resource management staff in Alaska was more centralized in the regional office than was the case in the Park Service's other regions. In 1986, the Alaska Region's Natural Resources Division had a total of 18 biologists, including two who were less than full time. Eight positions, including the six most senior positions, were based in Anchorage. Among the rest, Denali and Wrangell-St. Elias had two each, and Glacier Bay, Katmai, Gates of the Arctic, Lake Clark, Yukon-Charley Rivers, and the Northwest Areas had one each. Kenai Fjords had none. In part this was because the park could be served relatively easily from Anchorage; in part it was because the park's biological resources were not as far-flung as those in other areas and there was no subsistence use. But the Natural

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[14] David E. Moore to John Martin, October 2, 1984, Series A26, Administrative History Files, Archives, KEFJ.

[15] Superintendent's Annual Report – 1986, Series A2621 Annual Reports, Administrative History Files, Archives, KEFJ; David E. Moore to John Martin, June 15, 1987, KEFJ 13605/N/002, Administrative History Files, Archives, KEFJ.

[16] Superintendent's Annual Report – 1986, Series A2621 Annual Reports, Administrative History Files, Archives, KEFJ; David E. Moore to John Martin, June 15, 1987, KEFJ 13605/N/002, Administrative History Files, Archives, KEFJ; Gary M. Ahlstrand, *Dendrochronological Evidence of the Recent History of Exit Glacier* (Anchorage: National Park Service, 1985), 1-10.

Resources Division still recognized that Kenai Fjords had critical needs. The park was "important for marine mammals, Rocky Mountain goats, black and brown bears, moose and other wildlife," Al Lovaas, the chief of the division, wrote in a memo summarizing the Alaska Region's needs. "Visitor use is increasing rapidly. Little is known about the hydrology, mining impacts, fisheries or birdlife. Records of recession of the Harding Icefield and glacial movements are almost non-existent."[17]

With natural resource management staff concentrated in Anchorage, it was an important step for the park when Bud Rice was promoted from seasonal park technician to become the park's first full-time resource management specialist. Rice was pursuing a master's degree at the University of Alaska in Fairbanks between summers at Kenai Fjords, and he entered the job initially as a cooperative education student under a program agreement made between the Alaska Region and the University of Alaska. Starting in 1986, he was brought on board as a full-time staff member. He remained in that position for four more years, at which time he was promoted again and transferred to the regional office.[18]

Rice's career steps were emblematic of the change in natural resource management that occurred in the Park Service during the 1970s and 1980s. Rice graduated from the University of California, Berkeley in June 1973 with a degree in forestry, and after backpacking in several national parks that summer he decided to pursue a career in the Park Service. Like many park rangers in that highly competitive era, he worked a succession of seasonal jobs for the better part of a decade, including a turn at Noatak National Preserve in 1981 before starting at Kenai Fjords in 1983. By then, although he was still a GS-5 seasonal employee, Rice had become well-schooled in the Park Service tradition of the generalist ranger. He was part naturalist, part law enforcement officer, with a wealth of wilderness experience. But by the time Rice finally secured the full-time position he had long sought, he was in danger of losing out on the type of work that had always most interested him: managing natural resources. Throughout the Park Service, the ranger job was becoming more and more oriented to law enforcement, while new research grade positions in natural resource management were being filled by specialists with advanced degrees in the natural sciences. Fortunately, Rice was able to pursue a master's degree in geology and adapt to the changing culture of the Park Service, moving from one career track to the other.

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[17] Chiefs, Divisions of Natural Resources, Cultural Resources, Subsistence, Alaska Region, to Regional Director, March 6, 1986, File N22 Research Programs Resource Management Plan, Box 20, Acc. ARCC 00395 Alaska Support Office Administrative Files, ARCC.

[18] Superintendent's Annual Report – 1985, Series A2621 Annual Reports, Administrative History Files, Archives, KEFJ.

Cultural Resources Management

As with the Natural Resources Management Division in the Alaska Region, the people who conducted cultural resources management in the parks were based in the regional office. Altogether the Cultural Resources Division had, in 1986, four historians, three archeologists, one curator, and one historical architect, all GS-11 or higher. As with natural resources management, Kenai Fjords did not have high-priority needs relative to other parks in the region. When the chief of the division laid out a three-year plan for expansion in 1986, he proposed five additional positions in the regional office plus nine additional positions that would be based in parks. Among the latter, two each would be at Sitka and Wrangell-St. Elias, and one each at Katmai, Bering Land Bridge, Yukon-Charley, Gates of the Arctic, and Denali. Kenai Fjords did not make the list.[19]

As with natural resources management, the low priority given to Kenai Fjords had two parts to it. The first was logistical: of the fifteen units in the Alaska Region, this park was the most easily served by people based in Anchorage. The second reason was substantive: the park simply did not have as many cultural sites to be recorded and managed. (The park's enabling legislation contains no mention of cultural resources.) However, the notion that Kenai Fjords was a rock-and-ice park with hardly a human footprint could be taken too far. Starting with two surveys made in 1983, archeologists and historians in the regional office would gradually dispel that impression. "A perception of wilderness is easily acquired at Kenai Fjords National Park," Linda Cook and Frank Norris would observe in the opening lines of their impressively thick historic resource study several years later. The park's historic resource study would challenge "the long-held view that the coast has been uninhabited throughout most of the historic period – that it has been nothing more than a forsaken wilderness."[20] What Cook and Norris proceeded to demonstrate was that the rugged Kenai coastline had indeed been touched by many kinds of human endeavor, from use and occupancy in aboriginal times to such diverse twentieth-century enterprises as fox farming and homesteading.

The first archeological survey in the park was made in the second half of June 1983 and covered the west side of the Resurrection River valley. The team documented the previously known Placer Creek Cabin and discovered and recorded three other cabins, each in a different state of disintegration. Regional historian Bill Brown evaluated the Placer Creek Cabin and found that it was not eligible for National Register listing but that it was nevertheless worth preserving as a backcountry ranger base and recreation use structure. As such, its cultural resource values – its log architecture, ambiance, and setting – ought to be protected. Regional historian Bill Brown prepared

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[19] Chiefs, Divisions of Natural Resources, Cultural Resources, Subsistence, Alaska Region to Regional Director, March 6, 1986, Series N22 Research Programs Resource Management Plan, Box 20, Acc. ARCC 00395, Alaska Support Office Administrative Files, ARCC.
[20] Cook and Norris, *A Stern and Rock-Bound Coast*, xvii.

guidelines for stabilizing the structure and cleaning up the site, and a crew headed by park technician Robert Hakenan carried out this work later in the summer.[21]

The second archeological survey in the park – and the last until 1989 – consisted of a preliminary reconnaissance of cultural sites in Nuka Bay. Bill Brown and regional archeologist Harvey Shields joined Superintendent Moore and the backcountry team of Rice and Betts for a three-day tour of the area. They inspected a former Native village site and three mine sites located at Surprise Bay, Beauty Bay, and Shelter Cove. At the Native village site they found various depressions indicating a need for archeological testing at some time in the future. Of the three mine sites, Brown thought the Shelter Cove site was the most significant because of its "isolation and pristine abandoned condition." The site featured some collapsed buildings and scattered machinery that appeared to be practically untouched since the 1930s. Brown noted that it closely matched the site description by D. H. Richter of the U.S. Geological Survey based on Richter's 1967 visit and had evidently been visited infrequently since then due to its inaccessibility. "The old road is wiped out and it is a veritable jungle of undergrowth, marsh, and streams – all accompanied by great groves of Devil's Club," Brown wrote. He recommended that the site be thoroughly recorded and passively preserved as a discovery site for visitors, meaning that the ruins would be allowed to molder and disintegrate through natural processes.[22]

Three Land Use Issues

Following passage of ANILCA, the new area managers in Alaska faced a backlash from Alaska citizens, industry organizations, and state officials who remained resistant to the American people's desire to remake their state, the nation's "last frontier," into the nation's "last wilderness." To the frontier way of thinking, wilderness preservation only stood in the way of progress. Alaskans of the frontier persuasion made numerous tries to develop extractive resource industries on lands that they perceived as having been taken away from them by ANILCA. Superintendent Moore sought to defend Kenai Fjords National Park from three such efforts, two specific to his park and one directed at all of the ANILCA parks, but in all three cases his influence was limited as decisions were made at a higher level.

The ANILCA-wide effort, already noted in the previous chapter, involved a bill to amend ANILCA by re-designating much of the land in national parks as national

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[21] Georgeanne Lewis Reynolds, "An Archeological Reconnaissance of the West Side of the Resurrection River Valley, Kenai Fjords National Park, 1983," Accession KEFJ-00204, Archives, KEFJ; William E. Brown, "Field Survey Report and Recommendations," June 23, 1983, and Superintendent to Regional Director, July 13, 1983, Series H4217, Administrative History Files, Archives, KEFJ.
[22] Bill Brown to Dave Moore, Harvey Shields, and Leslie Hart, July 6, 1983, Accession KEFJ-00204, Archives, KEFJ.

preserves, thereby re-opening those areas to sport hunting. Alaska's two senators and one congressman all supported the so-called Alaska hunting bill. Critics of the measure saw it as a cynical ploy to drive a wedge into the Alaska Coalition, as it threatened to pit groups like National Audubon Society, whose membership was heavily weighted toward sport hunters, against groups like The Wilderness Society and Sierra Club. But the Alaska Coalition did not crack and in the end the Alaska hunting bill was easily defeated.

This bill would have re-designated roughly the northern one-fifth of Kenai Fjords National Park as national preserve. The area included two sections of the park of most interest to sport hunters: the west side of the Resurrection River, with its populations of brown bear and moose, and the area between Callisto Peak and Bear Glacier, containing mountain goat. Of the two areas the latter was the more problematic since the park boundary did not follow any natural features over the mountains and was unmarked. The Park Service occasionally heard complaints from goat hunters who used the area and were either unclear or unhappy about the new park boundary.

Around the time when the hunting bill was generating some heat, Senator Stevens visited Kenai Fjords National Park and requested a trip out to Exit Glacier. Moore decided to confront Stevens about the hunting bill as he drove him out Exit Glacier Road to inspect the development area. As Moore remembers it, they were driving up the muddy road in pouring rain and had to pause to put the vehicle in four-wheel drive. Geof Wilson, the Forest Service district ranger, and Herman Leirer, the man who had spearheaded the Exit Glacier Road construction, were in the back seat. When Wilson got out of the vehicle to turn the wheel hubs, Moore took that opportunity to make his pitch to the senator to leave Kenai Fjords out of the hunting bill. Moore argued that Kenai Fjords was the "only pure park created by ANILCA" (meaning that it was the only park not coupled with an adjoining preserve) and that few people would benefit if the northern portion was re-opened to hunting. Leirer leaned over the front seat to say that the superintendent's proposal was "asinine." Stevens replied obliquely to both comments at once, saying that the bill "did not stand a snowball's chance in hell" but he had to respond to requests from his constituents. Moore drew a lesson from this exchange: Alaskan politics being what they were, the senator sometimes had to hide the fact that he thought the ANILCA parks might actually be a good idea.[23]

Another try to open the park to resource development came from the Cook Inlet Aquaculture Association, a Soldotna-based group representing the salmon fishing industry. Prior to ANILCA, the association had developed a regional plan to enhance salmon stocks by clearing streams and fertilizing lakes where salmon spawned. Of a total of 70 proposed salmon enhancement projects in its regional plan, 6 were located in Kenai Fjords National Park. The association argued that neither the stream clearance projects nor the lake fertilization projects would have significant impacts on soils, vegetation, air

[23] Moore interview (2005).

quality, or cultural resources, and certainly the minor impacts would be less than those the Park Service proposed for developments in the Exit Glacier area. The association contended that the salmon enhancement projects would result in no loss of wildlife habitat for other species although it admitted that lake fertilization would add some nutrients to the lakes being fertilized. It did not acknowledge the danger of algae blooms and eutrophication if lakes were artificially fertilized, although this concern was one that the Fish and Wildlife Service shared with Park Service officials.[24]

Doug Warnock, deputy regional director, answered the Cook Inlet Aquaculture Association with a strongly worded letter in which he stated that habitat "improvement" (or "manipulation" in the Park Service's lexicon) was contrary to NPS policy. Warnock cited four examples in the legislative history of ANILCA that showed congressional intent to uphold that policy in Alaska. Perhaps most forceful was this quote from a House committee report:

> …of particular interest to the committee is the future of fish enhancement and aquaculture activities in the state. The Committee adopted language making it very clear that various fisheries enhancement activities could be permitted by the appropriate Secretary within wilderness or wilderness study areas, except within Park Service units.[25]

This letter put the matter to rest for the time being, but the Cook Inlet Aquaculture Association would raise the issue again some years later with the Native village corporation landowners.

The third land use issue involved the Bradley Lake Hydroelectric Project. The Bradley River drains the north slope of the Kenai Mountains and flows into Kachemak Bay. The entire proposed Bradley Lake Project from the diversion structure in the upper Bradley River drainage down to the Bradley Lake reservoir site was located outside the park; nevertheless, it was a concern to the Park Service because the water diversion was to occur on the divide between the north-flowing Bradley River and the south-flowing Nuka River and therefore it had the potential to take water out of the latter drainage, which does fall within the park. The diversion dam was aimed at capturing flow coming out of the Nuka Glacier. This glacier terminates on the gently sloping divide between the two river drainages. As the river channels emanating from this nearly flat glacier terminus tend to shift around a great deal, the amount of runoff going into each drainage has varied from year to year over the past half century. According to flow records kept by the U.S. Geological Survey, approximately 75 percent of the flow went into the Nuka

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[24] David Horne to John E. Cook, November 30, 1981, Series D18, Administrative History Files, Archives, KEFJ; Jeff Troutman, interview by Theodore Catton, September 18, 2008.
[25] Quoted in Douglas G. Warnock to David Horne, January 4, 1982, Series D18, Administrative History Files, Archives, KEFJ.

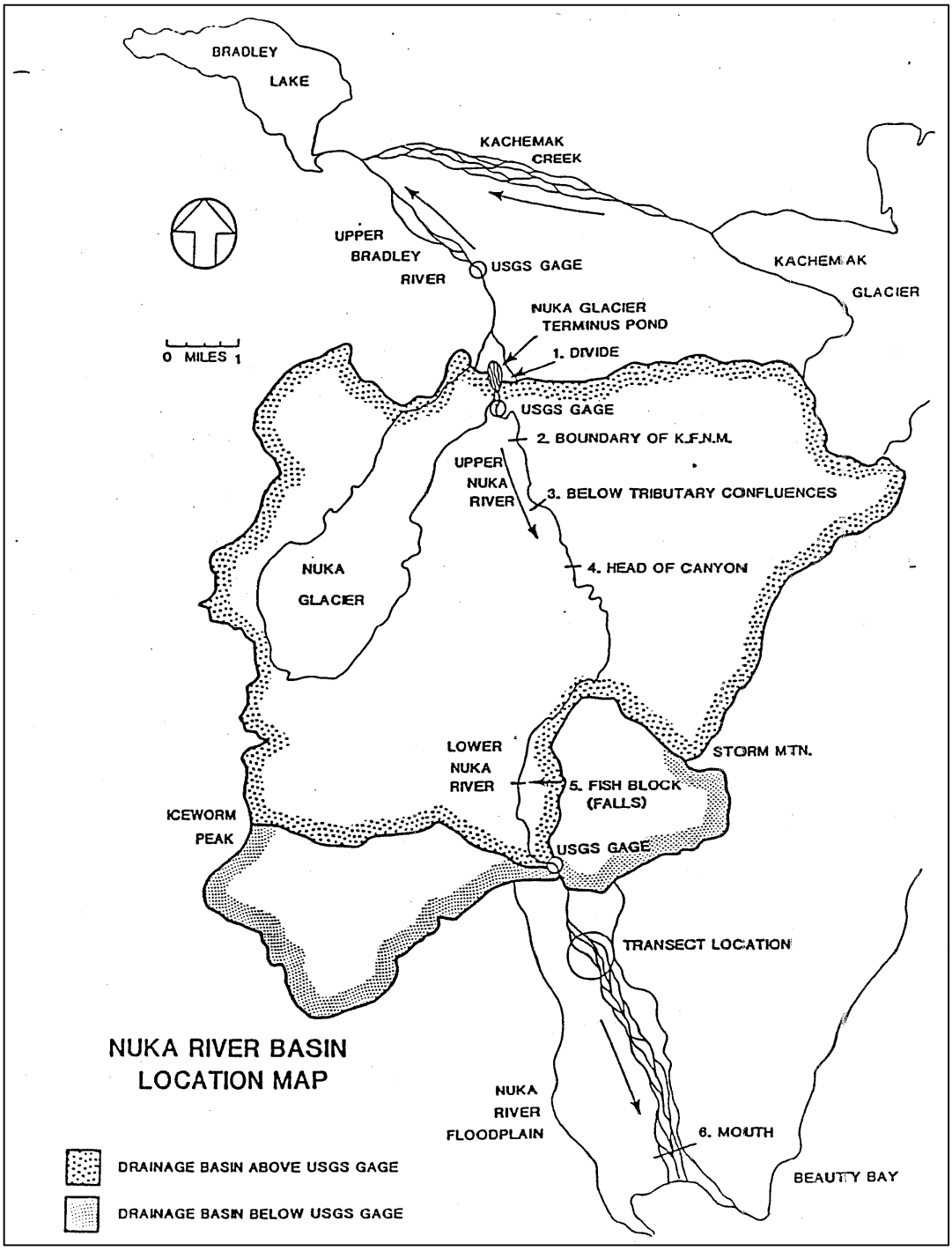

Figure 12. Bradley Lake Hydroelectric Project. (National Park Service, Alaska Regional Office, *Environmental Assessment, Nuka River Diversion; Bradley Lake Hydroelectric Project*, June 1986, File L2415, Central Files, KEFJ.)

River drainage in the years 1958 to 1970. Starting in the summer of 1971, nearly all the glacial runoff flowed into the Bradley River drainage. The distribution between the two drainages began to change back the other way in the summer of 1983 and by 1985 more than half the flow was going into the Nuka River drainage.[26] Nowadays, still as a consequence of the naturally shifting river channels in the outwash plain, the flow is once again into the Bradley River drainage.

The Bradley Lake Hydroelectric Project proposal predated the national park by a number of years. The Alaska Power Administration (later renamed the Alaska Power Authority) and the U.S. Army Corps of Engineers made a statewide inventory of potential hydropower sites in the early 1960s and a power site withdrawal for the Bradley Lake Hydroelectric Project was made by public land order in 1962. During the D-2 process, NPS planners identified all potential hydroelectric projects that overlapped NPS proposals, and the planning team for Kenai Fjords noted that the Bradley Lake Hydroelectric Project overlapped the Area of Ecological Concern for Kenai Fjords. The AEC boundary ran along township lines and included both slopes of the Kenai Mountains around the Grewingk-Yalik glaciers complex. The park boundary in this area is drawn more tightly than the old AEC boundary. It jags along section lines, more or less following the divide, taking in Iceworm Peak and all but the very head of the Nuka River valley while leaving out the Nuka Glacier and the broad saddle where the Bradley River and Nuka River headwaters part. The park boundary minimized, but did not quite eliminate, overlap with the power site withdrawal for the Bradley Lake Hydroelectric Project.[27]

In the early 1980s, the APA applied to get the project licensed and the Federal Energy Regulatory Commission prepared a draft environmental impact statement. Commenting on the EIS, the APA noted that the proposed diversion structure for capturing runoff from the Nuka Glacier would be outside the park and that the portion of the power site withdrawal that did overlap the park (four sections, or 3,200 acres) would be turned over to the Park Service. This was a welcome gesture as far as it went, but the main point of contention was no longer about land; it was about water. Regarding reduced flows to the Nuka River drainage, the APA acknowledged that the project would

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[26] National Park Service, Alaska Regional Office, "Environmental Assessment: Nuka River Diversion; Bradley Lake Hydroelectric Project," June 1986, Series L2415, Central Files, KEFJ.

[27] Memo, "Harding Icefield Kenai Fjords National Monument Hydropower Withdrawals," November 1976, KEFJ 13289/001/030b and Chuck Gilbert to Files, November 17, 1976, KEFJ 13289/001/010, Accession KEFJ-00205, Alaska Task Force Collection, Archives, KEFJ; Memo, "Proposed Parks and Alaska's Hydropower Potential," Revised 1/78, File A94 Alaska Power Administration, Box 2, Alaska Region Administration Subject Files 1964-1984, RG 79, NAAR. NPS officials noted that the legislative history of ANILCA was silent on potential conflicts between the Bradley Lake Hydroelectric Project and Kenai Fjords National Park, an apparent oversight, but Regional Director Boyd Evison stated, "It is apparent that the Congress clearly attempted to define the park's boundaries to avoid unnecessary interference with use of the waters of the glacier for the power project." (Regional Director to Assistant Secretary, Fish and Wildlife and Parks, June 9, 1986, Series L54 Bradley/Nuka Hydroelectric, Box 16, Acc. ARCC 00395 Alaska Support Office Administrative Files, ARCC.)

result in some changes to vegetation. However, the changes would occur slowly and not be noticeable to the average recreation visitor, and the overall changes would not be drastic. The diversion of Nuka Glacier runoff would lower the depth of the Nuka River about 2 inches in the upper section and about 4 inches in the lower section, which would not be enough to cause significant effects in the hydraulics of the river.[28]

Park Service officials, finding both the EIS and the APA's comments wanting, sought to have the Department of the Interior file a petition to intervene in the project. Their argument was that the establishment of the national park had created a federal reserved water right in the full flow of the Nuka River that was superior to the state's water right claim. Maintaining the full flow was essential to protecting the natural system, and the NPS did not have authority to abrogate the federal water right.[29] Assistant Secretary for Fish and Wildlife and Parks William P. Horn took a different view. Horn, who had been closely involved in Alaska affairs since the Watt years, did not want Interior to stand in the way of the hydroelectric development project. Indeed, it appeared to environmentalists that Interior had a broader interest in giving away the water coming from the Nuka Glacier in light of the fact that other dam projects in Utah and Colorado were similarly caught up over questions about reducing natural flows into national parks. In the words of Susan Alexander, Alaska director for The Wilderness Society, "It is an issue far bigger than Kenai Fjords National Park, because of the precedent they are trying to set – that the Park Service has the ability to give away federal reserve water rights. It was on top of Watt's agenda, and here they're trying to go ahead and do it."[30]

Despite strong protests from the new regional director, Boyd Evison, Assistant Secretary Horn prevailed on the Park Service to play ball with the APA and the U.S. Army Corps of Engineers on the Bradley Lake Hydroelectric Project. The regional office prepared an environmental assessment that considered five different alternatives for giving away a portion of the water, each one guaranteeing a different minimum flow into the Nuka River drainage, measured either at the diversion dam or the park boundary, with the project acquiring the excess. The environmental assessment was released for public comment at the beginning of June 1986 only days before a contract was signed between the APA and the Department of the Interior that established the guaranteed minimum flow at five cubic feet per second measured at the diversion structure (Alternative 4 in the environmental assessment). Environmentalists blistered the Park Service for ramming

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[28] Alaska Power Authority, "Evaluation and Comments, Impacts of Nuka Glacier Flow Diversion on the Nuka River Area of Kenai Fjords National Park, Bradley Lake Hydroelectric Project," April 3, 1985, Series L2415, Central Files, KEFJ.

[29] Superintendent to Regional Director, April 11, 1985, and Regional Director to Assistant Secretary, Fish and Wildlife and Parks, March 19, 1986 and June 9, 1986, Series L54 Bradley/Nuka Hydroelectric, Box 16, Acc. 00395 Alaska Support Office Administrative Files, ARCC.

[30] Quoted in Richard Mauer, "Wilderness Society Raps Water Diversion Decision – Director Says Bradley Lake Procedure A 'Charade'," *Anchorage Daily News*, June 6, 1986.

this action through the public review process in such a perfunctory manner, calling the environmental assessment a "charade."

Regional Director Evison finally determined that alteration of the natural flow into the Nuka River drainage resulting from the project would have no significant impact on the ecosystem's integrity, since the natural flow coming from the Nuka Glacier shifted back and forth between the two drainages over multi-year periods in any case. It was a strained argument, but it appeared to be aimed at defining the situation at the headwaters of the Nuka River as unique to Kenai Fjords National Park. Evison added a statement to his communiqué to Horn as follows: "My concurrence in the proposed agreement is based on my understanding that it will in no way set a precedent that could influence determinations regarding water rights affecting any other unit of the national park system." NPS Director William Penn Mott, Jr., echoed the regional director's statement, saying it was his understanding "that entering into this agreement must not, because of the unique hydrological situation related to the shifting channel of the Nuka River, be considered as precedent setting…."[31]

Visitor Death at Exit Glacier

The road bridge over Exit Creek opened on July 25, 1986, precipitating a change in visitation at Exit Glacier. Instead of a two mile walk, the glacier terminus was now a mere half mile from the parking lot. As anticipated, visitor use of the area grew dramatically. Moreover, a greater percentage of people visiting the glacier terminus were casual visitors with little or no experience in assessing natural hazards. Many arrived as part of bus groups made up of passengers off cruise ships that were docked in Seward. The park met this situation by expanding the interpretive program in the Exit Glacier area. Park ranger Cheryl Cline supervised an all-volunteer staff that included two full-time and several part-time VIP employees. These individuals provided interpretive talks and guided walks to the glacier.[32]

Visitor safety was a concern. With limited staff available, the park had to rely primarily on safety information signs to warn people of natural hazards. The development concept plan for the Exit Glacier area stated, "Safety information will be supplied on such topics as icefalls, rock scambling [sic], river dangers, quicksand, and wildlife encounters." The safety information was placed on outdoor exhibit panels so that visitors had access to it whether or not a park employee was present. Still, park managers expected visitors to exercise an appropriate level of caution in approaching the

[31] Regional Director to Assistant Secretary, June 9, 1986 and June 10, 1986, and Director to Assistant Secretary, June 23, 1986, Series L54 Bradley/Nuka Hydroelectric, Box 16, Acc. ARCC 00395 Alaska Support Office Administrative Files, ARCC; Mauer, "Wilderness Society Raps Water Diversion Decision – Director Says Bradley Lake Procedure A 'Charade'," *Anchorage Daily News*, June 6, 1986.
[32] Superintendent's Annual Report, 1986, Annual Narrative Reports, Central Files, KEFJ.

glacier. In fact, the development concept plan called for an exhibit that would invite visitors to "look for examples of changes caused by glacial retreat" and to take a trail that "leads right up to the glacier, so that the glacier can be touched."[33] What was assumed by this statement was that visitors would have no trouble distinguishing those places where it was safe to touch or walk onto the ice from those other places around the glacier terminus where there was a danger of ice falling.

Ken and Thais Grabenauer, a middle-aged couple from Napa Valley, California, were car touring around Alaska and drove to Exit Glacier on the morning of June 16, 1987. They walked to the end of the Exit Glacier trail, then went beyond the trail to the edge of the glacier. Thais Grabenauer stood beside the glacier, in an area where the ice was overhanging, while her husband stepped back to take a photo. At that moment the glacier calved a large chunk of ice that struck Thais Grebenauer on the head and torso. Ken Grabenauer sought help, and Mike Tetreau, a volunteer, was the first park employee to respond and administer treatment. With the help of soldiers from the Army recreation camp, the unconscious victim was placed on a stokes litter and carried to the outwash plain, where she was loaded onto the back of a four-wheel drive pickup and driven to the parking lot and a waiting ambulance. She died the next evening of multiple internal injuries exacerbated by a blood clotting disorder.[34]

The incident raised concerns about visitor safety and Park Service liability. A short while after the incident, the Park Service placed a sign on the trail informing visitors that the ravine up which the Grabenauers had scrambled was a closed area. Meanwhile, the Park Service formed a board of inquiry. One of its findings was that the Park Service could not possibly warn visitors about each individual hazardous spot in the Exit Glacier area. Indeed, the board of inquiry noted that a portion of visitors ignored the newly installed sign and went up the very ravine that they were cautioned to avoid. Still, the park hoped to forestall other such incidents by warning visitors that glaciers were unpredictable. Park staff would wrestle with this issue of proper signage around the Exit Glacier terminus for years to come.

With regard to the liability issue, Acting Superintendent Bruce Kaye and his superiors anticipated a lawsuit. Not long after the incident, Kaye was paid a visit by an insurance investigator who had been hired by the son of the deceased. The investigator was already known to the Park Service; he had previously brought suit against the government on behalf of a family who had lost family members on Denali. In that earlier case, it was alleged that a Park Service search and rescue team had erred by neglecting to leave sleeping bags for the missing people when the search and rescue team was

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[33] U.S. Department of the Interior, National Park Service, *Kenai Fjords, Exit Glacier Area, Development Concept Plan*, 11.

[34] Superintendent's Annual Report, 1987, Annual Narrative Reports, Central Files, KEFJ; Tom Kizzia, "Park Service, Family Settle Ice Death Suit," *Anchorage Daily News*, August 3, 1990; Kaye interview. Tetreau risked his own safety when he came to the victim's aid. She was lying beneath overhanging ice, all of which collapsed over the next few days.

weathered off the mountain. Park Service officials thought it was a ludicrous and galling argument, considering that the searchers had put their own lives at risk, and they still smarted over losing the case. Understandably wary of this individual when he arrived at park headquarters in Seward, Kaye secretly taped their conversation.[35]

The acting superintendent spent much of the next month compiling a photographic record of the scene of the accident and taking depositions from people who had been in the vicinity. Perhaps one of the strongest points suggesting that the couple had been misled was that they had picked up a commercial brochure – not an official park brochure – urging them to "walk up and touch the glacier." (The development concept plan actually had language similar to this.) On the other hand, Park Service officials believed that it was naïve for visitors to think that a national park is hazard free, and they insisted that the public must exercise reasonable prudence in such an environment. According to a later verbal description of the terrain that the couple needed to cross to get to the glacier, they had had to ascend "into a ravine," then "clamber over a rock," and finally enter "a little amphitheater" where there was "no place to run" when the ice fell from above. "It's not a wise place to go," a park official said to a reporter.[36]

As expected, the Grabenauer family eventually sued. Both the Park Service and Acting Superintendent Kaye were named in the lawsuit. The case was finally settled out of court three years later. The Grabenauer family sought $1.5 million for damages and settled for something less than $100,000, according to Kaye's recollection. At the Park Service's request, the terms of the settlement were sealed, but federal officials did disclose that the settlement contained no admission of liability and no requirement for a change of operations at the Exit Glacier area. The perception within the Park Service was that the case had been won.[37]

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[35] Kaye interview.
[36] Brochure and Peter Fitzmaurice quoted in "Park Service, Family Settle Ice Death Suit." For similar language in the DCP see reference and note above.
[37] "Park Service, Family Settle Ice Death Suit" and Kaye interview.

5

A Woman in Charge

Leadership Transition, 1987-1988

Turnover of Superintendents and Chief Rangers – Superintendent Anne Castellina – Trail Development at Exit Glacier and Visitor Access to Harding Icefield – The Wilderness Recommendation – Resource Protection

Turnover of Superintendents and Chief Rangers

A month into her new job, Superintendent Anne D. Castellina prepared her first annual report for the park, heading it with two lines of verse by the sixteenth century English poet Edmund Spenser about the ever-whirling wheel of change. "The wheel of change whirled mightily for Kenai Fjords in 1987," she began, paraphrasing. "Within the short span of twelve months four of the seven permanent members of the staff were replaced twice and two were out on extended maternity leave." Despite the radical turnover, she could report a "smooth operation" through the course of the year. She closed her report with a quotation by the ancient Greek philosopher Heraclitus to underscore her theme: "It is in changing that things find repose."[1] Her sunny forecast was more apt than she knew, because starting that year she and the new chief ranger, Peter Fitzmaurice, would find their own repose in a smooth professional partnership at Kenai Fjords that would take them nearly to the ends of their respective Park Service careers.

The wave of turnovers transpired between April 1987 and March 1988. In April 1987, Superintendent Dave Moore transferred to Chiricahua National Monument, and Chief Ranger Bruce Kaye began a six-month turn as acting superintendent. Superintendent Marvin Jensen arrived in September 1987, then transferred to Glacier Bay National Park after just three months. Anne Castellina, a park ranger instructor at the Stephen T. Mather Training Center in Harpers Ferry, West Virginia, was selected to replace Jensen and she arrived in mid-January 1988. In the meantime, Chief Ranger Kaye transferred to Theodore Roosevelt National Park in October 1987. Ranger Bob

[1] Superintendent's Annual Report, 1987, Annual Narrative Reports, Central Files, KEFJ.

Gerhard was detailed from Lake Clark National Park to serve as acting chief ranger after Kaye's departure. With the superintendent position becoming vacant as well, the Regional Office developed a list of candidates for the chief ranger position and had it ready upon Castellina's arrival. Castellina selected Peter Fitzmaurice, park ranger at Lassen Volcanic National Park, and he arrived in February. The administrative technician position turned over twice in that year as well. After Bobbie Bianchi left in February 1987, Joan Alley, who had served in that position from 1981 to 1983, returned briefly but resigned one month later following Superintendent Moore's departure. Lola Cabaniss, a civilian administrator with the Army, was hired in October 1987.[2]

Regional Director Boyd Evison was responsible for both superintendent hires in 1987-88. Evison selected Marvin Jensen, assistant to the superintendent at Sequoia National Park, after a lengthy search for someone to replace Moore. Evison knew Jensen personally, having worked with him when he was superintendent at Sequoia in the early 1980s. But Jensen had barely landed in his new job at Kenai Fjords when the superintendent position at Glacier Bay National Park and Preserve, which was one grade level higher, opened up. Jensen applied for that position and Evison selected him. Although Jensen would go on to do great things for Glacier Bay, the brief impression he made in Seward was unfortunate. Within a couple of months of arriving, he was already packing his bags. That did not win him many friends in town or in the park.

Evison began hearing complaints from people in Seward who were upset that the superintendent position at Kenai Fjords had suddenly turned into a revolving door. In December, Evison phoned Moore at his new post in Arizona, admitted that he needed to do some fence-mending with the townspeople, and asked whom he should contact. Moore gave him four names. Evison then phoned these individuals and assured each of them that he had acted promptly to appoint another well-qualified person, Anne Castellina, to take Jensen's place. Still, the townspeople were dubious. Who was Anne Castellina? Why had Evison recruited her instead of advertising the position?[3]

In 1987, Castellina was serving her fourth year as program coordinator and instructor at the Mather Training Center. Prior to that position she had managed interpretive staffs at Gulf Islands National Seashore in Pensacola, Florida, and Sagamore Hill National Historic Site in New York City. It was a leap from these historical and recreational areas in the East to a large natural park in Alaska, and that was one reason that the town fathers in Seward questioned her selection. The fact that she was a woman undoubtedly colored their reactions, too. Although there were other female superintendents in the National Park Service, they were still rare. Of the few dozen women superintendents in the 1980s, most served small historical areas. Even by 1995,

[2] Ibid.
[3] Moore interview (2008).

when Yosemite National Park acquired its first woman superintendent, there were just five women in the Park Service managing large natural-area parks. Castellina was one.[4]

Evison may have supported the ideal of placing more women in leadership positions in the Park Service, but there was also a technical factor in his selection of Castellina. Evison was looking for a manager who was willing to make a lateral move at the GS-12 level, and Bill Wade, who was Castellina's supervisor at Mather Training Center, gave Evison her name as an up-and-comer who would take that opportunity. Wade was supportive of women's advancement and he was influential in the area of recruiting superintendents; his ex-wife, Karen Wade, would soon follow Castellina to the Alaska Region as superintendent of Wrangell-St. Elias National Park. Bill Wade thought Castellina would make a great superintendent and that Kenai Fjords National Park, with its small staff, would be a good place for her to acquire her first superintendent experience.[5]

In contrast to the lengthy period from Moore's departure to Jensen's arrival, this second leadership transition was swift. Castellina was selected for the position in December and she arrived in Seward the following month. Jensen stayed for two more weeks to assist with the transition. "Marv immediately dragged me to a Rotary Club meeting and I joined Rotary," Castellina recounts, which proved to be a first step in gaining acceptance into the community. Her school-age daughters provided her with another point of entry into the life of the town. She was delighted when her daughters came home from their first day of school saying that they were finally in a student body where they looked like others. They are Hispanic Indian, and they resembled the Alaska Native children.[6]

One of Castellina's first tasks in her new job was to select a new chief ranger. Castellina picked Peter Fitzmaurice, a ranger at Lassen Volcanic in California. Prior to Lassen Volcanic, Fitzmaurice had worked as a backcountry ranger in Yosemite and Crater Lake – what he called "the snow and ice circuit." Although Castellina and Fitzmaurice had never crossed paths before, they would soon forge an excellent working partnership at Kenai Fjords that lasted more than a dozen years. They were a good pairing as Fitzmaurice's wealth of wilderness and law-enforcement experience complemented Castellina's strengths in interpretation and community relations.[7]

All of these staff changes in the twelve months from April 1987 to March 1988 were soon followed by other important staff developments. In September 1988, Bud Rice's position as resource management specialist and Bill Stevens's position as maintenance worker were both converted from seasonal to permanent positions. At the same time, the park's request for a full-time permanent interpretive position was

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[4] Anne Castellina interview by Theodore Catton, August 25, 2008; Polly Welts Kaufman, *National Parks and the Woman's Voice: A History* (Albuquerque: University of New Mexico Press, 1996), 155.
[5] Castellina interview.
[6] Ibid.
[7] Fitzmaurice interview.

approved. Castellina initiated the recruitment process in August. Subsequently, the money for that position was taken away, then reinstated. Acting quickly this time, Castellina contacted a number of people she knew through her classes at Mather Training Center and selected Karen Gustin, who was then chief ranger at Okmulgee National Monument in Macon, Georgia. Gustin arrived the following March. Although it was a lateral career move for Gustin, she soon had the opportunity to head a division in the park's evolving staff organization. It was another small step for the advancement of women in the Park Service; 20 years later, Gustin would be superintendent of Olympic National Park.[8]

Superintendent Anne Castellina

Historian Polly Welts Kaufman, in her study of the woman's voice in the national parks, emphasizes that it was important for the Park Service to bring women into leadership positions not only because it was more equitable for women, enlarged the talent pool for new recruits, and provided role models for the next generation, but also because women brought different strengths to the role. She cites "women's socialization as nurturers and carriers of culture, their smaller size, and their experience as outsiders with new perspectives on traditional institutions" as some of the important differences women had from their male counterparts.[9] Anne Castellina brought qualities of leadership to Kenai Fjords National Park that bore evidence of these differences. Among her strengths, she showed a deft understanding of how to integrate the park into the local community, took a keen interest in providing opportunities for women and minorities in the workforce, and found an effective balance in being both fair and demanding in her treatment of personnel. Her management style contributed to an esprit de corps that was reminiscent of the park's early years. Her own long stint of 16 years at Kenai Fjords National Park (1988-2004) was matched by similar long tenures of several other staff members, notably Peter Fitzmaurice (chief ranger, 1988-2001), Jeff Troutman (chief of resource management, 1993-2002), Mike Tetreau, (ranger and resource management specialist, 1988-2006), and Bill Stevens (chief of maintenance and boat captain, 1985-1995).

Superintendent Anne Castellina began her Park Service career at the end of the Hartzog era when women were first actively recruited into the ranger ranks. In 1972, Hartzog ordered the Park Service's personnel office to recruit 150 women for the ranger training program. The personnel office obtained a list of names from the Office of Personnel Management – made up of women who had achieved exceptional scores on the civil service exam – and Castellina's name was on the list. Recently graduated from

[8] Castellina interview.
[9] Kaufman, *National Parks and the Woman's Voice*, 143.

college, she was invited to embark on a park ranger career. "With absolutely no knowledge of what I was getting into," Castellina recounts, "I flew to the Grand Canyon, and on September 17th, 1972, I was met at the Grand Canyon by Deny Galvin, who later became deputy director of the Park Service." She spent 12 weeks at Albright Training Center, with 10 other women and 44 men, going on field trips, hiking into the canyon, rope climbing, and doing all the other elements of ranger training. It was a tough social environment, in part because many of her male classmates had been in the Park Service a number of years already and were trying to convert from the 026 technician series to the 025 ranger series and they regarded the female intake students as interlopers. After completing the training program, she was assigned to a cluster of sites in New York City. There was a push at the time to expand the national park system into urban areas – Gateway National Recreation Area in New York City and Golden Gate National Recreation Area in San Francisco were both authorized in 1972 – and the new women rangers tended to go to those units because they were generally the least sought after ranger positions in the national park system.[10]

From New York City she transferred to DeSoto National Memorial and then to Gulf Islands National Seashore, both in Florida, where she began to form a career specialization in historic site interpretation and environmental education. (In this regard, too, Castellina's career development was emblematic of the times. Kaufman describes how Park Service culture is made of two streams, one featuring a military ethos associated with the ranger force and the other a public communications ethos associated with the interpretive mission, and she relates how women's advancement in the organization historically centered in the latter stream.[11]) Castellina's talent for public communications led her to take a position as an instructor at Mather Training Center in Harpers Ferry, West Virginia, in 1984, where she expected she might stay for the rest of her Park Service career – until the phone call came in the fall of 1987 urging her to apply for the position of superintendent at Kenai Fjords.[12]

Regional Director Boyd Evison had two things in mind for her to accomplish when she came to Kenai Fjords. The first item could be summed up in the motto that former superintendent Dave Moore had framed and hung on the wall in the headquarters conference room: "Make Friends, Not Enemies." Nearly a decade after ANILCA, the Park Service was still working hard to secure a base of support in Alaska, and the turnaround in attitudes in Seward was still seen as a marvelous thing that had to be nurtured. Castellina had a strong background in communications and outreach, and whatever doubts the town fathers had about a woman being put in charge of the park were soon dispelled by Castellina's forceful leadership throughout the ordeal of the *Exxon Valdez* oil spill. Indeed, she was nominated for the town's "citizen of the year"

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[10] Kaufman, *National Parks and the Woman's Voice*, 131; Castellina interview.
[11] Kaufman, *National Parks and the Women's Voice*, xi-xiv.
[12] Castellina interview.

award the next year. In many ways, Castellina carried the mantle of managing "The Glory Park" forward into the park's second decade. In 1991, she and Chief Ranger Peter Fitzmaurice were grand marshals in the Fourth of July parade in recognition of the 75th anniversary of the creation of the NPS. Indicative of the park's warm embrace by the Seward community, the honor made news in Park Service circles throughout Alaska.[13]

Evison's second item for Castellina was to build the park's interpretive program. Now that the park had a visitor contact station and a small visitor pavilion at Exit Glacier, there was an opportunity to provide more exhibits and more programs. Evison promised Castellina that he would find the money for a fulltime position in interpretation. In her first year, Castellina got the money, recruited Karen Gustin for the position, and put her in charge of developing a bigger program.[14] The early emphasis on interpretation was one reason Castellina found her job to be a good fit. Years later, she liked to take short breaks from her administrative duties to work the information desk in the visitor center – just to have an opportunity to talk to visitors once in a while.[15] As Fitzmaurice says, Castellina had "the interpretation gene."[16]

Castellina stayed at Kenai Fjords for 16 years – far longer than she imagined that she would when she took the job. Her first year at Kenai Fjords was a learning experience. She and Fitzmaurice had ideas, as they arrived at the end of their first year, about how they would mutually improve on running the park during the coming year. And then they were suddenly thrust into the turmoil of the *Exxon Valdez* oil spill "and the next two years were a blur," Castellina recounts humbly and with sadness.[17] The year 1991, her fourth in the post, would be the first since the oil spill that was not dominated by cleanup activities and her first chance to manage the park more reflectively. She would settle into it, and capably guide the park through thirteen more years of change and growth.

Trail Development at Exit Glacier and Visitor Access to Harding Icefield

Improved automobile access to the Exit Glacier area also pointed to a need for better trail development in the area. Partly as a result of the visitor death in 1987, Chief Ranger Peter Fitzmaurice secured $60,000 for trail improvement work the following spring. The money had to be spent that year. Fitzmaurice hired Mike Tetreau, who had worked as a seasonal volunteer at Exit Glacier in the summer of 1987, to head the trail construction project in 1988. Tetreau designed the Overlook Loop Trail and ran the

[13] Karen Gustin interview by Theodore Catton, September 16, 2008; Jeff Mow interview by Diane Krahe and Theodore Catton, August 12, 2008.
[14] Castellina interview.
[15] Sandy Brue interview by Theodore Catton, September 18, 2008.
[16] Fitzmaurice interview.
[17] Castellina interview.

design plan through an expedited public review process. He then oversaw construction of the trail by a crew of Youth Conservation Corps (YCC) enrollees. The trail project won a national award for how it was planned and executed.[18]

This recognition led to a second stage of funding and trail development to improve hiker access to Harding Icefield from the Exit Glacier parking area. Most of the Harding Icefield Trail was an unimproved climber's route at that time; however, there had been significant construction already completed, including numerous switchbacks on the lower sections of the trail. The upper route sufficed for light use, but as foot traffic increased it was clear that it would become badly eroded. Mike Tetreau was put in charge of designing and constructing the remainder of the trail. The trail improvement occurred in two phases; the lower section was built by crews of Student Conservation Association (SCA) workers over three summers, and the upper section was built two years later.[19] When completed, the official Harding Icefield Trail was nearly four miles in length and provided relatively easy access through dense brush and steep terrain to the alpine/arctic environment on the edge of the vast ice field. At the end of the trail, visitors could look across ten miles of smooth, snow-covered ice to the first range of nunataks at the head of the Tustumena Glacier, an expanse amounting to roughly the northern half of the Harding Icefield. To continue beyond this point, people needed to have experience and technical equipment for glacier travel.

Figure 13. Harding Icefield looking toward upper Holgate Glacier, September 1988. (Photo by Bud Rice, Acc. 43, Cat. 614, Box 2, No. 18, KEFJ.)

Besides the Harding Icefield Trail, visitors who were not experienced mountaineers had another option for viewing the ice field and that was to see it from the air. The public demand for scenic overflights had grown since the park's establishment. In 1981, Harbor Air Service had flown a total of 134 tourists over the park and by 1985 that number had doubled. Nationwide, the increase in small airplane traffic over national

[18] Superintendent to Chief of Planning, January 12, 1990, File L3215, Administrative Records, Archives, KEFJ; Mike Tetreau interview by Theodore Catton, July 1, 2008. The award was from the Park Arts Association for excellence in park construction and design.

[19] Tetreau interview; Regional Historic Preservation Officer to Superintendent, April 11, 1994, and Form 10-213 for Harding Icefield Trail Rehab, undated, Series H4217, Administrative History Files, Archives, KEFJ.

parks caused mounting concern during the 1980s. The Park Service monitored the activity but it had no authority to regulate it, since the air space over national parks was not within its jurisdiction. Moreover, ANILCA provided for airplane landings in all parks created under that law. Starting in the 1980s, Congress periodically held hearings on the issue of national park overflights. In response to the Aircraft Overflight Act, which mandated a study, the Park Service queried all superintendents as to the number and character of national park overflights. Superintendent Jensen responded with data for Kenai Fjords. In 1987, Jensen reported, scenic overflights accounted for most of the air traffic over the park, with a small number of administrative flights accounting for the remainder. (There had been one recorded low-level military flight over the Exit Glacier area since the park's establishment.) Because of the provision in ANILCA for airplane landings, the park had issued a total of seven commercial use licenses to interested operators. The license required the operator to report the number of flights over the park annually. So far, Harbor Air Service was the only one of these carriers providing regular service and reporting overflights. In addition to the seven, however, there was a helicopter company operating out of Anchorage that was not licensed by the park because it did not make any landings in the park. The helicopter company had a contract with a cruise ship company, embarking cruise ship passengers in Seward for scenic flights over the park. The helicopter company gave park officials concern because its choppers had occasionally flown low over the Exit Glacier area.[20]

ANILCA provided for the possible development of recreational facilities and mechanized transport on Harding Icefield. Park officials rightly viewed this minor provision within Section 201 (5) of ANILCA as a holdover from the earlier legislative proposal to establish a Seward National Recreation Area under Forest Service management. Such a development would be more in keeping with the Forest Service's doctrine of multiple use than the Park Service's doctrine of preserving natural features in an unimpaired condition. The Park Service had no desire to expand upon the two existing forms of visitor access to Harding Icefield, namely the Harding Icefield Trail and scenic overflights. However, when someone inquired about the possibility of conducting snowmobile tours on the ice field, the Park Service decided to take preliminary steps in that direction in deference to the legislative provision.[21]

The park staff prepared a prospectus for the establishment of recreational tours on the Harding Icefield. An opportunity was presented for a qualified concessioner to design and operate facilities and services for visitor use. The prospective concessioner would provide round-trip air transportation from Seward to the ice field in fixed-wing aircraft equipped with combination wheels and skis. Each summer season, which would extend from at least Memorial Day to Labor Day, the concessioner would erect two

[20] Superintendent to Associate Regional Director, October 19, 1987, Series H1415, Administrative History Files, Archives, KEFJ.
[21] Castellina interview.

temporary structures at a location designated by the superintendent. One would function as an emergency shelter with capacity for up to 15 clients, and the other would be a garage for snow machines, fuel, and supplies. All equipment would be removed from the ice field by September 15 each year. The park anticipated that the concessioner would provide up to 15 round trips each day during flying weather for a maximum use of about 5500 people per year.[22]

The park staff weighed several factors in developing the prospectus. Safety was a major concern, and various alternative locations for the venture had to take into account the relative hazards of the flight paths to and from the site. Since a fully loaded ski plane could climb at a rate of just 350 feet per mile, some approaches to the Harding Icefield were considered too dangerous. Other safety concerns involved the landing surface at each location and the need for a feasible escape route for emergency evacuations by snow machine. Another concern was to locate the operation where it would have a minimal impact on the small number of backcountry users trekking across the ice field from time to time. Finally, park staff took care to select potential locations for the operation that were a suitable distance apart from mountain goat habitat areas.[23]

The prospectus failed to interest any bidders. The company that had expressed interest in launching a Harding Icefield tour service in the first place subsequently crashed two of its three aircraft and no longer had the wherewithal to take the venture on.[24]

The Wilderness Recommendation

The prospectus for a concessioner to provide Harding Icefield tours was tied to the wilderness review process for Kenai Fjords National Park. Indeed, it was at one of the public hearings on the park's wilderness proposal that the question of Harding Icefield tours arose, prompting the development of a prospectus. During 1988, the Park Service proceeded with both efforts at once, refining the wilderness recommendation at the same time that it developed the prospectus, tailoring its preferred alternative for wilderness designation so that it would be consistent with the ice field tours operation. Although the wilderness review process did not result in any wilderness designation by Congress, it did serve to crystallize Park Service thinking about wilderness values within the park. This had important consequences for future management of both the Harding Icefield and the fjords.

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[22] "Environmental Assessment, Harding Icefield Tours Concession Permit, Kenai Fjords National Park, Alaska," December 1988, Series L7617, Administrative History Files, Archives, KEFJ.
[23] Ibid.
[24] Castellina interview.

ANILCA established 32.9 million acres of wilderness in national parks, preserves, and monuments in Alaska, but none of Kenai Fjords National Park was so designated. ANILCA also provided that virtually all of the remainder of national interest lands under Park Service jurisdiction, or a further 21.8 million acres, would be studied for possible wilderness designation in the future.[25] These wilderness areas would be administered according to the terms of the Wilderness Act of 1964, subject to certain stipulations in ANILCA. This was Wilderness with a capital "W," as some like to stress, because the land was classified according to an idea of wilderness codified in law. The Alaska Region embarked on the wilderness review process for all national parklands in the state in 1986. Beginning in September of that year, public meetings occurred in more than 35 cities and villages. Two meetings were held in Anchorage and Seward specific to Kenai Fjords, and a total of 29 people attended. Several issues were raised in the scoping for Kenai Fjords, including access to inholdings, development of roads and cabins, subsistence use, airplane and helicopter use, mining, and native land selections.[26]

The Park Service developed four alternative proposals for wilderness designation in Kenai Fjords. Apart from the no action alternative, there was relatively little difference between them. All three of the action alternatives called for designation of the entire coastal area as wilderness. Native land selections within the coastal area would automatically become wilderness if and when the federal government acquired title to them. Where the alternatives differed was around the Exit Glacier area. Each one contemplated a somewhat different amount of land to be excluded from wilderness so as to allow for visitor access to the Harding Icefield. The proposed alternative contemplated the largest exclusion from wilderness, a 61,400-acre swath that took in a wide area around Exit Glacier and extended far across the Harding Icefield. It would allow for several facilities to be built, including an aerial tramway 5 to 7 miles in length and a terminal and lodge with food service, weather station, and other amenities on the ice field, and it would retain the option of snowmobile use in the excluded area. Another alternative would exclude an area of 15,720 acres, still allowing for development of a tramway, a day-use facility, and snowmobile use on the ice field, but after the exact tramway route was determined any lands outside of the narrow corridor needed to reach the ice field would be included in wilderness. The final alternative would include all of the Harding Icefield in wilderness, eliminating the possibility of a tramway (although airplane landings on the ice field would still be allowed). The three action alternatives would put 88, 95, or 97 percent of the wilderness study area in wilderness, respectively.[27]

The Park Service made clear its attitude toward the potential development of tourist facilities on the Harding Icefield in the environmental impact statement for the

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[25] Briefing Statement, November 20, 1989, Series L48, Administrative History Files, Archives, KEFJ.
[26] National Park Service, *Final Environmental Impact Statement, Wilderness Recommendation, Kenai Fjords National Park, Alaska* (Denver: National Park Service, 1988), 81-82.
[27] National Park Service, *Final Environmental Impact Statement, Wilderness Recommendation, Kenai Fjords National Park, Alaska* (Denver: National Park Service, 1988), iv-vii.

wilderness recommendation. In the proposed alternative, aircraft overflights and landings and snow machine use would disturb the primeval character of the portion of the Harding Icefield in and near the excluded area. A potential tramway from Exit Glacier to the rim of the Harding Icefield would diminish opportunities for solitude and primitive recreation in the vicinity, and construction of the tramway would result in heavy disturbance of vegetation and wildlife habitat along the route. The development would also disturb a small percentage of the habitat of mountain goats, black bears, grizzly bears, and ptarmigan and could displace or eliminate small numbers of these species.[28]

Why did the proposed alternative contemplate less wilderness and more development even when the EIS clearly pointed out how those developments would impair the park's wilderness values? Historian John C. Miles finds that the wilderness recommendation and EIS for other units in the Alaska Region contained the same contradiction and that the language and tone were part of a strategy by the Regional Office to subvert "recommended" alternatives that had been imposed on the agency by Assistant Secretary for Fish and Wildlife and Parks William Horn. (It is worth noting that these Park Service documents used the term "proposed alternative" rather than the usual "preferred alternative.") By highlighting development pressures on areas excluded from wilderness, the Alaska Region hoped to render the minimal wilderness recommendations unacceptable to Congress. Regional Director Evison hoped that the director would recommend a Record of Decision for maximum wilderness in all units even if it was unlikely to have the support of the secretary of the interior. In a memo to John Kauffmann concerning the wilderness recommendation and EIS for Gates of the Arctic National Park and Preserve, Evison wrote: "It appears that our subversion is working – at least on people who read with care. This is off the record, but you should be aware that the specters of development on non-wilderness were inserted to make clear the mischief that could be done by the concerted efforts of…another very pro-development administration."[29] The same comment could have applied to the wilderness recommendation and EIS for Kenai Fjords.

While potential developments at Exit Glacier and on Harding Icefield were the main focus, the wilderness recommendation for Kenai Fjords articulated how other proposed developments of a more modest character elsewhere in the park would impact wilderness values. Under the proposed alternative the only visitor development in the fjord area would be a five-acre walk-in primitive camping area at Delight Spit in McCarty Fjord. Located within the designated wilderness, it would disturb the pristine qualities and diminish the opportunities for solitude in that vicinity. The only recreational trail development, a trail from Bradley Lake to Beauty Bay, would have a minimal impact on the naturalness of the area. With a narrow tread and light use, it

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[28] Ibid, iv-v, 56-63.

[29] Evison quoted in John C. Miles, *Wilderness in National Parks: Playground or Preserve* (Seattle: University of Washington Press, 2009), 246.

would impinge on wilderness values only slightly. Other potential developments included a safety cabin at Harding Icefield, a ranger station on McCarty Fjord, and a radio repeater on Surprise Bay, none of which would be large or conspicuous enough to have a significant impact on wilderness values. Of the three mining claim groups in the park, two (Surprise Bay 1 and Glass-Heffner) were considered likely to become active in the future. In each case, mining activity would likely disturb no more than a few acres, while opportunities for solitude and primitive recreation would be disrupted by the sound of boats and floatplanes used in accessing the claims and by the sound of the mining activity itself.[30]

Predictably, one of the strongest objections to the wilderness recommendation came from the Resource Development Council, which wanted areas along the coast excluded from wilderness so that lodges might be developed there. In particular, the Resource Development Council questioned the Park Service's rationale in drawing the boundary to include Native land selections. Responding to this group, the Park Service explained that the Native land selections covered approximately one half of the park coastline and it was not known which lands would ultimately be conveyed to the Native corporations. These lands contained much of the park area that was most biologically rich, most scenic, and most useable for camping, hiking, and sport fishing. It would make no sense to draw a wilderness boundary that cut across mountain slopes and excluded so much of the coastal zone. "If significant portions of the coast are to be maintained in a natural condition," the Park Service declared, "it is important that the extensive areas in private ownership be included within any recommended wilderness area boundary so that they can be negotiated for." It was the Park Service's intention to acquire privately owned coastal lands through negotiation so as "to create more meaningful areas of public wildlands." Implicitly, the Park Service conceded that it would probably not be able to acquire all of the Native land. If and when Congress designated the area as wilderness, therefore, some private lands would be acquired and added to the park while other private lands would remain available for development under Native corporation auspices.[31]

The state of Alaska raised another concern. Would wilderness designation of the Nuka River drainage lead the Park Service to back out of its agreement with the state concerning the division of waters flowing out of the Nuka Glacier? The agreement, signed in 1986, was subject to renewal after five years. The Park Service responded that the Nuka River drainage should not be excluded, despite the water diversion. If necessary, the state's concerns could be provided for in the legislation.[32]

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[30] National Park Service, *Final Environmental Impact Statement, Wilderness Recommendation, Kenai Fjords National Park, Alaska* (Denver: National Park Service, 1988), 57-58.
[31] Kenai Fjords National Park, "Response to Resource Development Council," June 25, 1988, Series L7617, Administrative History Files, Archives, KEFJ.
[32] Director to Assistant Secretary for Fish and Wildlife and Parks, December 20, 1988, Series L48, Administrative History Files, Archives, KEFJ.

The wilderness recommendation for Kenai Fjords National Park was rolled into a comprehensive package for all wilderness study areas defined under Section 1317 of ANILCA. Altogether, the Park Service favored designating an additional 16.9 million acres in Alaska parklands as part of the national wilderness preservation system. Assistant Secretary Horn went over the NPS recommendation and cut it down to 7.1 million acres. After issuance of a draft environmental impact statement and public review, the administration reduced it further to 4.6 million acres. Essentially, the administration eliminated every wilderness addition to which anyone had raised objection.[33] In this anemic form, the wilderness recommendation did not stand a chance of stimulating action by Congress.

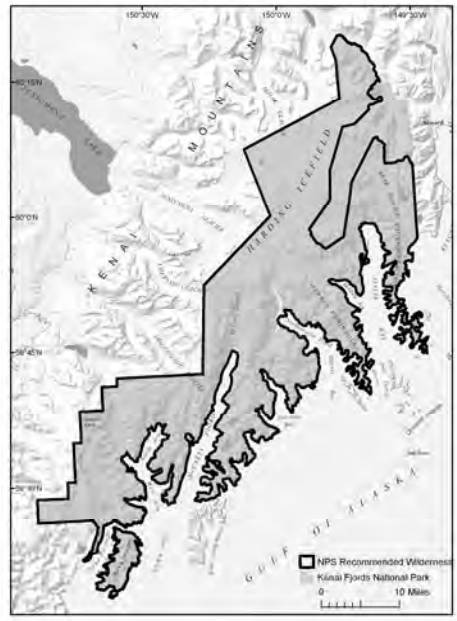

Figure 14. Wilderness Recommendation, 1988. Note that the portion of the Harding Icefield omitted from this wilderness recommendation was included in the area described as suitable for wilderness in the 1984 GMP. The park currently manages according to the 1984 "suitable" boundary.

The Alaska Region succeeded in its strategy of avoiding minimal wilderness designations, but if the hope was to achieve maximum wilderness designations or something close to it at some later time, that proved to be an elusive goal. The first Bush administration was no more favorable toward Alaska wilderness protection than the Reagan administration. The Clinton administration was philosophically more inclined, but it took no initiative in the first two years, and after the Republican Party took control of Congress in 1994 the prospects for more wilderness designation in the Alaska national parks grew dim.[34] Twenty years later, the wilderness proposal for Kenai Fjords had yet to be submitted to Congress.

Resource Protection

At the end of the 1980s, Kenai Fjords National Park's resource management program was in transition from a traditional emphasis on law enforcement to a broader emphasis on biological inventory and monitoring and other kinds of research. As in the preceding years, law enforcement gave protection to a variety of park resources at the end of the 1980s.

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[33] Briefing Statement, November 20, 1989, Series L48, Administrative History Files, Archives, KEFJ.
[34] Miles, *Wilderness in National Parks*, 247.

Figure 15. New ranger residence at Exit Glacier, October 1988. (Photo by Mike Tetreau, Acc. 51, Ext. 622, Box 5, No. 36, KEFJ.)

Poaching of wildlife was an ongoing problem. Poaching of moose and brown bear was known to occur in the Exit Glacier area. Black bears and harbor seals were taken illegally along the coast. Usually, all that was known about such incidents might be a carcass on the beach or an unconfirmed report by a kayaker.[35] Poaching was assumed to occur in other locations as well, such as on the high slopes above Bear Glacier and along the Resurrection River. In some cases, poachers seemed to be intentionally flouting the law, while in other cases, they may have been thinking that they were outside the park. There were two inland areas where the park boundary was difficult or impossible to mark. One was the east boundary west of Caines Head State Park, where the boundary simply followed an invisible township line over the mountains, and the other was the northeast boundary, where the boundary went down the mid-channel of the Resurrection River, a line that was both ambiguous and constantly changing. In addition, there seemed to be perpetual confusion in the public's mind about where federal and state jurisdiction met within the intertidal zone along the coast.[36]

In March 1988, the park's volunteer winter caretaker at the Exit Glacier cabin reported that a trapper was illegally taking beaver inside the park. Officials confiscated one dead beaver and two traps but never apprehended the trapper. Castellina examined

[35] Aialik Bay Rangers End of Season Report, 2000, Digital Files, KEFJ.
[36] Tetreau interview.

the state trapping regulations and discovered that there was no mention anywhere that trapping was illegal inside the park, so she posted a no-hunting sign at the park boundary. That incident was followed by another poaching incident during the summer. Kayakers reported seeing a black bear shot on the coast above mean high tide as it came out of the forest. Chief Ranger Fitzmaurice learned later that day that some people were returning to Seward in a charter boat at a suspiciously late hour. So with the help of a state trooper he confronted the suspect at the dock, bluffed him into showing the bear hide, and cited him. Even with witnesses and a hide, however, the Park Service proceeded cautiously in taking the case to court. There remained the tricky problem of proving to a jury that the poacher had not acted in defense of life or property when he shot the animal. Rather than making it a criminal case, in which the prosecution would need to prove the man was guilty beyond a reasonable doubt, the Park Service agreed to try the case in civil court and treat it as a Lacey Act violation. The Park Service won and the poacher paid a fine. The Park Service tried to make an example of the case by putting it in a public notice in the Anchorage newspaper.[37]

Following those two incidents, the park began a lengthy process of trying to get the Alaska Department of Fish and Game to clarify that no hunting or trapping was allowed in the park, which fell within the boundaries of the state's Game Management Unit 7. For reasons that were never fully explained, state officials repeatedly failed to act on park requests to insert the statement "all lands and waters within Kenai Fjords National Park are closed to hunting and trapping" in the pertinent state handbooks. The standoff continued through four more hunting seasons.[38]

Park officials warded off other threats to park resources. In 1988, Afognak Logging Company of Seward tried to secure a state permit to harvest glacier ice from Aialik Bay. The intention was to market the ice in Japan, where there was currently a craze over using glacier ice in cocktail drinks. Supposedly, the dense ice took longer to melt and it fizzed as it released pressurized air bubbles.[39] Castellina thought harvesting the ice was a crackpot idea since glacier ice is obviously dirty. In all likelihood, she reasoned, the ice would have to be melted, purified, and refrozen, and then marketed under the pretense that the drink-sized cubes were cut straight out of the ice. All that aside, the ice harvesting operation would be a disturbance – both to wildlife habitat and the sightseeing public. Interestingly, Castellina argued that the operation would conflict

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[37] Superintendent's Annual Report, 1988, Annual Narrative Reports, Central Files, KEFJ.

[38] Anne Castellina to Tina Cunning, March 14, 1990, and November 3, 1990, and Castellina to Alaska Board of Game, September 25, 1992, Series N16, Administrative History Files, Archives, KEFJ.

[39] According to the permit application, each iceberg would be taken to Seward, sprayed with water to get rid of the salt, then frozen for 24 hours, then crushed to two-inch squares, boxed, and loaded into freezer vans and shipped via SeaLand to Anchorage, Seattle, and Tokyo. But as Castellina pointed out, this would not get rid of gritty silt encased in the ice. (Patti Epler, "Logging Firm Hopes to Turn Profit with Ice," *Anchorage Daily News*, September 15, 1988.)

with park purposes, which included the protection of marine mammals, even though the activity would occur in sea water outside the park.[40]

The Park Service wrangled with state officials over the Afognak Logging Company's permit application for two years. The state tried to appease NPS concerns by placing restrictions on where the vessels could operate in the bay. But at the same time, other companies decided to get into the act. Castellina sought help from the Regional Office, and Acting Regional Director Richard Stenmark informed the Alaska Department of Natural Resources, "We are seriously concerned about a possible proliferation of ice collection enterprises in the fjords and especially in Harris Bay, which is renowned for its outstanding wilderness values."[41] In August 1990, ADNR finally issued a three-year permit to Afognak Logging. The company took a barge and a fleet of small boats into the bay and began collecting ice. There was a public uproar, with some citizens expressing alarm that the operation would remove icebergs needed by the harbor seals for pupping. While Castellina shared their concern, she was appalled above all by the noise pollution. Fortunately, Afognak Logging soon recognized that the operation was not economically viable and pulled out.[42]

Some years later, a helicopter company approached the park with a proposal to provide scenic helicopter flights around Bear Glacier and Resurrection Bay. The owner took Chief Ranger Fitzmaurice and Chief of Resource Management Jeff Troutman on a helicopter ride to inspect his proposed route. They put down on Bear Island, where the owner proposed to land his clients and let them walk around. Fitzmaurice and Troutman expressed concern that the helicopter skids and the sightseers' ambles would disturb nesting birds. The owner was resistant to this idea until Troutman discovered that one of the helicopter skids was resting mere inches from a nest with gull eggs in it. "That spooked the pilot and he immediately lost interest in the enterprise," Troutman recalls.[43]

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[40] Castellina interview.
[41] Richard J. Stenmark to Veronica Gilbert, April 17, 1989, Series N3031 Geological Features and Studies Glaciers (Ice & Frost Action), Box 21, Acc. 00395 Alaska Support Office Administrative Files, ARCC.
[42] Castellina interview.
[43] Jeff Troutman, interview by Theodore Catton, September 18, 2008.

6

A Manmade Disaster

The *Exxon Valdez* Oil Spill and Cleanup, 1989-1992

The *Exxon Valdez* Oil Spill – Cleanup and Monitoring – The Psychic Toll

The *Exxon Valdez* Oil Spill

The *Exxon Valdez* oil spill was a turning point in the administrative history of Kenai Fjords National Park. As the first national park in the path of the oil slick, Kenai Fjords was thrust into the national limelight, featured in the news media, discussed in congressional hearings, and revisited month after month in *National Parks Magazine* and other conservation periodicals. People called it the worst manmade disaster ever to hit a national park. Tragically, the oil spill took a toll on the park's resources before the Park Service had had much opportunity to inventory what was there. Decimating certain animal species and seeping into the food chain, the oil spill entered the park's ecological story. Cleanup and restoration would absorb much of resource managers' efforts at Kenai Fjords for the next two years and beyond. Yet, ironically, the traumatic event was not without a silver lining. The park would eventually cash in on a share of the nearly $1 billion settlement with Exxon Corporation, using the money to acquire a large part of the Native land holdings along the coast – more than would otherwise have been likely to come into the park. The disaster also generated much positive publicity for Kenai Fjords. In the following summer, the park hosted a record number of visitors. The park's vulnerability and popularity would translate into substantial base funding increases in the 1990s.

When the tanker vessel *Exxon Valdez* ran aground on Bligh Reef in Prince William Sound on March 24, 1989, it spilled 11 million gallons of crude oil into the open water – a volume of liquid equivalent to the water in 125 Olympic-sized swimming pools. It was the largest oil spill in U.S. history. Worldwide, there had been much larger oil spills by volume, but none to compare with it in terms of social and environmental impact. Several factors combined to make the *Exxon Valdez* oil spill unprecedented in

scope. First, the spill occurred in a remote and spectacular location where thousands of miles of rugged and pristine shoreline were exposed to its ill effects. Ultimately, the slick would stretch for 460 miles, from Bligh Reef to the village of Chignik on the Alaskan Peninsula – equal to the distance from Cape Cod to Chesapeake Bay on the East Coast – and would contaminate ecosystems in three national parks. Second, it occurred in frigid, storm-lashed waters where known techniques for containing and dispersing oil slicks were either ineffective or impossible. This circumstance was compounded by the fact that the spill occurred in March, when weather conditions severely hampered the disaster response. Third, it occurred in a part of the world exceptionally rich in marine and bird life. An estimated quarter million oiled sea birds died in the disaster, while chemical pollution in the water column produced long-term effects in the marine ecosystem that are still not fully understood.[1]

Early reports of the disaster on Friday, March 24, suggested that it would be confined to Prince William Sound. That morning, federal officials were alerted and a Regional Response Team was activated according to National Response System protocols, setting up headquarters in Valdez. The Regional Response Team included a representative for the Department of the Interior but no one from the Park Service. The Park Service's Alaska Regional Office was contacted but it did not send anyone, apparently based on the inference that no parks would be harmed.[2] Superintendent Anne Castellina was similarly complacent on that first day as she assumed that the spill was too far away to threaten park resources.[3] Bud Rice, the park's resource management specialist, guessed otherwise. Back from annual leave on Monday, March 27, Rice telephoned his former professor at the University of Alaska, Thomas C. Royer, who was an expert on ocean currents in the Gulf of Alaska. Royer confirmed what Rice suspected: from its present location in Prince William Sound, the oil slick would be borne on ocean currents through Knight Island Passage and then southwestward along the coast of the Kenai Peninsula.[4]

So advised, Castellina began to glimpse the outlines of the impending disaster. It was late March, practically the worst time of year to confront this problem, since migratory birds would soon be arriving on the coast, bears would be coming out of hibernation, and the tiny park staff had no detailed knowledge of what the shoreline biological community looked like so soon after winter. Indeed, Rice was the only person on the park staff who had extensive biological knowledge of the Kenai Fjords coast at any time of year.[5] Late that afternoon, Castellina and Chief Ranger Peter Fitzmaurice

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[1] Kenai Fjords National Park, "20 Years Later…Exxon Valdez Oil Spill," March 1, 2009, copy provided by Jeff Mow to the author, Superintendent's Files, KEFJ.
[2] William S. Hanable, *The Exxon Valdez Oil Spill and the National Park Service: A Report on the Initial Response*, (Anchorage: National Park Service, Alaska Region, 1990), 14-15.
[3] Castellina interview.
[4] Rice interview.
[5] Castellina interview.

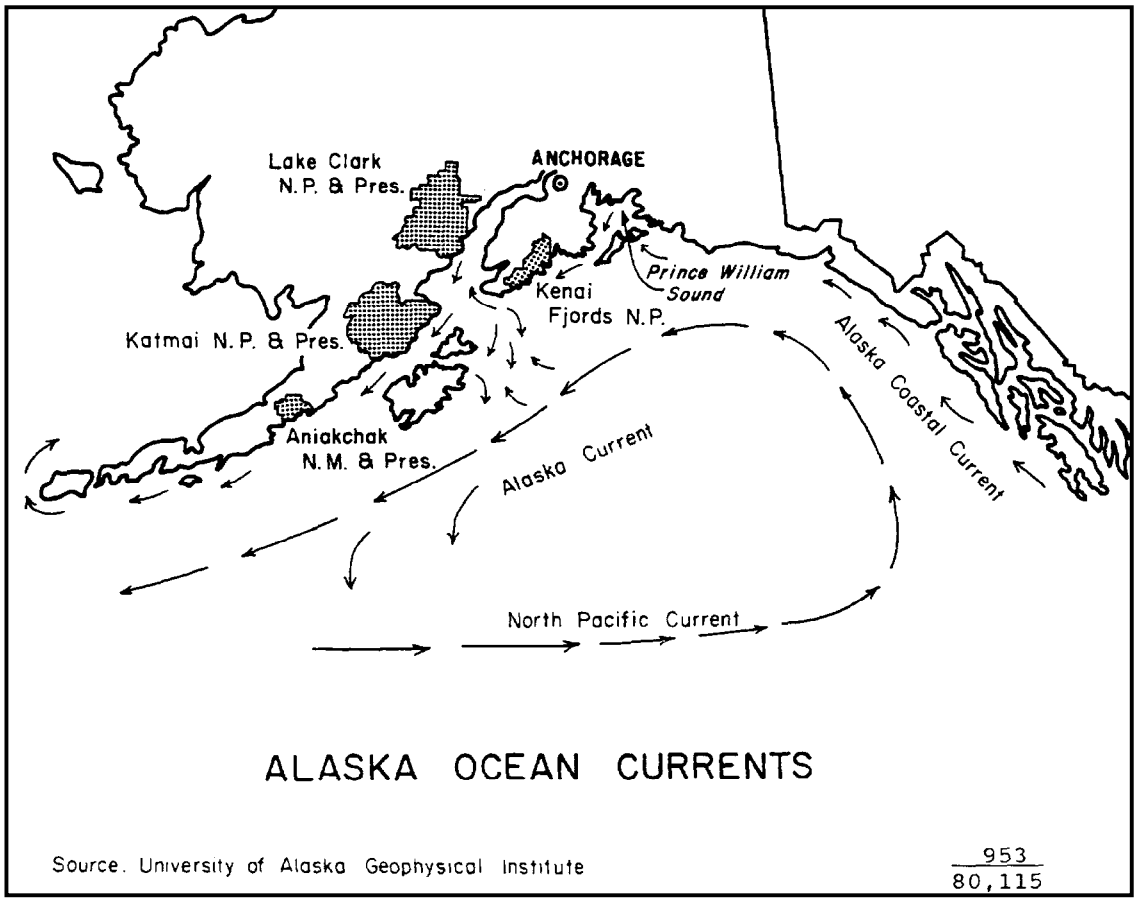

Figure 16. Alaska ocean currents placed Kenai Fjords downstream from the oil spill in Prince William Sound. (William S. Hanable, *The Exxon Valdez Oil Spill and the National Park Service*.)

attended an emergency meeting with city officials at the Seward City Hall, where Fitzmaurice presented the park's oil spill contingency plan. By sheer coincidence the plan had just been drafted; however, the *Exxon Valdez* oil spill was much bigger than the kind of event this plan aimed to address. Also that day, Castellina telephoned the regional office to request an additional summer ranger to help deal with the response effort – a gesture that she would see as pitifully inadequate in retrospect. Her request was immediately granted.[6]

Meanwhile, Acting Regional Director David Ames, in consultation with Castellina and the Interior Department representative in Valdez, decided to call in an Incident Command Team to take charge of the disaster response in Seward and along the Kenai coast. As historian William S. Hanable has recounted in *The Exxon Valdez Oil Spill and the National Park Service: A Report on the Initial Response*, the request was controversial, since it challenged the direction being taken by the interagency Regional Response Team in Valdez. Even at this early date, officials on the ground felt pressure from officials in Washington not to exaggerate the scale of the disaster. The Bush

[6] Hanable, *The Exxon Valdez Oil Spill*, 19.

administration was pushing Congress to open the Arctic National Wildlife Range to oil exploration, and the administration perceived (correctly, it turned out) that the disaster in Prince William Sound would turn public opinion against its initiative. It seems clear that these political considerations influenced President Bush to resist "federalizing" the disaster response and to rely instead on efforts by Exxon Corporation to recover the spilled oil, even after many people on the ground began to raise serious doubts about the effectiveness of those efforts. At this early stage, all other federal agencies, including the Forest Service, which owned most of the land around Prince William Sound, were taking a low-key approach to the crisis. Thus, the Park Service's request to call in an Incident Command Team at Seward and prepare for the worst at Kenai Fjords National Park was distinctly off-message.[7]

The Incident Command Team or ICT that deployed to the park headquarters was Type-I, meaning that it was in the elite class in the National Incident Management System. In 1989, there were a total of 18 such teams, which rotated around the country. This one happened to be the Alaska-based team currently on its Alaska rotation, a fortunate coincidence, as its members were familiar with Alaska conditions. Although trained primarily to deal with wildfires, each ICT was considered "all-risk" and could be called up for any type of disaster assistance. This ICT was under the command of Dave Liebersbach, a seasoned firefighter and smokejumper who worked for the Bureau of Land Management. It included six other core staff officers whose key functions were safety, information, planning, operations, logistics, and finance.[8]

Castellina had no prior experience with an ICT but she knew it was a big step to order one. She recalls telephoning her mentor, Bill Wade, on the eve of the team's arrival, in the hope of getting some encouragement and perspective. Wade emphatically endorsed her decision to call in the ICT and he explained to her how it would work. She was going to sign the park over to the ICT insofar as managing the crisis, but she would still be the line officer in control. The ICT would work directly with her, keeping her involved with its decisions.[9]

The ICT arrived in Seward on Thursday afternoon, March 30. Besides the ICT's experience in crisis command, it also represented a huge augmentation of personnel at a time when the park was critically short-handed, with just nine employees including the superintendent comprising the permanent staff. The seven member ICT was billeted at the Army's Seward Recreation Camp, and it was provided with office space in a Forest

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[7] Hanable, *The Exxon Valdez Oil Spill*, 19-24; Boyd Evison interview by William S. Hanable, October 17, 1989, NPS Historian Report – Interviews, Case AK-NPS-01, Volume 17B, Set 5, EVOS Collection, Archives, KEFJ. Another factor shaping the Bush administration's response to the disaster was its uncertainty as to whether Exxon Corporation would be totally liable for cleanup costs under two recently enacted laws, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Clean Water Act. Some administration officials argued that "federalizing" the response effort would complicate how these two laws were prosecuted in the case.
[8] Hanable, *The Exxon Valdez Oil Spill*, 16.
[9] Castellina interview.

Service seasonal housing unit located in the heart of Seward. The latter became operations center for managing the response effort.[10]

On Friday, March 31, Castellina gave the ICT a general briefing. It was the Park Service's view that the coastal current would carry the oil slick past the headlands and offshore islands of the Kenai coast. Forecasts suggested that the oil could be pushed ashore, and if certain wind conditions developed the oil might even be pushed deep into Resurrection Bay and the park's fjords. Besides the Park Service, other landowners with resources at risk included the City of Seward, the state, and the U.S. Fish and Wildlife Service. A unified command for the response to the crisis might involve these three entities together with the U.S. Coast Guard and Alaska Air National Guard. As for the Park Service's priorities in meeting the disaster, it sought to protect wildlife and habitat in the park, including salmon streams and salmon fry, bird congregation areas, seal haul-out areas, beach areas containing fragile or endangered plant species, areas of significant bivalve concentrations, and birds and mammals which feed on carrion.[11]

Prioritization was the order of the day. At the incident commander's request, Castellina formed a multi-agency coordinating group, or MAC group, so that interested parties could work together in a unified manner. Initially ten entities were invited to participate, including Exxon, Chugach Alaska Corporation, and the North Pacific Fishermen's Association, as well as state agencies, the City of Seward, and the Kenai Peninsula Borough. The Fish and Wildlife Service, the only other federal entity besides the Park Service on the list, initially declined to participate in deference to the Department of the Interior's position that Exxon Corporation and the Regional Response Team could handle the response effort.[12]

Castellina was appointed chair of the MAC group, and soon she welded this group into her own incident management team that acted on a parallel track with the ICT. Meeting daily first thing in the morning, the MAC group would take stock of boats and crews and other resources at its disposal and decide where they would be deployed. Castellina led the group to a key decision at its first meeting: priorities would be set on the basis of protecting the whole ecosystem rather than any one land owner's interests. As proof of that intention, the park offered a list of the ten most important salmon streams in the area. Each salmon stream was to be cordoned off with "boom," a floating barrier designed for protection from oil spills. As both time and the boom material were in limited supply, the prioritization of streams was crucial. The first five streams were located around Resurrection Bay, outside the park, in deference to local interests.[13]

Procurement was another urgent need. The first action by the ICT was to requisition every available boat in the harbor, putting each boat owner under contract to

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[10] Hanable, *The Exxon Valdez Oil Spill*, 25-30.
[11] Ibid, 30.
[12] Ibid, 26.
[13] Hanable, *The Exxon Valdez Oil Spill*, 26-27; Castellina interview.

allow use of the vessel for the response effort as needed. Next it obtained a mountain of Mustang survival suits, or flotation coveralls, for outfitting the anticipated legion of workers who would arrive as soon as Exxon Corporation started hiring. The ICT also initiated a search for more boom to augment what was on hand locally.[14]

It was important that Exxon representatives were included in the MAC group, since there was an expectation that Exxon would eventually foot the bill for everything. Early in April, Castellina and Don Gilman, mayor of Kenai Peninsula Borough, flew to Valdez to obtain funds from Exxon for purchasing boom. "Don marched into Exxon headquarters over there," Castellina remembers, "and it was total chaos." Minutes later, she and Gilman walked back out with a check for $1 million. They used the money to buy all the boom on hand in Homer as well as everything in stock from the manufacturer, which was located on the East Coast. They also flew an engineer from the manufacturer to Seward and had him explain to the local responders how the material should be used. The boom was supposed to lie on the water surface like a curtain, held in place with weights. The strong tides and heavy chop that prevailed in these coastal waters made its use problematic. In fact, it would later prove to be not very effective except in the most sheltered areas. Crews began placing boom in early April. By April 9, they had strung several thousand meters of it in front of several salmon streams, including Pedersen Lagoon, Delight Creek, and streams in the Nuka Bay area within the park.[15]

Besides laying boom, crews went out to inventory biological resources before the shoreline was hit by oil. The Park Service brought people from the regional office and contracted with outside researchers to assist with this effort. Resource managers wanted data concerning what species were present and in what numbers so that they would have baseline information for making damage assessments later. As with prioritizing where to put the boom, resource managers had to choose where to focus their efforts under severe time and manpower constraints. They also had to devise how they would conduct hasty surveys with some semblance of scientific method. One team of scientists, contracted to gather baseline data in the intertidal zone at the beginning of April, described its survey methodology relative to the emergency situation as follows. "We decided to maximize the number of sites visited at the cost of time spent at any one site. This strategy is advantageous if oil is distributed along the shore in a patchy fashion….Maximizing the number of sites increases the likelihood that at least some of our sites will be impacted and serve as a post-oil comparison to either pre-oil surveys or unoiled sites." Admitting

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[14] Castellina interview.

[15] Castellina interview; U.S. House Committee on Interior and Insular Affairs, *Oil Spill Damage to National Parks in Alaska, Oversight Hearing before the Subcommittee on National Park and Public Lands of the Committee on Interior and Insular Affairs*, 101st Cong., 1st sess., April 13, 1989, 7. See also Hanable, *The Exxon Valdez Oil Spill*, 33, for details about the financial arrangement. According to Hanable, the check was obtained from Exxon in Kodiak, not Valdez. On the booms' effectiveness, see Rick S. Kurtz, *Lessons to be Learned: The National Park Service Administrative History and Assessment of the* Exxon Valdez *Oil Spill* (Anchorage: National Park Service, Alaska Regional Office, 1995), 87-89.

to the survey method's shortcomings, the team continued, "This strategy permits a rapid qualitative census but necessitates a reduction in quantitative sampling."[16] Other scientists who were put to work on the biological inventory naturally improvised their own survey method. With so many people involved in the effort, data collection was inconsistent and redundant.[17]

By April 3, forty people were involved in biological inventory and the number was growing. Dave Liebersbach, the ICT commander, told a newspaper reporter, "We're doing about six months of data gathering in three or four days."[18] Under these circumstances, people took extraordinary risks. Crews went out without proper safety equipment, entrusting their lives to deckhands who had been hired off the street only the day before. Seasonal ranger Mike Tetreau, who would become the park's oil cleanup specialist, recalls his experience on one of these hastily assembled trips in April 1989. The skiff that had been promised to them for getting ashore turned out to be just a 9-foot aluminum johnboat – "a total death trap to be floating around in." But there was no time to deliberate about it. "Sometimes we were less than twenty-four hours ahead of the oil," Tetreau says. Although he was assigned to inventory plants, he and his crewmates were encountering sea otters and other wildlife along the way. "And we knew that by the end of the day tomorrow this place was going to be wiped out."[19]

The oil slick's movement out of Prince William Sound and along the coast was monitored by aircraft. At first, Exxon and the National Oceanic and Atmospheric Agency (NOAA) managed this effort but as the oil slick moved closer to Kenai Fjords National Park the Park Service made observation flights as well. For a few days in the second week of April the oil held off shore, and the park staff entertained hopes that the park might escape getting hit. Eerily, tendrils of the oil slick wrapped around the Chiswell Islands but appeared to pull back from the islands' rocky shorelines.[20] And then the onshore winds came. On Monday, April 10, the park and the islands got hit. Oil came ashore on Aialik Cape, the first confirmed hit in the park. It would be weeks before the park staff knew how much shoreline was polluted, but eventually the amount was put at 20 miles, or about four percent of the total. Most of the oiled shores were headlands, although Takora Arm, Thunder Bay, Black Bay, Beauty Bay, and Yalik Bay were all hit.

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[16] David Duggins, Kathy Ann Miller, and Paul Gabrielson, "Pre-Oil Intertidal Surveys in Kenai Fjords National Park," no date, RM File 101, RINS No. 33-08-100, KEFJ.
[17] Science Advisor to Regional Director, October 18, 1989, Series N36 Pollution/Environmental Quality OIL SPILL 1989, Box 22, Acc. 00395 Alaska Support Office Administrative Files, ARCC.
[18] "Fire experts lend aid in keeping oil from harming park," *Anchorage Times*, April 3, 1989. Also see Hanable, *The Exxon Valdez Oil Spill*, 52-53, for details on the field team structure. In brief, the effort came to comprise five teams, each assigned with a different resource and mode of transport (wildlife evaluation/boat, wildlife evaluation/air, terrestrial evaluation/boat, recreation evaluation/boat, bivalve evaluation/boat).
[19] Tetreau interview.
[20] Steve Rinehart, "Oil hits shores beyond Sound," *Anchorage Daily News*, April 7, 1989.

The deep fjords were spared, thanks in part to the heavy outflow of fresh water from the glaciers.[21]

Park staff members felt devastated when they learned that the oil had washed ashore, but there was no time to grieve. With booms in place and pre-oiling resource inventories complete, the disaster response effort entered a new phase: damage assessment. Over the next three weeks, personnel from the park and the regional office made three separate trips along the coast to assess where the oil had come ashore and the extent of damage to biological resources. This grim work included counting and collecting dead carcasses as well as collecting oil samples from various beaches and cliffs. Specimens were brought back to Seward, catalogued, and stored for use as evidence in the government's natural resource damage claim against Exxon.[22]

Meanwhile, Castellina tried to reorient the park staff from crisis mode to an atmosphere of business as usual, since the summer tourist season was fast approaching. Reluctantly, she released the ICT in mid-April. For a period of weeks, Castellina tried to fill the void left by the departure of the ICT by assigning similar emergency response functions to her own staff. She served as incident commander, Fitzmaurice as deputy incident commander, Rice as operations chief, and Page Spencer (on detail from the regional office) as planning chief. When this proved too burdensome, she requested and got another ICT to assist with the oil spill activities through the summer; however, the second ICT was smaller and the park staff still carried an exceptional burden of oil-spill-related work as the tourist season began.[23]

Figure 17. Location and extent of oiled beaches in Kenai Fjords National Park.

Historian Rick S. Kurtz, in his administrative history of the oil spill and the Park Service, states that the Park Service's use of the ICT, particularly at Kenai Fjords, constitutes one of its biggest successes in responding to the disaster. Kenai Peninsula Borough Mayor Don Gilman told Kurtz that he and other MAC group participants were amazed by how effectively the ICT mobilized a local response. The Coast Guard modeled its own

[21] Castellina interview. The Park Service's early assessments were that up to 100 miles of shoreline were hit, as reported by national media in late April. See, for example, "Spill from Tanker Spreads Further on Alaskan Shores," *Wall Street Journal*, April 28, 1989.
[22] Hanable, *The Exxon Valdez Oil Spill*, 68-70.
[23] Ibid, 75-76.

response in other stricken areas after the ICT and MAC-group organizations it observed in Seward.[24]

Cleanup and Monitoring

Alaska's harsh environment confounded efforts to contain and clean up the oil spill. The frigid waters of Prince William Sound greatly slowed the rate of evaporation and limited the effectiveness of microorganisms in breaking down the oil. By the time the oil slick was abreast of Kenai Fjords, it had mixed with water to form a viscous emulsion referred to as "mousse." Portions became tar-like, a grisly compound of oil, dead birds, kelp, and other organic matter. This material was too thick to be collected by Navy skimmers. The only way that it could be recovered at sea was with harbor dredges, supplied by the U.S. Army Corps of Engineers, which finally arrived on the scene in late April.[25]

Cleanup on the rocky shorelines was even more difficult. In Prince William Sound, three methods were used. The first was to remove it by hand, one bucket at a time. Hand shovels only worked where there were great gobs of it; elsewhere the oil had seeped down into crevices and coated the underside of rocks, so that each individual rock had to be picked up and wiped clean with disposable absorbent pads. The apparent futility of this method led to the next method, which was to blast the rocks with hot water hoses, but this too was problematic. As *Time* reported, "high-temperature, high-pressure rinses proved moderately effective in scouring oil-fouled rocky beaches, but they killed intertidal creatures such as barnacles and snails. Coast Guard Captain David Zawadzki compares the process with chemotherapy."[26] Finally, there was bioremediation. A fertilizer called Inipol was sprayed on oiled beaches, which induced the spread of micro-organisms that would "eat" the oil. The Park Service was leery of using the pressure hose method and it was dead set against using any Inipol, since the compound was known to be toxic to marine life. That left cleaning by hand as the preferred method.[27]

Cleanup of the shoreline in Kenai Fjords began in the second half of April. Although the cleanup crews worked under Exxon's auspices, the effort soon presented park staff with a logistical nightmare. According to a U.S. Coast Guard order, a "bear guard" had to stand watch with a shotgun for each cleanup crew placed on shore. To comply with this order, the Park Service insisted that only its own personnel could serve as bear guards, or "resource protection officers" as the Park Service preferred to call

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[24] Kurtz, *Lessons to be Learned*, 86.
[25] "Waiting Game," *Scientific American* 260 (June 1989): 24; John Kenney, "Grave Waters: America's Worst Oil Spill Poisons Parks for Years to Come," *National Parks* 63 (July/August 1989): 21; Hanable, *The Exxon Valdez Oil Spill*, 71-72; Castellina interview.
[26] Paul A Witteman, "The Stain Will Remain On Alaska," *Time* 134 (September 25, 1989): 58-59.
[27] Hanable, *The Exxon Valdez Oil Spill*, 75.

them. Regional Director Boyd Evison put out a call for rangers throughout the nation to volunteer for a 21-day rotation in either Kenai Fjords or Katmai national parks. These people had to be trained, transported to and from their duty stations, and housed on boats, which the Park Service rented at considerable cost. Synchronization of this deployment with the cleanup effort by Exxon did not always go smoothly. For a time during mid-summer, the park had a half dozen of these temporary rangers stationed along the coast with not one cleanup crew to protect.[28]

In September, Exxon ended its cleanup effort throughout the spill area. Reports of how much oil had been recovered by the cleanup would vary widely, with some figures as low as 750,000 gallons (out of 11 million spilled). Yet with so much oil still at large, observers could plainly see that the cleanup effort itself was causing further damage to the environment. Resource managers knew that all treatments carried some level of harm for the biota even if they did not know precisely how much. As Kurtz explains their dilemma, "At what point did the net benefits from cleanup remediation efforts cease to outweigh the negative impact cleanup was having on resources?"[29] The federal government had no legal or scientific guidelines for determining how much cleanup was enough. Everyone could agree that, in view of the financial and environmental costs, it was neither feasible nor desirable to remove every particle of contamination. But where to draw the line was a highly subjective call fraught with legal problems. So the cleanup effort shut down for the winter with no agreement as to whether it would be resumed the next year.[30]

The park's oil spill operations continued after the cleanup crews were gone. Mike Tetreau, a biological technician, anchored the ongoing program and maintained an office in the McMullen Building in downtown Seward, where Exxon, Alaska Department of Environmental Conservation, Alaska Department of Natural Resources, U.S. Coast Guard, and Fish and Wildlife Service also had offices dedicated to oil spill activity. The MAC group also continued to meet, still under Superintendent Castellina's leadership, though it convened just once a week instead of daily as before.[31]

That fall, the National Oceanic and Atmospheric Administration (NOAA) released a report that suggested whatever oil remained on beaches should now be left to the forces of nature to disperse. Oiled beaches are eventually cleansed by wave action, especially by the pounding of storm-driven waves. The time it takes for storm energy to cleanse oiled beaches varies from two to twenty years, depending on two main variables:

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[28] Larry Campbell, "Crews make gains at Kenai Fjords," *Anchorage Daily News*, June 17, 1989; Regional Director to Regional Directors, May 12, 1989, Series N1623 Management of Natural Resources and Backcountry/Wildlife Management 1989, Box 20, Acc. 00395 Alaska Support Office Administrative Files, ARCC; Hanable, *The Exxon Valdez Oil Spill*, 73-76; Castellina interview.
[29] Kurtz, *Lessons to be Learned*, 48.
[30] "Spill Lingers At Alaskan Parks," *National Parks* 64 (January/February 1990): 8-9.
[31] Michael D. Tetreau, "Fiscal Year 1990 Oil Spill Operations, Kenai Fjords National Park, Alaska," February 12, 1991, Accession KEFJ-00204, File OO204/MAN/G-23-0, Archives, KEFJ.

how heavily the beach is oiled, and how energy-intensive the beach is. Outside of Prince William Sound, NOAA indicated, most of the oiled beaches along the Gulf of Alaska tended toward light oiling and high storm energy; therefore, it might be better to leave them alone.[32]

To evaluate this concept, a Winter Interagency Monitoring Program was implemented to measure the effects of winter storms on oiled beaches. Three sites (two within Kenai Fjords National Park) were visited repeatedly and soil samples were taken at specific locations within the intertidal zone. The program led to the conclusion that wave action was not cleansing the polluted shores as much as had been hoped. The results buttressed demands for Exxon to provide further resources for cleanup work on these shore areas.[33]

Cleanup in the summer of 1990 was more targeted than in the previous year. The biggest cleanup effort on the Kenai coast took place on a beach in the Yalik Glacier forelands area, on state park land just south of the national park, where a pair of Bobcat loaders removed tar mat. This was the only mechanized cleanup outside of Prince William Sound.[34] Inside the park, cleanup methods involved use of shovels, hand trowels, and absorbent pads, hot and cold water spraying, and bioremediation with a fertilizer (but not Inipol).[35]

As a general policy the park decided it wanted beaches that were only lightly oiled to be left alone. But in at least one instance, the park wanted cleanup of a lightly oiled beach and was turned down. The dispute arose over a site in Pony Cove, where the Park Service assessment team detected a strong smell of oil. Since the beach was in a sheltered spot on the coast, it wanted remediation. Three weeks later, representatives of Exxon, the Alaska Department of Environmental Conservation, NOAA, the Coast Guard, and the Park Service investigated the site. The team concluded that the amount of contamination did not warrant a cleanup operation. Park officials maintained that the team's decision was influenced by other factors, namely the beach's inaccessibility.[36]

Besides monitoring actual cleanup activity, the park tried to keep informed of Exxon's own biological investigations in the area. Exxon employed various consultants and contractors in conducting biological surveys along the coast, although the surveys were concentrated in other, more hard-hit areas east and west of the park. Exxon selected just one test site within the park boundary and this was on state land in the Yalik Glacier forelands area. Park officials were concerned that both Exxon and the state of Alaska

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[32] Kurtz, *Lessons to be Learned*, 48.
[33] Charles Wholforth, "Storms mask state of oiled shorelines," *Anchorage Daily News*, January 19, 1990.
[34] Tom Kizzia, "State fears haste will cut standards," *Anchorage Daily News*, July 11, 1990.
[35] Although Inipol was banned in national parks, another granular bioremediation fertilizer was used with some success in Kenai Fjords National Park. See Anne D. Castellina, "Oil Spills and Parks Don't Mix," *Women in Natural Resources* 13, no. 1 (xxx): 35.
[36] Kurtz, *Lessons to be Learned*, 54-55.

were focusing efforts on areas that had been heavily or moderately oiled at the expense of areas like Kenai Fjords that had been lightly oiled.[37]

In May 1991, Exxon carried out another survey of oiled areas in the park. This time, to save costs, Exxon requested that a cleanup team accompany the assessment team so that the cleanup team could immediately treat minor sites as the group proceeded. The Park Service resisted this procedure as it might cause greater disturbance to resources; however, it agreed to a compromise whereby Tetreau would accompany the group. One beach was identified for further cleanup. As this beach contained an archeological site, the cleanup operation required considerable pre-planning work, which was coordinated through the regional office. The cleanup was conducted in June using hand tools for removal of solidified oil and debris and a bioremediation material called Customblen for removal of viscous traces.[38]

While that ended the cleanup effort, surveys and research relating to the oil spill would continue for many more years. However, funding for this work fell off sharply after the emergency response effort ended. In 1989, the Park Service expended an estimated $8 million on the emergency response (which included work in Katmai as well as Kenai Fjords). Ordinary budget considerations were simply put aside to deal with the crisis. In 1990, the park administration returned to its normal budget allowance and operated with an ONPS budget of $391,800. Castellina called it a "slim year for finances." Some help came from the regional office, which formed an oil spill office to oversee ongoing response efforts. The office contributed equipment as well as personnel costs for two seasonal employees dedicated to oil spill work: biological technician Mike Tetreau and a part-time secretary, Cathy Weiford.[39]

On October 8, 1991, Exxon reached a settlement with the State of Alaska and the United States for natural resource damages from the *Exxon Valdez* oil spill. The settlement, which totaled about $1 billion, included $870 million to be paid into a Restoration Fund to be managed jointly by state and federal trustees. The new organization to oversee the money, known as the Exxon Valdez Oil Spill Trustee Council, would coordinate funding for restoration over the next two decades and beyond. Under the law, the restitution money could be used to "restore, replace, or acquire" equivalent resources.[40] Soon the Park Service decided that the most effective use of restitution funds for Kenai Fjords would be for land acquisition. That effort is discussed in the subsequent chapter on land protection.

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[37] Michael D. Tetreau, "Fiscal Year 1990 Oil Spill Operations, Kenai Fjords National Park, Alaska," February 12, 1991, File OO204/MAN/G-23-0, Archives, KEFJ.
[38] Superintendent's Annual Report, 1991, Annual Narrative Reports, Central Files, KEFJ.
[39] Superintendent's Annual Report, 1990, Annual Narrative Reports, Central Files, KEFJ.
[40] Alaska Center for the Environment, Prince William Sound Conservation Alliance, and Southeast Alaska Conservation Council, "Putting the Exxon Settlement to Work: The Emerging Regional Consensus," February 1, 1992, EVOS Correspondence, Office Files, KEFJ;

The Park Service also expressed the need for research to study and monitor the long-term effects of the oil spill on park resources. However, research did not attain the level of priority that land acquisition did. Although the Park Service's Alaska Region identified research needs totaling $5 million, it did not have the necessary political clout with the Exxon Valdez Oil Spill Trustee Council to secure that money. As park staff had feared, the trustee council soon showed a preference for restoration projects located in the hard-hit Prince William Sound area and for research proposals in support of multiple-use management objectives rather than the Park Service's preservationist mission. Tracking this problem closely, the National Parks and Conservation Association reported that just one Park Service research proposal had been funded by settlement money in 1992 compared with 29 research proposals by the Alaska Department of Fish and Game. Since its inception, the trustee council had allocated just $51,000 of research funding to the Park Service out of a total of $16 million. To make up the shortfall, the Park Service funded some of these projects out of its own research budget.[41]

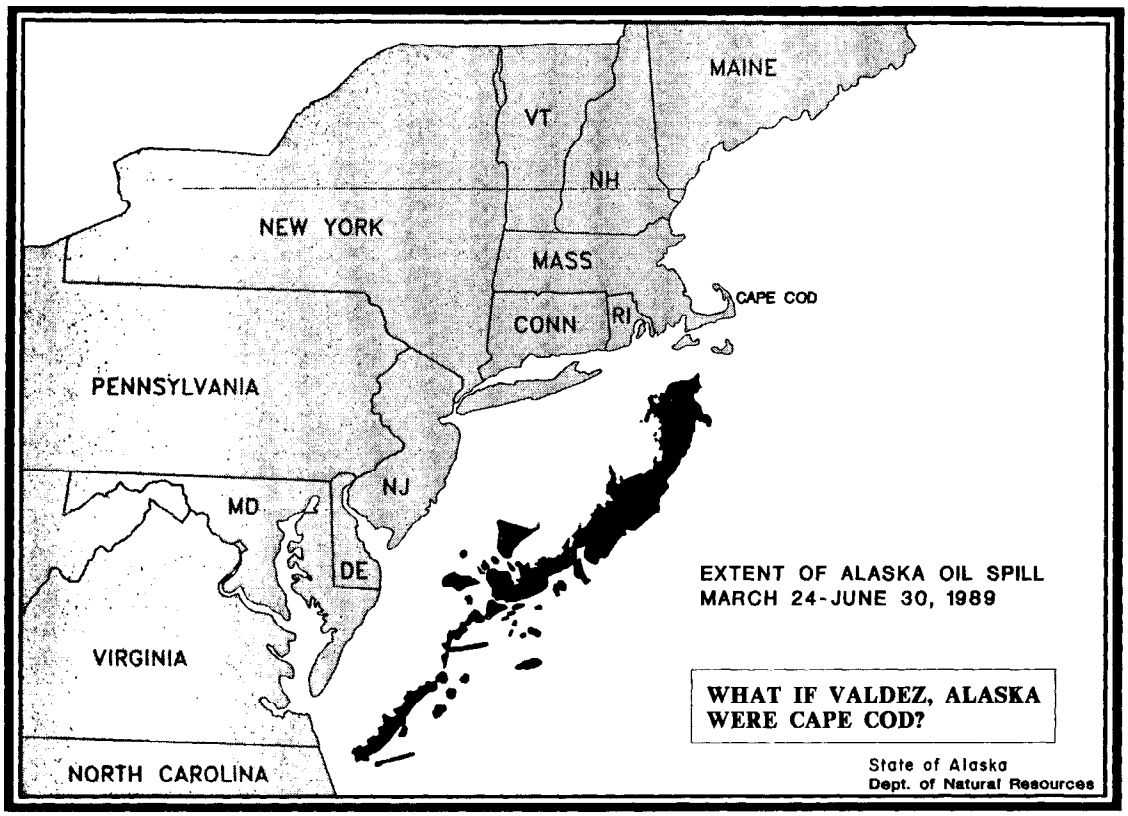

Figure 18. Extent of Exxon Valdez Oil Spill in relation to East Coast. (William S. Hanable, *The Exxon Valdez Oil Spill and the National Park Service*.)

[41] Jeffrey R. Richardson, "Persistent Poison," *National Parks* 66 (September/October 1992): 24-30.

The Psychic Toll

The *Exxon Valdez* oil spill disaster had a profound psychic impact on the local community and the park staff. As many people would later attest, what made this disaster so traumatic was that it was manmade. Unlike the Alaska earthquake of 1964, for example, it was not possible to respond to the disaster fatalistically, accepting the misfortune as part of the natural order. Indeed, the fact that the spill occurred in Prince William Sound, wreaking havoc in such a pristine part of the world, only accentuated its unnaturalness. When people saw images in the media of sea otters and bald eagles coated in oil, they understood that humans were to blame. And while the captain of the oil tanker and Exxon Corporation were widely regarded as the chief culprits, most people shared the unsettling feeling that all of modern civilization was implicated in this crime against nature thanks to humanity's ravenous appetite for oil. So people approached the event with raw emotions, mixing anger and guilt with sorrow.[42]

In Seward, the psychic trauma from the oil spill played out against a backdrop of social and economic dislocations caused by the pollution and the cleanup operation. The disaster rocked the commercial fishing industry as the spill disrupted fishing activity in 1989 and threatened to depress fishery stocks in future years. But some commercial fishermen turned their loss into profit by renting their boats to Exxon or going to work as boat captains in the cleanup effort. Others criticized these actions, fearing that Exxon was in the process of buying off the people whom it had victimized as part of its legal maneuvers. Rather than assisting Exxon in what appeared to be a pointless cleanup effort, these people argued that the community should set its sights on a financial restitution through the court system.[43]

The community experienced a rush of transient workers looking to make money in the cleanup effort. The population influx overwhelmed Seward's social services, such as child daycare, which created additional stresses for people engaged in extra long days of work. Seward's crime rate increased.[44]

For the park staff, the disaster was terribly upsetting and led to feelings of helplessness and failure. Castellina says the day that the oil came ashore on Aialik Cape was the worst day of her life. "I felt like a total failure as a manager because I had let my park get hit," she states. "I remember Peter [Fitzmaurice] and Bud [Rice] and I were sitting in a row and we just looked at each other. I'll never forget that. We just looked at

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[42] For two very personal accounts of people's emotional and intellectual responses to the disaster, see Marybeth Holleman, *The Heart of the Sound: An Alaskan Paradise Found and Nearly Lost* (Salt Lake City: University of Utah Press, 2004) and Page Spencer, *White Silk & Black Tar: A Journal of the Alaska Oil Spill* (Minneapolis: Bergamot Books, 1990). For an environmental historian's view of society's collective responsibility, see Donald Worster, *Under Western Skies: Nature and History in the American West* (New York: Oxford University Press, 1992): 154-223. For a journalist's view, see Michael D. Lemonick, "The Two Alaskas," *Time* 133 (April 17, 1989): 56-66.
[43] Holleman, *The Heart of the Sound*, 42.
[44] Tetreau interview; Castellina interview.

each other and we kind of sunk in our seats. I think all of us were feeling the same sense of disaster. Because when you're a Park Service manager your park is your thing. It's why we're here is to protect the environment. Our first role as park managers in the Park Service is to protect the park….at all costs, protect the park for future generations. Our organic act tells us to do that, and we're brought up with that, and we're trained to do that. And this came along, and it just – it wasn't a natural thing."[45]

In the days and weeks after the oil hit, park staff returned from the field shaken or depressed by the horrible things they were seeing. A flock of cormorants landing smack in the middle of an oil slick, attracted by the smoothing effect of the oil on the ocean chop. Bald eagles congregating in unusual numbers on Bear Glacier beach to feast on the deadly tide of carrion, one eagle limping away with its oil-smeared wings dragging uselessly on the cobbles.[46]

The small park staff was stressed by the severe demands on its time. In April and May 1989, people worked vast amounts of overtime and still felt as though they could not accomplish very much because of the hothouse atmosphere created by so many people jammed in a tight place all competing, for example, for a few minutes at the overworked photocopy machine. Between the ICT, the MAC group, and park operations, people felt crushed by the weight of so many meetings and agendas. So many people wanted to consult Bud Rice on his knowledge of coastal resources that at one point he found it necessary to climb out of an office window in order to escape from the building for a bit of much-needed personal time.[47]

Another emotional strain came from having to deal with newcomers' or outsiders' lack of understanding of the situation. On occasion, these differences of perspective were galling. Castellina later wrote about the burden of hosting groups of congressional fact-finders. "On one trip, I flew with a staff group to Beauty Bay, an area in the park heavily impacted by tar balls. We landed in the water near the beach and the Exxon crew sent out a skiff to take us ashore to view the work in progress. When they saw how wet and dirty they might get, none of the Congressional staffers would leave the plane. Thoroughly discouraged, I made up some excuse about having to stay there and went off with the skiff. A helicopter picked me up later and brought me back to Seward."[48]

Part of the ICT operation involved stress counseling for park staff. Castellina brought in counseling teams who worked with staff over an extended period. During the year, the small park staff experienced three divorces or breakups. How much these personal problems were attributable to the *Exxon Valdez* oil spill was impossible to know, but there could be no doubt that the year of the oil spill was extremely challenging both professionally and personally for everyone involved.[49]

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[45] Castellina interview.
[46] Ibid.
[47] Tetreau interview.
[48] Castellina, "Oil Spills and Parks Don't Mix," 35.
[49] Castellina interview.

Some park personnel were able to assess the limits of their endurance and manage their stress better than others. For Peter Fitzmaurice, there came a time in late summer 1989 when he had to step back from it. He took a month off and went on a sailboat trip. Again, for another month over Christmas, he escaped to Hawaii. Fitzmaurice recalls that those vacations were key for him in avoiding total burnout. Another key element, he says, was the staff's mutual supportiveness in getting everyone through a difficult period. Staff members experienced burnout more or less one at a time, as if taking turns, so that the staff as a whole could remain effective.[50] When Fitzmaurice came back from his second vacation, Castellina worked out an arrangement with him whereby she relieved him of any more oil spill work and he took over some of her work in heading up park operations. They both thought this arrangement worked well.[51]

Finally, it should be noted again that park staff, especially the superintendent, bucked political pressure from senior officials in the Bush administration to downplay the emergency in the aftermath of the oil spill. After her controversial decision to call in the ICT, Castellina was under a virtual gag order not to talk to the media about the likely path of the oil spill, which the federal Regional Response Team in Valdez was saying would never leave Prince William Sound. But when a television news crew came to Seward and asked her for an interview, she decided that it was in the best interest of the park to speak candidly to the media. Looking back, she is philosophical about her decision. As a park manager, she says, "there may come a time in your career when you're going to have to make the decision [between] doing what you've been told to do and doing what you know is right. And you have to be careful. You have to pick those moments." Castellina was prepared to lose her job over it, and she believes an action taken by Senator Ted Stevens may have prevented her removal. The Alaska senator arrived in Seward on April 2 on a tour of the oil spill response efforts. Having just come from Valdez, where the effort was floundering, Stevens thought the ICT and the MAC group in Seward were making impressive strides. He told Castellina not to be discouraged from taking action independently of the federal team's direction in Valdez. After this meeting, Stevens spoke to Darryl Shaefermeyer, his former staffer who was then serving as assistant city manager, and told him that if there was a move by the Department of the Interior to remove Castellina from her post he wanted to be informed so he could put a stop to it.[52] Three weeks after Stevens's visit, Castellina received an Honor Award for her outstanding work in response to the oil spill. Secretary of the Interior Manuel Lujan presented the award to her during a four-day fact-finding trip to Alaska. The granting of the award assured Castellina that she was safe from retribution.[53]

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[50] Fitzmaurice interview.
[51] Fitzmaurice interview; Castellina interview.
[52] Castellina interview.
[53] "Castellina honored for outstanding oil spill work," *Seward Phoenix Log*, May 4, 1989.

7

Boom Times

Development and Visitor Services, 1990-2004

Seward's New Economy – Visitor Surveys – Budget and Administration – The Changing Workforce - Trail Plan – Public Use Cabins – The Interpretive Program – Exit Glacier Area Planning and Development – The Exit Glacier Area Plan and GMP Amendment and Winter Use Policy - Visitor Protection in the Backcountry

Seward's New Economy

In July 1990, the *Anchorage Daily News* ran a story titled "Seward Finds a New Boom in Tourism." The town of 3,000 people had arrived at a turning point. In the decade just ending, the town had struggled to diversify its economy still emphasizing extractive industries. Seward had expanded its fish processing plant, developed a coal port, acquired a new sawmill, and become the site of the state's new maximum security prison. But in the meantime, growing numbers of Seward citizens had seen the future in tourism. Many new motels, restaurants, and tourist shops had sprouted along the waterfront by the small boat harbor. Ray's Waterfront Restaurant was emblematic of the new economy, the newspaper story suggested, having items on the menu that "could have been lifted from a waterside eatery in Seattle or San Francisco."[1]

Kenai Fjords National Park was "one of the pillars of the town's tourism industry," the *Anchorage Daily News* reported. The park attracted tens of thousands of visitors to the fjords and to Exit Glacier, and these people spent money on Seward-based transportation services as well as Seward restaurants, motels, and shops. The cruise-ship business was another boon for the local economy. Although cruise ship passengers did not spend as much money in restaurants and shops as business owners wanted, they did go on sightseeing excursions, creating a market for a variety of local tour companies. Seward had seen an increase in cruise ships in the mid 1980s when the Park Service put a cap on how many vessels could enter Glacier Bay and the cruise ship lines looked for other places in Alaska where they could visit tidewater glaciers. Of a total of 83 cruise

[1] Bruce Melzer, "Seward Finds a New Boom in Tourism," *Anchorage Daily News*, July 8, 1990.

ships making ports of call in southcentral Alaska in 1990, a little over one third docked in Seward.[2]

In the following decade, Alaska's tourism industry approximately doubled in size. In 1990, an estimated 700,000 tourists visited the state. Ten years later, an estimated 1.4 million people toured Alaska.[3] The statewide numbers were impressive enough, but in Seward's supercharged tourism economy the growth curve was more than twice that steep over the same time span. In 1990, Kenai Fjords National Park counted 66,115 visitors. Ten years later, it counted 290,673. From 1982 to 1990, the average annual visitation was about 47,000. From 1991 to 2000, the average annual visitation was about 223,000.[4] According to one study, Seward businesses grossed about $6 million from goods and services sold to park visitors in 1990. The businesses grossed about $15.7 million in 2001, while about $6 million more flowed into the community in secondary benefits.[5]

Increases in park visitation were not steady from year to year, but the trend was unmistakable. The first big jump in visitation came in 1986, the year that a road was open all the way to Exit Glacier. The next jump occurred in 1989, the year of the oil spill, when visitor numbers shot up nearly a third over the previous year. (All the media attention focused on Kenai Fjords National Park after the oil spill contributed to the increase, but the oil spill itself was not a major draw. When visitors were asked in 1990 if the oil spill was a reason for their decision to visit Alaska or Kenai Fjords ninety percent of respondents indicated that it was not a factor.) Visitation dipped marginally to 70,850 in 1990, then rose to 107,973 in 1991, increased slightly to 108,816 in 1992, and surged to 191,088 in 1993. Strong, steady growth over the next four years brought the number to 313,337 in 1997. The latter figure counted 67,934 tour boat passengers, a category that the Park Service began to include in park visitation statistics only in 1996. Even if that number was taken out of the equation, however, visitation still grew apace in the mid 1990s.[6]

By the 1990s, it was clear that the park was a driver in the town's increasingly tourism-based economy. Superintendent Castellina carefully cultivated the townspeople's appreciation of the park's role in the local economy. For example, when visitor surveys were made of park visitors, she insisted that the surveys should include questions aimed at developing data on how much money park visitors spent in Seward. That way, she could summon community support for a variety of park initiatives. Like

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[2] Melzer, "Seward Finds a New Boom in Tourism."
[3] Joan Pardes, "Tourism Stable in Alaska," *Alaska Business Monthly*, March 1, 2003 at http://www.allbusiness.com/north-america/united-states-alaska/488245-1.html <August 3, 2009>.
[4] For annual visitation statistics see Appendix 1.
[5] Bill Sherwonit, "The History of Kenai Fjords National Park, Alaska," at http://www.theconservationlandtrust.org/eng/mision_conflictos_articulo_2.htm <August 3, 2009>.
[6] Anne D. Castellina, "Kenai Fjords National Park Visitor Use Statistics, 1981-1997," revised 12/97, Series L26, Central Files, KEFJ.

Moore before her, Castellina felt strongly that the park and the town stood to benefit each other. If the park was a magnet for tourists who spent money in Seward, it was also true that Seward was a service center that relieved the park of the need to provide those same visitor services. Seward's motels, gas stations, grocery stores, and other amenities allowed the park to operate without a single concession on park land. Seward could also provide a welcome community for park staff. Speaking for herself, Castellina once told an interviewer, "Becoming part of things just seemed natural; I felt like I'd come home." She encouraged her staff to get involved in community activities. "One of the things we [in the Park Service] haven't done so well is to recognize that while we're involved in managing a parkland, we're also part of a human community," Castellina said. "We need to participate in that, too."[7]

Besides the park, certain other institutions in Seward – Alaska SeaLife Center, the Chamber of Commerce, the Seward Port Authority – kept statistics that could be used to estimate the number of visitors to Seward. One study estimated that in 1993 the town received 316,849 visitors. Of this total, a little less than half were Alaskans and a little more than half were non-resident visitors. About 72 percent came by private car, 5 percent by private recreational vehicle, 3 percent by private airplane, and the remaining 20 percent by railroad, ferry, or cruise ship.[8] What these figures showed was that the park's visitor population and Seward's visitor population were strongly correlated. Not every Seward visitor was also a park visitor, but a great many were. Some Seward business owners had long been aware of this fact, but it still deserved emphasis. The public's desire to visit the coast, to view the majesty of the fjords and tidewater glaciers, and to see marine wildlife had sparked the tour boat industry, for example. In 1983, Pam and Don Oldow joined with Sheila and Jack Scoby to form Kenai Fjords Tours, Inc. In its first full year of operation Kenai Fjords Tours carried 3,000 passengers; by 1990, it carried five times that number on a total of five vessels. Meanwhile, another company, Kenai Coastal Tours, Inc., co-owned by Tim Lowe and Edward Ward, entered the market. In 1990, the latter company introduced a tour package in which it brought passengers by bus from Anchorage for a one-day tour of the fjords.[9]

Seward had good data on the number of cruise ships and cruise ship passengers coming to port.[10] In the mid 1990s, the number of cruise ships docking at Seward nearly doubled.[11] Seward business owners complained that cruise ship passengers did not spend

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[7] Sherwonit, "The History of Kenai Fjords National Park, Alaska."
[8] Reed Hansen and Associates, "Kenai Fjords National Park Visitation Report," report prepared for National Park Service by Jones & Jones, July 15, 1994, File DCP for VC and EG – 1995, Central Files, KEFJ.
[9] Melzer, "Seward Finds a New Boom in Tourism."
[10] For data on numbers of cruise ships, passengers, and passenger side trips in 1990, see Division of Interpretive Planning, Harpers Ferry Center, "A Plan for the Interpretation of Kenai Fjords National Park, Alaska, 1990," October 10, 1990, Series K1817, Administrative Files, Archives, KEFJ.
[11] U.. Department of the Interior, National Park Service, *Final Frontcountry Development Concept Plan, Kenai Fjords National Park, Alaska* (Denver: Government Printing Office, 1996), 5.

much money in the town's shops because so many were whisked away on sightseeing buses without having a chance to stroll through town.[12] After the road to Exit Glacier was paved, Princess Cruises began taking busloads of cruise ship passengers into the park (as well as to other points on the Seward Highway).

Seward also saw a significant increase in recreational vehicle and tent campers. Many of these campers came from Anchorage. Seward catered to campers by providing a campground along the waterfront between the downtown and the small boat harbor area. Campers made more use of amenities in town than did the cruise ship passengers and probably contributed more to the growth of shops and restaurants in the small boat harbor area. Since the park headquarters and visitor center were located in the small boat harbor area, the growth of this section of Seward strengthened the town's identity as a gateway to the park and reinforced the park's image as an engine of economic growth for the town.[13]

As the relationship between the park and the gateway community matured, Superintendent Castellina invited more business owners to "link up" with the park administration by obtaining a commercial use license (later called a commercial use authorization, or CUA). The benefit to the company was that it could provide its customers or clients with better service, integrating what it offered with park programs, while establishing a record of cooperating with the park. Eventually, a license or permit was required of all businesses bringing paying clients into the park. Most such permits issued at Kenai Fjords were for tour vans, cars, and buses bringing visitors to Exit Glacier, and for air taxi operators, sport fishing guides and boat operators bringing visitors above mean high tide in the fjords, and for backpacking guides.[14]

In the late 1990s, the number of businesses operating under permit in the park grew from about 30 to about 90. As the number expanded, so did the burden on park staff. It was the chief ranger's responsibility to review and approve each CUA, to write park-specific stipulations, to check compliance, and to handle warnings and citations. By 2008, much of the chief ranger's responsibility for the permits was delegated to Ranger Janette Chiron, who spent perhaps 30 to 40 percent of her time on this program.[15]

The permitting did not extend to tour boat operators even though tour boat passengers composed a significant portion of the park's annual visitation. The Park Service did not have authority to place tour boat operators under permit, since the tour boats did not make landings or put people ashore above mean high tide. That did not prevent the park from working with the tour boat companies as partners, and indeed, park officials noted that in the absence of a permitted relationship they had a freer hand in

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[12] Donald Cripps interview by Theodore Catton, August 13, 2008.
[13] Melzer, "Seward Finds a New Boom in Tourism."
[14] Anne D. Castellina to Friends of Kenai Fjords National Park, April 22, 1992, File Commercial Use Licenses, Central Files, KEFJ.
[15] Jim Ireland, comments on draft report.

collecting money from the companies for interpretive services.[16] Castellina instituted an annual Boat Operators Workshop that was usually held over one or two evenings in late spring. The workshops brought tour boat operators (boat captains as well as support staff) together with representatives of the Park Service, NOAA, and other federal agencies for discussion of coastal issues and programs. The workshops were considered a success in facilitating communication and cooperation and they continued under park auspices until the early 2000s, when the chamber of commerce and tour boat companies took charge of them.[17]

Visitor Surveys

As Kenai Fjords National Park attracted more visitors, park managers sought to learn about the demographic makeup, motivations, and behavior of this growing user population. Such information was difficult to compile and aggregate, but it was important for helping managers decide how to provide a quality visitor experience.

A visitor survey conducted in July 1990 found that the typical Kenai Fjords park visitor came as part of a family group, often with just one companion, and usually without accompanying children. Nearly a third of visitors were between 56 and 70 years old. Five percent of visitors were foreigners, with Canadians, Japanese, and Germans being the most common nationalities represented. One fourth of visitors were Alaska residents, while people from California and Washington outnumbered people from any other state outside Alaska.[18]

Visitors used various forms of transportation in getting to Seward. The most common form of transportation was private car (44 percent), followed by private recreational vehicle (25 percent) and rental car (24 percent). Another 12 percent of survey respondents came by air, 8 percent by train, 7 percent each by cruise ship and ferry, 5 percent by bus, and 2 percent by rental RV. (Percentages did not equal 100 because visitors could list more than one form of transportation.) Nearly four out of five visitors were on their first visit to Kenai Fjords. Three-quarters of visitors went to Exit Glacier, while somewhat more than half entered the visitor center in Seward. Nearly a third went to Aialik Bay, while 8 percent went to Northwestern Lagoon. Some 15 percent of visitors reported visiting Harding Icefield.[19] Presumably the numbers for Harding Icefield included scenic overflights of the area. It should be noted that the

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[16] Mow interview.
[17] Jim Ireland, comments on draft report.
[18] Margaret Littlejohn, *Visitor Services Project, Kenai Fjords National Park*, Report 31, Report prepared for the National Park Service by the Cooperative Park Studies Unit, University of Idaho (Moscow, Idaho: Cooperative Park Studies Unit, University of Idaho, 1991), 1.
[19] Littlejohn, *Visitor Services Project, Kenai Fjords National Park*, 13-15.

proportion of visitors in this survey getting to backcountry areas was high because the survey was conducted in the middle of summer.

The survey asked visitors to rate the usefulness of interpretive and visitor services. Services that received higher ratings were the Exit Glacier brochure, the park map/brochure, visitor center displays, visitor center audio-visual material, trailside exhibits, and contacts with the roving ranger at Exit Glacier. Services at the low end of this scale were publications for sale and ranger programs in the auditorium. The survey results also indicated which interpretive and visitor services received the most use. These were the park map/brochure and visitor center displays, but even ranger-led walks, the least used service, were utilized by an impressive 20 percent of respondents.[20]

Visitor use of the Exit Glacier area grew at a fast clip. Starting at a low level relative to overall park visitation, the number of visits to Exit Glacier doubled from 1988 to 1991, then doubled again from 1991 to 1993. Visitor use of the Exit Glacier area surpassed visitor use of the visitor center in Seward in about 1989. By 1993, the Exit Glacier area saw double the number of visits recorded at the visitor center, and in 1997 it was triple the number. This circumstance created a complicated situation in which park managers were glad to see the overall growth of park visitation but were concerned about the increasing visitor load on the Exit Glacier area. Viewed from a regional perspective, Kenai Fjords was seen as the Alaska park with most potential to attract and absorb significantly greater visitation and relieve some of the pressure on Denali National Park. But park managers debated whether the Exit Glacier area could sustain the same rate of growth as the park as a whole. They wondered if that area of the park should have some sort of limitation on visitor numbers. The problem of managing visitor use and development of the Exit Glacier area became one of the park's biggest management issues by the mid 1990s.[21]

Another visitor survey was conducted in August 1999, this time focusing on visitors to the Exit Glacier area. The visitor profile was similar to the one produced by the 1990 survey. Like before, most people came as part of a family group. The biggest difference in this survey group was that it was somewhat younger, with slightly more than half the respondents being from 26 to 55 years old. Foreigners accounted for 8 percent of respondents, with Germans and Japanese being most numerous. Among U.S. travelers, 19 percent were residents of Alaska, 12 percent from California, and 6 percent each from Washington and Minnesota. According to the survey, a large majority of visitors to the Exit Glacier area thought the quality of services was "very good" or "good" (the two highest ratings). A large majority also thought the Harding Icefield Trail was one of the most important facilities. A majority found the Exit Glacier area "not at

[20] Littlejohn, *Visitor Services Project, Kenai Fjords National Park*, 19.
[21] Mow interview; Troutman interview.

all crowded" while a little more than a third found it "somewhat crowded."[22] As surveys such as this always do, however, it missed an unknown number of people who had already decided the place was too crowded for their liking and had gone elsewhere.

Counting visitors was nearly as tricky as surveying them. Numbers for the Exit Glacier area were based primarily on vehicle counts, but improper functioning of the traffic counter led to doubts about the reliability of data prior to May 1993.[23] Other sources of data included the interpretive program's records of visitor contacts, airplane and charter boat carriers' annual reports on the number of people they dropped in the park's backcountry, and NPS registration of overnight users in the public use cabins and the small campground at Exit Glacier. Missing from these combined tallies was the large number of people who visited the fjords and viewed the tidewater glaciers by tour boat. These people were not technically park visitors because they did not go ashore, although the purpose of their trips was clearly to view and experience the park's resources. Since visitation is one of the factors that affects a park's budget, park officials wanted to revise the formula for visitor counts so as to include tour boat passengers. Park officials argued that if the park put interpretive rangers on tour boats, then tour boat passengers should be counted as park visitors. In 1996, the park got permission from the Washington office to count a portion of those passengers as park visitors. In a compromise agreement, it was stipulated that only tour boat passengers on the all-day cruises that visited Aialik Bay or Northwestern Lagoon would be counted, even though the park put interpretive rangers on half-day cruises around Resurrection Bay as well.[24]

Budget and Administration

As park visitation increased, so too did the park's budget and staff. At the start of the decade, the park operated with a budget of a half million dollars. By the end of the decade, it had grown to approximately $1,350,000. In 1991, the park had a permanent staff of 9 people. In 2000, the number had increased to 17.[25] This near tripling of the park operating budget and doubling of the permanent staff over a ten-year span approached the rate of increase of visitor use over the same period. The rapid growth of

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[22] Visitor Services Project, *Kenai Fjords National Park Exit Glacier Area Visitor Study Summer 1999*, Report 115, (Moscow, Idaho: Cooperative Park Studies Unit, University of Idaho, 1999), n.p.

[23] Reed Hansen and Associates, "Kenai Fjords National Park Visitation Report," report prepared for National Park Service by Jones & Jones, July 15, 1994, File DCP for VC and EG – 1995, Central Files, KEFJ.

[24] Tetreau interview.

[25] Superintendent's Annual Report for 1991, Annual Narrative Reports, Central Files, KEFJ; Kenai Fjords National Park, "Strategic Plan," April 17, 2000, Series D18, Administrative Records, Archives, KEFJ. The nine permanent staff in 1991 were Anne Castellina, Superintendent; Peter Fitzmaurice, Chief Ranger; Bud Rice, Chief of Resource Management; Elsie Dillewaard, Administrative Technician; Bill Stevens, Chief of Maintenance; Ida Murdock, Administrative Assistant; Maria Gillett, Chief of Interpretation; Mike Tetreau, Biological Technician; and Tim Steidel, Intake Park Ranger.

the park budget and staff called for continual restructuring of staff organization and duties. Looking back on his long tenure as chief ranger from 1988 to 2001, Peter Fitzmaurice remarks that the park's rapid growth helped to keep things interesting. "It was evolving so much," he says, "it was like a new job every few years."[26]

As the decade began, a signal change in park operations occurred when the park acquired a new boat. During the oil spill cleanup, it became evident that the *M/V Kenai Ranger* was no longer adequate to support the park's coastal operations. In the fall of 1991, when all the superintendents in the Alaska Region met to decide budget priorities for the coming year, Castellina presented the park's case for procuring a bigger boat. As

Figure 19. *M/V Serac.* (Kenai Fjords National Park photo.)

the park was staging more and more research in remote areas of the park that had been hit by the oil spill, it was imperative for the safety of personnel and the protection of park resources that her park should get a more seaworthy support vessel. She was persuasive; all the superintendents in the region agreed that it was a top priority, and to come up with the money they all agreed to pitch in 100 percent of their area's equipment replacement money for that year. The Park Service then contracted with a boat manufacturer in Fife, Washington, to build a 53-foot fiberglass boat to replace the 32-foot *Kenai Ranger*.

[26] Fitzmaurice interview.

Castellina, together with Chief Ranger Peter Fitzmaurice and Bill Stevens, the boat captain, made trips to Fife to ensure that the vessel was built to specifications. The day the new vessel arrived in Seward in September 1992 was a day of celebration.[27]

The *M/V Serac* was a boon for park operations but it was also a complicating factor for park administration. Since 1985, the park's boat captain, Bill Stevens, had doubled as chief of maintenance, and after Castellina reorganized the park staff into divisions early in her tenure the boat operation went into the maintenance division. After 1992, the *M/V Serac* absorbed so much of Stevens's attention that Castellina found it necessary to reorganize the maintenance operation. In the fall of 1993, she hired Bo Bohanan as the park's facilities manager and converted Stevens's position to boat captain. Stevens was assisted in the boat operation each summer by Tony Chapin, cook and deckhand. After Stevens and Chapin left in 1995, the park maintained this combination of boat captain and deckhand for boat operations year after year. Meanwhile, the boat operation was transferred from division to division. It was put in the ranger division until 1998, when it was moved to the resource management division. Wherever it nested, it was in constant demand for support of various park operations.[28]

The boom times of the 1990s included some hard years in the middle of the decade. The park's operating budgets in fiscal years 1994 and 1995 flattened out despite rising labor costs as the Clinton administration and the new Republican majority in Congress sought to reduce government spending. To avoid cutting permanent staff, Superintendent Castellina had to resort to other measures: deferral of maintenance tasks, aggressive use of grant-based funding sources to accomplish research and education outreach, employment of fewer seasonal staff, and more reliance on volunteers.[29]

In 1995, the Park Service implemented a nationwide restructuring plan that had significant consequences for the park. The plan addressed some long term problems in how the agency was organized as well as a number of recommendations put forth by the Clinton administration's National Performance Review on reinventing government. A major thrust of the restructuring plan was to move senior support personnel from central offices to field units and to encourage field units to take more initiative. The Alaska Regional Office was downgraded to a system support office with the idea that it would "support" rather than "direct" the units under its purview. Marcia Blaszak, formerly the associate regional director for administration, was reassigned to the position of superintendent of the support office. The natural resources division in the former regional office was completely reorganized and "downsized" – partly as a result of the transfer of all research-grade biologists to the newly created National Biological Survey the year before.[30]

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[27] Castellina interview.
[28] Castellina interview; Jim Ireland interview by Diane Krahe, August 15, 2008.
[29] Superintendent's Annual Report, 1995, Annual Narrative Reports, Central Files, KEFJ.
[30] Superintendent, Alaska System Support Office, to Senior Historian, Alaska System Support Office, February 20, 1996, Box 1 of 2 (Annual Reports), Park Historic Reference Files – Alaska, HFC.

Besides shifting authority from regional offices to the parks, another aim of the restructuring plan was to group all units in the national park system into "clusters" based on their similar geographic and ecological characteristics. System support offices were intended to support the clusters. Further, some personnel stationed in field units were to serve multiple areas. In 1995, Castellina was given the prerogative to hire a coastal resource specialist who would be duty-stationed at Kenai Fjords and would also serve Katmai and Lake Clark. Castellina hired Peter Armato, the lead geologist at Redwoods National Park, for the new position of "cluster ecologist," and he arrived in Seward at the end of 1995. In the midst of the turmoil caused by restructuring, Armato's position was regarded with suspicion by other unit managers in Alaska. Since Armato was to be supervised by Castellina, it seemed inevitable to them that he would focus his energies on Kenai Fjords at the expense of other units in the cluster. Resource-sharing, leveraging, and partnering were still unfamiliar concepts within the traditional agency culture. The situation was ripe for conflict, and it soon developed that Armato could not work effectively with resource managers in those other units. Chiefly, the resource management staffs at Katmai and Lake Clark did not agree with Armato on the order of priority for research projects. While Kenai Fjords welcomed the addition of the cluster ecologist position, it did not promote collaboration with other conservation areas to the extent that was envisioned when the position was established.[31]

Castellina had to address other personnel challenges arising from the restructuring plan and federal downsizing. Most permanent staff positions were upgraded in 1993 and 1994 as a result of Ranger Careers and Administrative Careers reclassification actions, but the rise in labor costs did not automatically trigger commensurate increases in the overall park operating budget. As a result, Castellina had to compensate for these payroll increases by making payroll reductions elsewhere. One park ranger position was furloughed for six months, and the environmental education specialist position was allowed to lapse after 1995. Just months after Bohanan came in as the park's new facility manager, he accepted an offer of early retirement. The position stood vacant until the following year when John Chekan replaced him. In 1994, Elsie Dillewaard transferred from an administrative position to a vacant interpretive ranger position, leaving a large hole in the administrative staff until Beth Lowthian was hired in her place one year later.[32]

When Chief of Interpretation Maria Gillett transferred to Mount Rainier National Park in November 1996, Castellina decided not to refill that position. Instead, interpretation was combined with visitor protection and placed under an I & VP management team. Chief Ranger Peter Fitzmaurice headed the team while three

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[31] Superintendent's Annual Report for 1995, Annual Narrative Reports, Central Files, KEFJ; Peter Armato interview by Diane Krahe, August 13, 2008; Troutman interview.
[32] Superintendent's Annual Report for 1995, Annual Narrative Reports, Central Files, KEFJ; Castellina interview.

permanent rangers and one seasonal ranger assisted him. One permanent ranger was the lead law enforcement ranger while the other two were responsible for visitor center operations and tour boat operations respectively. The seasonal ranger in this five-person team, designated as the "lead Exit Glacier ranger," was a key innovation as this person was duty stationed at Exit Glacier and tied into the management team at headquarters. Three days per week, the lead Exit Glacier ranger would work in the Exit Glacier developed area, one day per week he or she would work on a tour boat, and one day per week the person would join other managers for squad meetings at headquarters.[33] While the overall management team approach would prove to be only a stopgap measure until the park refilled the chief of interpretation position, the designation of a lead Exit Glacier ranger to work with management was a lasting innovation.

The chief of interpretation position was subject to more experimentation in the years to follow. In 1998, Amy Ireland was recruited as the park's third chief of interpretation and she came with her husband, Jim Ireland, a law enforcement ranger, who would soon advance to chief ranger. In 2001, Amy Ireland went on maternity leave and Sandy Brue, a seasonal ranger with an extensive Park Service resume including a stint as chief of interpretation at Sagamore Hill National Historic Site, stepped up to fill her place temporarily. When Amy Ireland returned to work, she and Brue approached the superintendent with a job-share plan. Castellina agreed to give this a try but after one year it was decided that the position called for a single individual. Brue took over and was chief of interpretation until 2004, at which time she sought a transfer. Acting Superintendent Peter Armato, acting on Brue's suggestion, asked Jim Ireland to take over management of the interpretive program, recombining the interpretation and visitor protection divisions under the chief ranger as in 1996-97. As before, the reorganization was to be an interim arrangement pending the arrival of a new superintendent.[34]

Perhaps not surprisingly, the interim arrangement persisted for much longer than intended as the park encountered difficulty getting the chief of interpretation position funded again. Jim Ireland accepted the arrangement in the first place on condition that part of the savings derived from combining the two division chief positions would be reprogrammed to reduce or eliminate the furlough period of the permanent law enforcement staff, upgrade one GS-9 law enforcement ranger to a GS-11 supervisory position, and fill the vacant GS-11 supervisory position in the interpretive ranger staff created by Ranger Doug Capra's request to go back to a lower-grade seasonal job. Subsequently, the park retained the latter GS-11 position but it did not get the new GS-11 law enforcement position. As Ireland doggedly pursued the matter (with the backing of the new superintendent) he finally came to an impasse with the head of the Park Service's human resources office in Denver, Deb Burton-Orton. The ostensible reason given for

[33] Superintendent to KEFJ Seasonal Employees, November 7, 1996, File Correspondence 1996, Central Files, KEFJ.
[34] Amy Ireland interview by Diane Krahe, August 14, 2008; Brue interview.

denial of the park's request was that the law enforcement program was not complex enough to justify a GS-12 chief and a GS-11 supervisor. However, Burton-Orton later admitted in a protracted phone call with Ireland that the crucial factor weighing in the decision was the effect that the position reclassification would have on the park's budget. In truth, the position reclassification finally fell victim to the budget scalpels that appeared when the Bush administration required the Park Service to undertake its "core operations analysis" in 2006. This rankled, since position classifications were supposed to be based on duties, not budget considerations.[35] Three years later, the park was still pursuing options for what to do with the combined I & VP division.

The Changing Workforce

Besides its overall growth, the park staff changed in another important way from 1990 to 2004: it included a growing roster of local hires. ANILCA carries a local hire provision that allows parks to hire people for their "local knowledge." In practice, park managers interpreted the meaning of "local knowledge" in different ways and there was no consistency in how the legal authority was used. The local hires at Kenai Fjords were by and large people who had lived in the Seward area for many years and had acquired knowledge of the park resources through firsthand experience – often through prior volunteer service for the park. Some said that ANILCA's local hire provision was intended to support employment of Alaska Natives and to buttress park involvement with Alaska Native communities; therefore, use of the local hire provision to bring non-Natives on board without going through the usual Office of Personnel Management procedures seemed inappropriate.

If Kenai Fjords National Park's managers ever thought they were stretching the rules of local hire, they did so for practical reasons. The park faced a chronic seasonal housing shortage. Seasonal employee housing consisted of three cabins in the Exit Glacier area. These consisted of two prefab units built in the mid 1980s and a public use cabin built in 1992, the latter open to visitors in the winter. Two of these cabins accommodated two people each, and the third accommodated four. None of the cabins had running water, so tenants had to come to town for a hot shower. After 2005, the Mai House in Seward could quarter another person or two (until such time as it was razed in preparation for a new visitor center). Altogether, that added up to ten maximum. Additional non-resident seasonal employees were left to their own resources. Since the town of Seward had a tight and expensive rental market, it made the hiring of seasonals who were not already established in the community more difficult.[36]

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[35] Jim Ireland, comments on draft report.
[36] Connie Anthony interview by Diane Krahe, August 12, 2008; Mow interview.

Starting in 1998, the park was mandated to develop a fee demonstration program at Exit Glacier, which in turn created a need to hire a large number of fee collectors. Castellina, together with Jim and Amy Ireland, saw an opportunity to make these jobs available for local people. The fee collectors were called "visitor use assistants" and the positions were classified as GS-3 and GS-4 (for supervisors). Visitor use assistants spent approximately half their time in the fee collection booth and half their time providing interpretive services in the Exit Glacier area. Combined with the GS-5 interpreter and GS-7 boat interpreter positions, the visitor use assistant jobs offered a seasonal career ladder for local people who were interested. With the prospect of advancement, a number of local high school and college students returned year after year.[37]

Hiring locally had a cumulative effect as local people gained experience on the

Figure 20. Park staff, winter 1991-92. Front row: Bud Rice, chief of resource management; Mike Tetreau, resource management specialist; Maria Gillett, chief of interpretation; Bill Stevens, maintenance worker/boat operator. Back row: Anne Castellina, superintendent; Marilyn Holland, secretary; Peter Fitzmaurice, chief ranger; Ida Murdock, administrative assistant; Elsie Dillewaard, administrative technician; Tim Steidel, intake ranger; Jim Pfeiffenberger, Exit Glacier seasonal ranger. (Kenai Fjords National Park photo.)

park staff (often starting out in volunteer positions) and as the community came to perceive the park as a good place to work. Castellina cultivated that positive perception by the community. Over the years, longtime employees at Kenai Fjords National Park, some of whom had been local hires themselves at one time, detected a considerable change in the workforce. "Now the vast majority of our seasonal people are local people

[37] Jim Ireland comments on draft report.

who have lived here for 30 years and who work here summer after summer," says Jim Pfeiffenberger. "The park is now much more integrated into the community."[38]

The park also recruited seasonal employees from minority populations. This initiative came in response to the Park Service's national diversity recruitment effort announced in 1999. Superintendent Castellina and other park staff made trips to historically black and Hispanic colleges in Baton Rouge, Louisiana and San Antonio, Texas. Most of these recruits were hired as visitor use assistants and placed in the fee demonstration program.[39]

Trail Plan

In 1990, Castellina tasked biological technician Mike Tetreau with preparing a trail plan for the park. Tetreau's trail plan took inventory of the existing trails, classified trails so that improvement or maintenance of each one would be to a prescribed standard, and identified areas for potential new trail development. The trail plan was minimalist. Aside from upgrading the Harding Icefield Trail, which was underway when Tetreau wrote the plan, it did not call for much change to the existing trail system.[40]

The trail plan listed just 5.14 miles of constructed and maintained trails, all in the Exit Glacier area. The "trail" category was subdivided into frontcountry and backcountry trails, with different prescribed standards for width of tread, height and width of clearing, and steepness of grade for each type. It listed an additional 4.82 miles of "routes." User-defined by markers such as cairns or flags, routes currently required no maintenance other than replacement or repair of markers as needed. However, routes would be monitored for increased use, and if necessary, might be upgraded to backcountry trails at a later time in order to protect resources. The plan also identified five "major historical trails and roads" to mine sites. The plan did not require maintenance of this group either but simply noted them for their historical value and possible future use as hiking trails.[41]

The trail plan identified three areas for potential new trail development. The first was a winter route from Exit Glacier to Placer Creek along the west side of the Resurrection River. The second area was the Nuka River drainage, where the potential existed for a backcountry trail from the park boundary near the terminus of the Nuka Glacier down the Nuka River to Beauty Bay. This development was largely contingent

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[38] Jim Pfeiffenberger interview by Diane Krahe, August 14, 2008.
[39] Jim Ireland, comments on draft report.
[40] Mike Tetreau, "Kenai Fjords National Park Trail Plan," December 14, 1990, Series D30, Central Files, KEFJ.
[41] Routes inventoried were Upper Harding Icefield Route (later ugraded to backcountry trail), Placer Creek Cabin Route, Addison Lake Route, Delight Lake Route, and Desire Lake Route. Historical trails and roads inventoried were Babcock Creek Road (Palisade Lagoon), Alaska Hills Property Road (Beauty Bay), Little Creek Property Trail (Beauty Bay Mine), Nuka Bay Mines Company Trail (Beauty Bay), and Nukalaska Mine Road (Shelter Cove).

on whether the Bradley Lake hydroelectric project would result in public access to Bradley Lake and recreational use of that area. It was the same route for a recreational trail that Don Follows had proposed in the 1970s. The third and final potential new trail would be a kayak portage trail over the spine of the Aialik Peninsula. The portage trail had also been proposed in the 1970s. Its purpose would be to give sea kayakers a way to reach Aialik Bay without having to go around the exposed Aialik Cape. The the plan listed two possible routes, one from Agnes Cove to Paradise Cove, the other from South Pony Cove to Chat Cove.

Public Use Cabins

In 1992, Senator Stevens put $500,000 into the Interior appropriations bill for construction of public use cabins in Alaska's parks. Authorization for new cabins was found in ANILCA, Section 1315 (d), which states in part: "Within wilderness areas designated by this Act, the Secretary or the Secretary of Agriculture as appropriate, is authorized to construct and maintain a limited number of new public use cabins and shelters if such cabins and shelters are necessary for the protection of the public health and safety."[42] The regional office formed a special task group to oversee how this allotment would be used. Task group members started with the impression that Senator Stevens wanted the public use cabins distributed among several parks, but a review of general management plans for the several parks revealed that just one, Kenai Fjords, called for such development. So almost the entire allotment went to Kenai Fjords, and a total of four public use cabins and one public use shelter were built with it.[43]

The project raised some eyebrows, since the Park Service generally did not favor new development in designated wilderness or, as in the case of Kenai Fjords, in areas suitable for wilderness designation. Some of the conservation groups questioned it, but did not strongly object.[44] What made Kenai Fjords an exceptional case was the severity of the coastal climate. It was suggested that public use cabins would offer a valuable refuge for wilderness kayakers caught in a long stretch of foul weather, which was not uncommon on the coast. Such a refuge would provide safety as well as comfort. Moreover, the public use cabins would tend to concentrate backcountry use at a few points along the park's 400-mile shoreline, making the job of resource protection easier. Resource managers often preferred to concentrate use at a few selected sites that were "hardened" (for example, with pit toilets and designated fire pits) so as to minimize

[42] Quoted in National Park Service, Alaska Regional Office, "Environmental Assessment, A Proposed Public Use Cabin, Aialik Bay, Kenai Fjords National Park, Alaska," June 1992, Series L7617, Administrative History Files, Archives, KEFJ.
[43] Richie interview. A small portion of the allotment was used to build tent platforms along the Chilkoot Trail, with the rest going to Kenai Fjords.
[44] Gilbert interview.

resource impacts. Alternatively, resource managers tried to spread use and resource impacts over a wide area so they were diffuse, but the latter approach was not suited to Kenai Fjords, where backcountry use, restricted by the extremely rugged topography, tended to concentrate along the highly visible and biologically sensitive shoreline. For these reasons, development of the public use cabins went forward without much opposition.[45]

Figure 21. Aialik Bay Public Use Cabin in 2008. (Photo by Theodore Catton.)

At the same time, the park recommended a public use cabin at Exit Glacier and a public use shelter at the end of the Harding Icefield Trail. Neither of these buildings were within the area recommended for wilderness so they did not raise as much concern. Functionally, the cabin at Exit Glacier would be available for public use in the winter and for seasonal employee housing in the summer. The shelter would be for public safety in inclement weather and it would serve as a place to store emergency medical supplies and equipment.[46]

Finding suitable locations for the public use cabins along the coast was difficult. Each site had to have accessible beach, a view, a source of fresh water, and a suitable location for a pit toilet where the waste would not leach into the water table. Further, it had to be clear of archeological sites and sensitive habitat such as bald eagle nests. In addition, preference was given to locating each cabin on Native selected land. Both ANILCA and the GMP called for locating such cabins on Native land whenever practicable. The intent was that the government would lease the property from the Native corporation for public use, thereby providing the Native corporation with a small amount of revenue and drawing the Native community and the park into a closer partnership.

One public use cabin already existed. The Aialik Bay cabin had been built by a crew from the Alaska Vocational and Technical College in 1985. It was on Native selected land. The four new cabins were built at Exit Glacier, Holgate Arm, North Arm,

[45] Castellina interview.
[46] National Park Service, Alaska Regional Office, "Environmental Assessment, Construction of a Public Use Shelter, Harding Icefield Trail, Kenai Fjords National Park, Alaska," June 1992, and National Park Service, Alaska Regional Office, "Environmental Assessment, Construction of a Public Use Cabin Exit Glacier, Kenai Fjords National Park, Alaska," May 1992, Series L7617, Administrative History Files, Archives, KEFJ; Castellina interview.

and near Delight Lake. The public use shelter was built at the edge of Harding Icefield. After Native selected lands were conveyed, only the Aialik Bay and Delight Lake cabins stood on Native land.[47]

The design plans for the cabins included exposed trusses and wide, covered front porches so that wet gear could be hung up and spread out to dry. The cabins were all built to the same specifications but each one was given a unique façade, siding material, and color scheme to harmonize the cabin with the setting.[48]

The three coastal cabins were in such remote locations that the regional office task group was hard pressed to find a builder. "We beat the bushes a bit," Brad Richie remembers. At last they received a proposal by the chief of maintenance at Wrangell St. Elias, Will Tipton. Tipton offered to serve as project foreman and head up a team of temporary laborers from the Glennallen area. The regional office task group acted as general contractor for the project, purchasing material, shipping the material to Seward, and chartering boats to transport the laborers and materials to the cabin sites. The coastal cabins were all built by Tipton and his crew in the summer of 1992.[49]

The cabins proved to be popular. The park introduced a reservation system. It made bookings beginning on January 2 of each year, and popular dates were booked within days. The park instituted stay limits (three days at Aialik and Holgate cabins, more at North Arm) to allocate use more equitably. In 1998, Chief of Interpretation Amy Ireland worked with the Anchorage Alaska Public Lands Information Center to transfer the reservation system to that office.[50]

The Interpretive Program

In 1990, the interpretive program was still focused exclusively on the park's two frontcountry areas. The visitor center in Seward had photo exhibits, book displays, and an information counter in the main lobby and audio-visual programming in the small auditorium. The building was open seven days a week from Memorial Day to Labor Day and five days a week during the rest of the year. Two outdoor kiosks were located on the wharf behind the visitor center. The kiosks had three panels each, which oriented visitors to the park as well as the nearby portion of the Chugach National Forest, Caines Head State Park, the Alaska Maritime Wildlife Refuge, and Seward. At Exit Glacier, there

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[47] The U.S. and Port Graham Corporation entered a lease agreement for Aialik Bay cabin for five acres "in the event of conveyance" of the property from the U.S. to Port Graham Corporation. (Series L1425, Administrative History Files, Archives, KEFJ.)
[48] Richie interview.
[49] Richie interview. The ice field shelter (the designation changed from "public use shelter" to "emergency shelter") was built by park maintenance workers Rick Smeriglio and Ray St. Amand. (Mike Tetreau comments on draft report.)
[50] Jim Ireland, comments on draft report.

were exhibits in the ranger station and wayside exhibits along the handicapped-accessible trail out to the glacier as well as on the loop nature trail on the edge of the outwash plain. There was also a bulletin board with map and safety information in the parking lot at the trailhead and a second bulletin board in the small campground. Personal services programs featured naturalist-led hikes to the base of the glacier and all-day hikes to the ice field.[51]

Karen Gustin, the park's first chief of interpretation, made some strides in expanding the program but she worked in the shadow of the *Exxon Valdez* oil spill cleanup and transferred to Albright Training Center at the beginning of 1991. By the end of Gustin's short tenure she had initiated contacts with area schools to develop an environmental education component of the interpretive program, and she and Castellina were also having conversations with the tour boat companies about putting interpretive rangers on tour boats – an innovative idea for the time that would bear fruit in the mid 1990s.[52]

In April 1991, Maria Gillett was hired as the new chief of interpretation. Several things happened that year to spur growth of the interpretive program. The park received a large base funding increase, which allowed the park to hire more seasonal interpretive rangers. In addition, a new environmental education initiative, based out of the Washington office, facilitated the hire of a part-time environmental education specialist, Katy Toth-Stauble, who was tasked with developing programs for area schools and child day care centers. A new cooperative agreement with the Seward Chamber of Commerce brought outside funding from that group for increased staffing of the Exit Glacier Ranger Station. Altogether, the seasonal interpretive staff for the summer of 1991 included a dozen people: four interpretive rangers, an environmental education specialist, a co-op student, two Volunteers in Parks (VIP) interpreters, one SCA interpreter, two Chamber of Commerce interpreters, and the Alaska Natural History Association sales director. With more interpretive staff than ever before, the park was able to expand personal services, offering evening programs seven days per week at the visitor center, daily dockside walks, daily nature walks at Exit Glacier, and weekly hikes to Harding Icefield. Interpreters talked on a range of topics, including natural history, Native Alaskan storytelling, and the Russian history of Seward.[53]

During all the activity surrounding the oil spill disaster, the park outgrew the visitor center in Seward. As early as 1993, Castellina announced that she was interested in developing a new visitor center because the existing facility was getting too crowded. It was not just office space that was in short supply, but visitor space as well. "One

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[51] Division of Interpretive Planning, Harpers Ferry Center, "A Plan for the Interpretation of Kenai Fjords National Park, Alaska, 1990," October 10, 1990, Series K1817, Administrative History Files, Archives, KEFJ.
[52] Superintendent's Annual Report, 1991, Annual Narrative Reports, Central Files, KEFJ; Gustin interview; Capra interview.
[53] Superintendent's Annual Report, 1991, Annual Narrative Reports, Central Files, KEFJ.

busload [of visitors] dropped off at the front door and we're maxed out," she told a reporter. "We have to put them through movies in shifts."[54] Castellina entered discussions with the Forest Service about a new facility that would co-locate administrative offices and a visitor center for both the Park Service and the Forest Service. The Seward community supported the idea.[55] Unfortunately, the complicated interagency planning for what eventually became known as the Mary Lowell Center followed a tortuous path and encountered obstacles that no one could have anticipated. In the meantime, the park staff had to make do with the existing building year after year.

The park staff's long-simmering frustration with the visitor center space was evident in the park's interpretive plan (2001). The description of the visitor center began:

> When a visitor walks in the front door, the first impression is that the building is a bookstore, as the Alaska Natural History Association (ANHA) sales area dominates the lobby. A staffed information and sales desk is located at the rear of the lobby. There is a mural of the park ecosystem, some animal and bird specimens, and a few other random exhibits spread throughout the sales area. These exhibits are not theme-based and do not provide any introduction to the park. The space is too small to function as a sales area, exhibit area, and information desk. A small exhibit on coastal backcountry trip planning is located near the rear exit of the building.[56]

The description continued with references to the "outdated" and "poor quality" slide show, which did not provide a good orientation to interpretive themes. Park staff also felt that the building's location next to the small boat harbor confused many visitors. Some visitors thought the visitor center was where they would start a boat tour, others thought they were already in the park, and many, it seemed, failed to comprehend that the park extended over a vast area on the other side of the skyline behind the town. Another problem with the visitor center was that it could not be closed through the slow winter months because the park administrative offices were accessed through the front door. Staffing the information desk in those slow periods was a waste of resources. Short of getting a new facility, there was not much that could be done to remedy these problems.

Park staff had more options when it came to improving visitor services at Exit Glacier. To meet growing demand, the Park Service hired more seasonal interpreters, provided more personal services, and added more wayside exhibits. It expanded and rerouted the trail system. The Exit Glacier Nature Trail, a one-half mile self-guided trail

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[54] Tom Kizzia, "Tourism Boom Outpaces Park Facilities," *Anchorage Daily News*, October 19, 1993.
[55] Anne D. Castellina to Sarah Baker, February 6, 1995, File DCP for VC and EG – 1995, Central Files, KEFJ.
[56] Department of the Interior, National Park Service, "Long Range Interpretive Plan, Kenai Fjords National Park, Alaska," 2001, Series K1817, Administrative History Files, Archives, KEFJ.

through alder and cottonwood forest and old glacial moraines, was improved with the installation of new fiberglass imbedded station plaques, which replaced three inferior exhibits dating to when the trail was first constructed in the mid 1980s.[57]

In terms of infrastructure, the main challenge that the interpretive program faced in the Exit Glacier area was how to locate fixed facilities in relation to the glacier, a mobile feature. When the glacier advanced, it destroyed the end of the trail; when the glacier retreated, it left the end of the trail short of where people wanted to go. Meanwhile, the young alder and cottonwood forest through which the trail was built began to mature, obscuring the glacier from former vantage points. A small pavilion with interpretive displays, located midway from the parking area to the glacier, once provided views of the glacier over the tops of the alder brush and made a good location for an exhibit on primary ecological succession. As the forest grew up around this site, it became necessary to change the interpretive material.[58]

Figure 22. Ranger-led walk to Exit Glacier, July 2001. (Digital Files, KEFJ.)

The interpretive program at Exit Glacier had to give due emphasis to visitor safety. As one major planning document explained, "The glacier mass is a compelling

[57] Tim Steidel, "A Funding Proposal for the Exit Glacier Self-Guided Nature Trail," June 13, 1992, Series H4217, Administrative History Files, Archives, KEFJ.
[58] Mike Tetreau, "Affects of changes in Exit Glacier terminus position on park facilities," December 1, 2004, Digital Files, KEFJ.

force, drawing visitors dangerously near to it. Because the ice is always moving, and large chunks can fall at any time, standing on or near the glacier is extremely hazardous. Education and additional staff are needed to alert visitors to this danger."[59] Infrastructure had to be strategically designed and located for the purpose of safeguarding visitors while still providing access nearly to the glacier itself.

By the mid 1990s, the interpretive program was expanding into various fields and activities beyond the traditional array of exhibits, audio-visual media, and ranger programs offered at Exit Glacier and the Seward visitor center. It was becoming more diverse. One impetus for this sweeping change in the interpretive program was the environmental education initiative of the first Bush administration, which was preserved – albeit with funding cutbacks – by the Clinton administration. Another important impetus was the strong emphasis that the Park Service placed on partnerships after its reorganization in 1995. A key element in the Clinton administration's National Performance Review, partnerships were promoted as a way to enhance government performance. As such, they became the new route for program expansion. The park's interpretive program acquired a number of partners, from educational institutions and tour boat operators to the Alaska SeaLife Center, which became a major partner through the creation of the Ocean Alaska Science and Learning Center (OASLC). While partnerships were supposed to make the agency less insular and more "entrepreneurial," they also required a lot of effort. Lisa Matlock, who served as the learning center's education specialist in 2001-02 and went on to do education outreach for Alaska Maritime National Wildlife Refuge, comments that partnerships "take constant care and feeding." She characterizes her two years at the park, when the learning center was getting started, as a "gigantic learning curve about partnerships." While Matlock remains strongly committed to the idea of partnerships in her present position in Homer, she emphasizes that partners do not usually see eye-to-eye about how to spend money or develop and run projects.[60] The Park Service's commitment to partnerships lay at the heart of how the interpretive program developed from the mid 1990s onward.

Perhaps the park's most important partnership – certainly its oldest and most solid partnership – was with Alaska Natural History Association (later renamed Alaska Geographic). This group was the history and science nonprofit organization for all the national parks in Alaska. Based in Anchorage, it also served 14 wildlife refuges and the Chugach and Tongass national forests. Unlike other partners, its mission was closely aligned with that of the park, since its purpose was to serve the park along with other federal conservation areas in Alaska. Its main function was publishing, and its publications included everything from pamphlets and trail guides to coffee table books and scholarly studies. As a nonprofit, the association donated some of the proceeds from

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[59] U.S. Department of the Interior, National Park Service, *Final Frontcountry Development Concept Plan, Kenai Fjords National Park, Alaska* (Denver: Government Printing Office, 1996), 7.
[60] Lisa Matlock, interview by Theodore Catton, August 4, 2009.

book sales to the several entities that it served, including Kenai Fjords National Park. Often the association paid for one seasonal employee in the visitor center. In 1997, the association opened a branch outlet in Seward and hired Tye Long as branch manager. Long's steady presence over the next decade proved to be a real asset to the park as she was practically another member of the park staff. [61]

The park's first major venture into the brave new world of partnering with private enterprise involved putting interpretive rangers on tour boats. Although such operations were rare in the national park system, a precedent existed in Glacier Bay, where ranger naturalists had been going aboard cruise ships since 1969.[62] Castellina suggested a similar program to Seward-based tour boat companies in 1990 but the companies declined. She raised the possibility again when the park hosted its first annual workshop for tour boat operators in 1995.[63] The following year, Major Marine Tours asked the park to offer interpretation on one of its boats on an experimental basis. Through the summer of 1996 and 1997, park rangers took turns providing interpretation on one boat, the *Kenai Star*. In 1998, the operation grew to include a second Major Marine Tours boat, the *Star of the Northwest*. As Major Marine Tours began to advertise that its boats came with park rangers on board, Kenai Fjords Tours decided it wanted to put rangers on its boats, too. There were a couple of seasons in which the two companies each emphasized their use of rangers in their advertising in order to gain an edge over their competitor, a dust-up that park staff bemusedly called "the ranger wars."[64]

In the case of Kenai Fjords Tours, park rangers had to be integrated into a company culture in which boat captains were accustomed to giving their passengers a running narrative from the pilot house. For a time, these boat captains wanted rangers to do roving interpretation on deck while they kept control of the public address system. Rangers found that roving interpretation wore thin after the first hour or so. After the park alerted company management that the system was not working very well, rangers finally won access to the public address system on these boats.[65]

Chief of Interpretation Maria Gillett oversaw the tour boat program in its first summer but transferred out in November 1996. Peter Fitzmaurice and Glenn Hart shared responsibility for the program the next year, and then Amy Ireland was hired in November 1997 as the park's third chief of interpretation, and she put a lot of effort into expanding and standardizing the boat tour operation over the next two years. In 2000,

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[61] Amy Ireland interview.
[62] Theodore Catton, *Land Reborn: A History of Administration and Visitor Use in Glacier Bay National Park and Preserve* (Anchorage: National Park Service, Alaska Regional Office, 1995), 170. The boarding operation was different in Glacier Bay. Since the cruise ships did not dock in the vicinity, the ranger naturalists boarded the tall vessels via a Jacob's ladder as they moved along at about five knots. In addition, a 100-pound footlocker with interpretive materials had to be hauled up a rope ladder and maneuvered into a side hatch. This was one of the trickiest aspects of the program in that park.
[63] Superintendent's Annual Report, 1995, Annual Narrative Reports, Central Files, KEFJ.
[64] Capra interview.
[65] Ibid.

she appointed Doug Capra, a retired school teacher in Seward who had been on the seasonal interpretive ranger staff since 1997, as her lead tour boat ranger. One of Capra's first assignments was to formalize the service by putting operating procedures into written form. He prepared a booklet that detailed how the ranger was to go aboard well before departure time, sign in, and attend to a list of duties before the passengers arrived. These pre-departure duties included testing the microphone, arranging interpretive materials such as animal skulls, pelts, and other specimens, and preparing for Junior Ranger activities. Then the ranger would greet passengers as they boarded, getting to know the audience for that day. After some preliminaries by the boat captain, the microphone would be handed over to the ranger, who would begin his or her interpretive program.[66]

Capra worked with the other seasonal interpretive rangers to ensure that these programs were thematic. "The challenge," Capra says, "is to do a thematic program within the context of a moving platform….On a boat you know what is probably going to happen but you never know when or where. It's a performance art. You have to put the program together on the move." Rangers could expect their passengers to see a sea otter on the trip, for example, but the sighting could happen at any point along the way. Weather conditions were another huge variable as rain, fog, or low cloud could limit how much rangers could point out on land. Nevertheless, rangers were trained to structure their program around an introduction, body, and conclusion. Carrying a cogent theme for a trip of several hours in length, when visible landscape features and wildlife sightings varied with each trip, was a test of communication skills.[67]

Sandy Brue, chief of interpretation from 2001 to 2004, states that the level of competency of the tour boat interpretive rangers was "extremely high" in her experience. When she came to the park in 2001, she was impressed by the level of training being given to seasonal rangers. The interpretive division and the resource management division worked together to cross-train seasonal law enforcement and interpretive rangers. Training ordinarily lasted for two weeks. Brue had worked in two other units of the national park system where there was no training program to compare with this; rather, new seasonal employees were simply made to job shadow someone for a few days and then start working. As a strong proponent of good staff training, Brue extended the training period at Kenai Fjords by another week. All tour boat interpretive rangers went through a week of instruction from Capra and became certified guides through the National Association of Interpretation.[68]

The tour boat companies helped make this high level of training possible. The park had a cooperative agreement with each company. Each agreement stipulated the number and length of tours to which the park would assign rangers and defined a number

[66] Ibid.
[67] Ibid.
[68] Brue interview.

of ranger positions to cover this service. The companies agreed to reimburse the park for labor costs plus extra costs for training, housing, equipment, and supplies. Altogether, the companies came to fund about a third of the total interpretive program. The park and the companies renegotiated these agreements each year.[69]

Park managers thought the tour boat operations were a great boon for the park. One advantage was that it freed the interpretive program somewhat from its space limitations in the Seward visitor center. Indeed, at one time Associate Director Denis P. Galvin suggested that the park could offer a similar program onboard the cruise ships docking at Seward. By using the ships' auditoriums, the Park Service could limit the need for expanded visitor facilities in Seward. "This could allow considerable flexibility in providing service to the various cruise ships which may visit Seward and would not leave NPS with an oversized visitor center if ships are drawn to other ports," Galvin suggested.[70]

The only drawback of providing interpretation on tour boats was that boat passengers did not actually set foot in the park. But the tour boats gave several thousand people each year the opportunity to visit the wild coastline while having minimal impact on natural resources. The park was so enthusiastic about it that it agreed to put rangers on tour boats that did not even go to the fjords. Kenai Fjords Tours ran a boat tour to Fox Island in Resurrection Bay, where passengers would disembark and have lunch at a lodge and then return to Seward in the afternoon. An interpretive ranger accompanied this tour and gave a slide presentation at the lodge.

Kenai Fjords Tours introduced a marine science boat that served as a floating classroom for school groups in the spring. This special boat tour ran for about four weeks in April and May. Taking school groups for one day at a time, the marine science boat went on a tour of Resurrection Bay, stopping at four places in the course of the tour. At each stop, the students, who were divided into groups, went to a new station onboard the boat. One station featured an aquarium, where students learned about life in the intertidal zone; another station taught students about plankton; another demonstrated turbidity; and at the fourth station they measured the water's salinity and other chemical properties. (The stations varied somewhat over the years.) Kenai Fjords Tours provided all of the science lab equipment. Generally the company's employees gave instruction at all but one of the stations. An interpretive ranger gave instruction at the fourth station.[71]

Meanwhile, the park moved into other areas of environmental education. This effort began in the local schools and it soon spread to outlying areas. Glenn Hart, environmental education specialist in the mid 1990s, arranged visits to Port Graham and Nanwalek where he presented science information in the classroom to young students.

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[69] Jim Ireland interview.
[70] Associate Director to Field Director, July 27, 1995, File Kenai Fjords NP Correspondence/Miscellaneous, Office of Planning, National Park Service, Washington, D.C.
[71] Jim Ireland interview; Capra interview; Matlock interview.

After a promising start this effort lapsed, mainly because the environmental education position was converted to a term position in 1995 and was unfunded in 1996. The position remained vacant until Lisa Matlock was hired in 2000. One of Matlock's main activities in the fall and spring was to lead school groups on trips to Exit Glacier. Mostly oriented to fourth-graders, the program drew participants from the Anchorage area and all over the Kenai Peninsula. Matlock also worked with Amy Ireland on preparing an activities booklet for the Exit Glacier field trips. The Exit Glacier curriculum and booklet featured "inquiry-based learning." Park ranger Jessica Stern completed the booklet after Matlock left.[72]

The park partnered with other institutions and agencies. In 1995, it provided training to a gathering of seasonal interpreters from various agencies located on the Kenai Peninsula.[73] After the Alaska SeaLife Center opened in 1998, the park began offering education programs at the new facility. In 2001, Matlock spent one week on the outer coast with seasonal interpreter Lena Williams observing and learning about an ongoing research project involving the black oystercatcher, so that Williams could present educational programs to the public on this subject at the Alaska SeaLife Center.[74]

The Alaska SeaLife Center became another key partner. The $56 million facility, funded in part by the settlement with Exxon, grew out of the marine animal rescue center that was established at the time of the oil spill. Located on the waterfront in downtown Seward where the ferry terminal had once stood, the Alaska SeaLife Center had a four-fold mission of rehabilitation, research, conservation, and public education. In its role of supporting public education, the Alaska SeaLife Center offered visitors a full fare of talks both in its exhibit areas and in a public auditorium at the center. These talks were given by the center's own staff, visiting scientists, and interpretive rangers from the park.

In the early 2000s, the park partnered with the Alaska SeaLife Center in offering science presentations to local schools. Lisa Matlock completed work on a large grant, Parks as Resources for Knowledge and Science, that Glenn Hart had secured for the park in the mid 1990s, which was a first step in reviving the lapsed program. In 2003, Jim Pfeiffenberger, the new education coordinator, made the first of what became annual trips to Port Graham and Nanwalek. On these visits, Pfeiffenberger presented information on marine science in the park that fit into the school curriculum's week-long unit on sea life. After a few years the partnership program expanded to include eight other Native villages near Katmai. As Pfeiffenberger returned year after year to Port Graham and Nanwalek, he valued the connection to the young people of those communities. Besides the immediate educational benefit for these children, he hoped that the connection was

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[72] Matlock interview.
[73] Superintendent's Annual Report, 1995, Annual Narrative Reports, Central Files, KEFJ.
[74] Matlock interview. Lena Williams was a Southern University student recruited by Castellina as a visitor use assistant for the new fee collection program, in response to the national diversity recruitment effort, and was among those who took advantage of the "seasonal career ladder" to advance to an interpretive ranger position in her second year.

seeding a greater awareness of the park that would bear fruit in future relations between the park and the Native communities.[75]

In 2004, the park celebrated the opening of the long awaited Exit Glacier Nature Center. When the interior furnishings were completed, its dominant interpretive display was a large relief model of the Harding Icefield and Kenai Fjords. This handsome exhibit gave visitors an instant understanding of the relationship between Exit Glacier and the vast ice field from which the glacier flowed. The relief model also put into perspective the relationship of the fjords to the ice field. It was an effective exhibit for conveying the park's interpretive themes of tectonic subsidence and glaciation. The selection of books for sale, with titles relating to climate, glaciers, and the ice ages, reinforced these themes.

Exit Glacier Area Planning and Development

As one of just two glaciers accessible by car from Anchorage, it was practically inevitable that Exit Glacier and its environs would undergo a transformation during the boom times of the 1990s. Park managers sought to preserve the rustic character of the place as the public knew it at the start of the decade, but by the end of the decade they could only approach that ideal. Visitor projections made in 1993 suggested that by the year 2008 the Exit Glacier area would receive nearly 4,000 people on busy days, double the use it received at peak times in 1993. Under the circumstances, the one-square-mile area at the foot of Exit Glacier saw perhaps the most intensive planning and development effort of any area of similar size in the Alaska Region.

To recap development that had already occurred since the park's establishment: a foot bridge was placed across Exit Glacier Creek in May 1982, the road bridge was opened in July 1986, the foot trail to Exit Glacier was built in 1988 and 1989, and improvement of the Harding Icefield Trail followed. With each new improvement, visitor use increased. In the 1990s, a series of upgrades in the Exit Glacier Road kept this pattern of spiraling use and development going. While the growth of visitor use of the Exit Glacier area was attributable in a general way to the boom in Alaska tourism and the expansion of cruise ship traffic to Seward, it grew by noticeable leaps that were directly tied to improvements in the Exit Glacier Road.

Changes to the Exit Glacier Road began in 1989 with a proposal by the Federal Highway Administration (FHA) to upgrade the major portion of the road, from the Seward Highway intersection to the park boundary, or 7.3 miles of its total length of 8.8 miles. The project primarily involved the FHA, private landowners, and the Forest Service, but numerous other agencies and individuals weighed in as stakeholders.

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[75] Pfeiffenberger interview. Also see section on "Village Outreach" in Ocean Alaska Science and Learning Center, "Semi-Annual Progress Report of Alaska SeaLife Center Activities as part of the Ocean Alaska Science and Learning Center," September 29, 2004, RINS 03-08-101, RM Files, KEFJ.

Various issues came up in relation to alternative realignments and design features. There were concerns about environmental impacts on the floodplain, wetlands, and wildlife habitat; right-of-way access; and how a gravel versus paved road would affect ambiance. For the Park Service, the major issue was how the project would influence visitation at Exit Glacier. The washboard surface and loose gravel inhibited some people who would otherwise drive it, and the narrow bridge over Box Canyon Creek prevented large tour buses from making the trip. Despite some people's preference to leave the road unpaved, the Park Service officially supported the project, emphasizing the value of making Exit Glacier accessible to more people. As considerable work and expense were involved in raising sections of the road out of the floodplain, this project stretched over more than a decade. In 1995, the first four miles was realigned, upgraded, and paved and the bridge over Box Canyon Creek was improved so that buses could go over it (although buses still did not have adequate parking space at Exit Glacier). In 1998, the remaining project was enlarged to include reconditioning and paving the 1.5 miles of roadway from the park boundary to the parking area, and expanding and paving the Exit Glacier parking area. The entire road project was completed in 2001. As anticipated, the improved road surface was an invitation for more people to visit Exit Glacier; park officials reported a perceptible increase in use as each leg of the road was paved.[76]

The road improvement project was still in its early stages when the park launched a facilities planning effort for Exit Glacier in 1993. Since the Exit Glacier area was the only portion of the park delineated as a development zone, it was decided that the plan should cover all visitor facilities, both at Exit Glacier and Seward, or the entire "frontcountry." Key to the park's planning assumptions was the park's projections of visitor use over the next fifteen years. It estimated that by 2008, annual visitation at Exit Glacier and the Seward Visitor Center would be double their current levels. The forecast was based on historic growth of park visitation coupled with the recent surge in cruise ship dockings in Seward, the anticipated opening of the Alaska SeaLife Center in 1998, and the upgrade of the Exit Glacier Road.[77] Actual increase in visitation would turn out to be less than projected; instead of a near 100 percent increase, the overall growth in park visitation over the next decade and a half would be closer to 44 percent.[78]

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[76] Gail McGillivray to Allen J. Stockman, February 27, 1989, Stockman to Scott Rustay, March 15, 1989, and October 5, 1990, Rustay to Interested Parties, March 18, 1991, and Anne D. Castellina to Kit Duke, September 9, 1991, Series D30, Central Files, KEFJ; Dave R. Gibbons to Jack Melton, January 9, 1998, File EG Road, Central Files, KEFJ; Jeff Troutman, "Prevent Major Impacts to Exit Glacier Area of Kenai Fjords National Park by Implementing a Carrying Capacity Plan," no date, File: Kenai Fjords NP Correspondence/Misc., Office of Planning, National Park Service, Washington, D.C.; Troutman interview.
[77] U.S. Department of the Interior, National Park Service, *Final Frontcountry Development Concept Plan, Kenai Fjords National Park, Alaska* (Denver: Government Printing Office, 1996), 5.
[78] In 1993, the park estimated 189,179 visitors; in 2008, it estimated 272,190 visitors. Since the 1993 figure did not include an increment of tour boat passengers while the 2008 figure did, the actual percentage increase was something less than 44 percent.

The planning team held public scoping meetings in Seward and Anchorage in September 1993. At these meetings, the public expressed a strong desire to preserve the pristine qualities and rustic character of the Exit Glacier area, while providing access for summer visitation and winter recreation. Specifically, the public voiced concern about insufficient parking space and congestion on the main trail at peak times, it expressed desire for a wider range of activities and types of experience such as additional trails, and it wanted to preserve wildlife habitat and avoid changes that would result in displacement of wildlife.[79]

The planning team distilled the park's concerns and the public's input into five goals for Exit Glacier area development. As revised by the park staff, these goals were expressed as follows:

- Provide the opportunity to experience the glacier in a predominantly natural setting at the edge of a wilderness;
- Provide interpretation which complements personal contact with the glacier as the primary visitor experience;
- Provide a network of trails which are of varying difficulty in order to allow for a variety of visitor experiences and to minimize crowding;
- Provide visitor facilities which are appropriate in location, size, scale and character, in order to minimize impacts on the natural and cultural resources of the park;
- Provide options for management of visitors during peak season.[80]

As the plan took shape, it described three alternatives for the Exit Glacier area: no action, minimum development, and moderate development. Under the minimum development alternative, the parking area would not be enlarged, effectively limiting use of the Exit Glacier area to the current capacity of the parking area. Under the moderate development alternative – the preferred alternative – the Park Service would add a larger visitor contact station and restroom facilities and it would pave the access road and parking area. It would enlarge the parking area by 50 percent, and retain the option to introduce a shuttle bus service if demand for parking were to exceed a certain threshold. At the request of the Office of Planning in Washington, a statement was inserted: "A carrying capacity study would be conducted to determine this threshold." In September 1995, the

[79] U.S. Department of the Interior, National Park Service, *Final Frontcountry Development Concept Plan*, 7.
[80] "Planning Assumptions and Goals, Kenai Fjords National Park Front Country DCP," April 5, 1995, File DCP for VC and EG 1995, Central Files, KEFJ. These goals were reproduced verbatim in U.S. Department of the Interior, National Park Service, *Final Frontcountry Development Concept Plan*, 8.

revised draft development concept plan and environmental assessment (DCP/EA) was released for public review.[81]

The Park Service received comments on the DCP/EA from just six agencies and organizations: the Alaska Wildlife Alliance, the Resource Development Council, the Eastern Kenai Peninsula Environmental Action Association, the City of Seward, the Office of the Governor, and the Chugach National Forest. At one end of the spectrum, the Alaska Wildlife Alliance supported the minimum development alternative and stressed that it did not want the parking area modified to accommodate diesel buses, whose noise and air pollution would be "completely inconsistent with a rustic wilderness experience." It opposed the moderate development alternative because it did not want to see an increase in vehicular traffic, nor new trail development and a new visitor contact station. It expressed concern that the moderate development alternative would allow for more public use, which would in turn have "severe" impacts on wildlife habitat and the character of the Exit Glacier area. Increased use of the Harding Icefield Trail was especially problematic. It suggested the potential for more human-bear conflicts and more damage to vegetation, noting "already, vegetation is being trampled as hikers disperse at higher elevations." The Alaska Wildlife Alliance argued that the only way to preserve the quality of the experience and protect the resources at Exit Glacier was to place limits on use. "A carrying-capacity study, similar to the study of use at Arches National Park, should be implemented in order to set appropriate limits at Exit Glacier," it urged.[82]

At the opposite end of the spectrum, the Resources Development Council (RDC) argued that even the substantial upgrade alternative fell short of what was needed. It wanted more parking than what the Park Service proposed, expansion of the walk-in camping area, more trail development, and more public use cabins. Notably, it warned against any thought of limits on use. "Alaskans are very protective of their access provisions and would aggressively oppose new access restrictions in a frontcountry zone," the RDC stated. In short, it wanted Kenai Fjords National Park to deliver on the promise made by ANILCA's supporters that the vast Alaska parklands "would eventually drive Alaska's economy by providing a stable foundation for tourism." While acknowledging that the purpose of the national parks was for the protection of natural resources as well as the public's enjoyment, the RDC contended that it made sense "to concentrate development within selected areas of the few parks that have road access, as

[81] Associate Director to Field Director, July 27, 1995, File Kenai Fjords NP Correspondence/Miscellaneous, Office of Planning, National Park Service, Washington, D.C.; U.S. Department of the Interior, National Park Service, Denver Service Center, *Draft Frontcountry Development Concept Plan Environmental Assessment* (Denver: Denver Service Center, 1995), ii.
[82] Matt Singer to Anne Castellina, December 12, 1995, File DCP – FY 96 Final Public Meetings & Comments, Central Files, KEFJ.

is the case with Exit Glacier."[83] The other four public responses ranged in between these two and were generally supportive of a substantial upgrade of facilities as outlined by the Park Service.

In March 1996, the Park Service issued a Finding of No Significant Impact, announcing that it would proceed with development of the Exit Glacier area along the lines of the "moderate development" alternative described in the draft DCP. In a nod to the pro-development RDC, it announced that the development would include expansion of the campground with a cooking shelter, three parking spaces, and two toilets. In a nod to conservation groups, meanwhile, it stated that resource protection and visitor management would include a shuttle system that would be elective and might become mandatory during peak periods if visitor use reached a certain threshold. One month after this announcement, the final plan was issued.

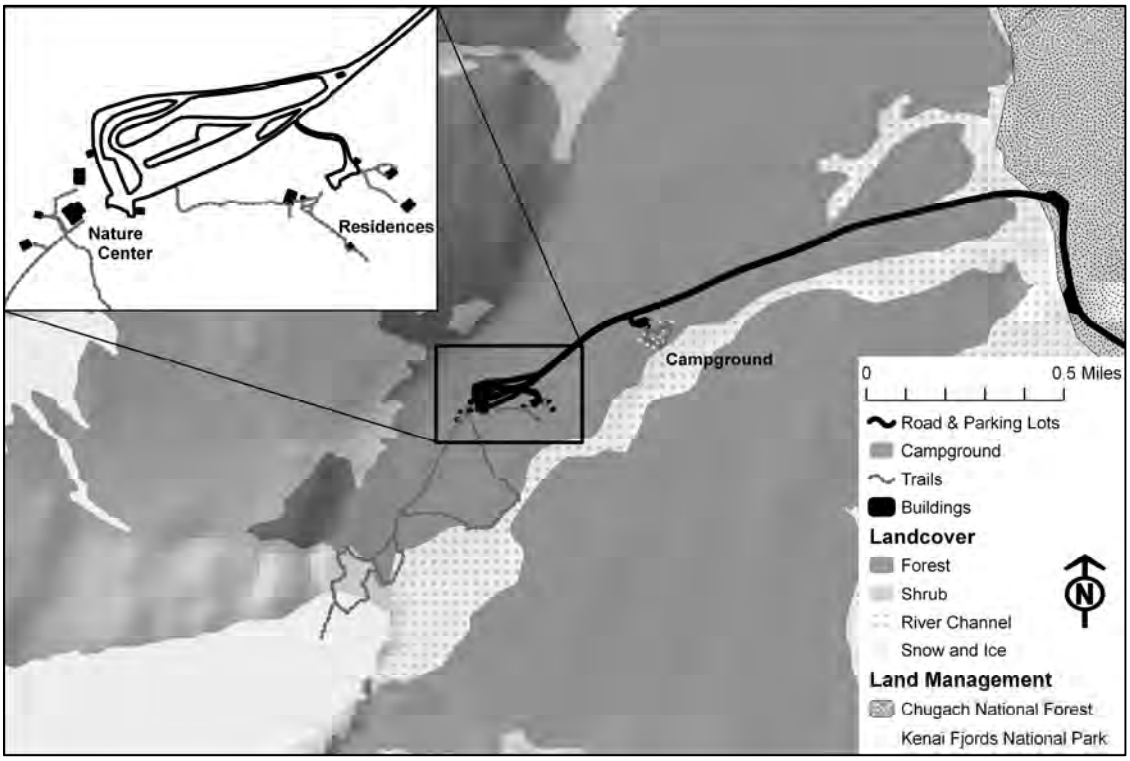

Figure 23. Exit Glacier Development Area.

Over the next eight years, new development followed mostly according to plan. The campground was expanded from ten to thirteen units, and a bear-proof cooking shelter or picnic pavilion was built. The road was paved from the park boundary to the parking area, and the parking area was completely redesigned and paved. Vault toilets were replaced by a permanent restroom building. The old ranger station was removed. Two items listed in the final DCP were modified. The DCP called for various changes to

[83] Carl Portman to Anne Castellina, December 18, 1995, File DCP – FY96, Final Public Meetings & Comments, Central Files, KEFJ.

the trail system, including constructing a trail to Ouzel Falls. No such trail was built. And the Nature Center that opened in 2004 was more modest than the 1500-square-foot facility that the DCP described. Still, it was a handsome structure built with native materials, and it fulfilled the desired functions of providing space for interpretive displays and serving as a shelter in inclement weather. It soon became a popular place for hiking parties to assemble before going out on the trail. A significant feature of the new building was that it was powered by a solid-oxide fuel cell, an experimental clean energy source, the first of its kind in the national park system.[84]

The same year that the DCP was completed, Congress enacted a law that sought to expand fee collection in national parks. Parks that enrolled in the program were allowed to keep 80 percent of the revenue they collected rather than turning it all over to a general fund. Each region in the national park system had to select pilot projects. The Alaska Region selected Kenai Fjords because the Exit Glacier developed area could be designated a user fee area. Castellina did not want to implement the fee demonstration program but she had to follow orders. She gave the project to Peter Fitzmaurice, who in turn gave it to Jim Ireland, who had just transferred to the park from Amistad National Recreation Area in Texas, where he had implemented the fee demonstration program in that unit.[85]

The park built a fee collection station near the end of the Exit Glacier Road and hired an auxiliary seasonal staff of fee collectors. Fee collectors went by the title of "visitor use assistants," and they split their time between the fee booth and roving interpretation at Exit Glacier. Most were local hires. Despite a high rate of turnover in these positions, the visitor use assistants provided regular, daily visitor services and constituted a much more robust staff presence in the area than had previously existed.[86]

The revenue from the program was not insignificant. Gross receipts averaged around $150,000 per year. Payroll expenses and other costs of the fee collection program amounted to about $50,000 per year. After deducting expenses and contributing 20 percent of what was left to a national pot, the park could use the other 80 percent on certain park projects. Over the next seven years, revenue from the fee demonstration program paid for the cook shelter in the campground and other amenities at Exit Glacier, as well as a metal building in the maintenance yard and various resource management work.[87]

Alaskans were outraged when the fee station was put in. ANILCA specifically prohibits entrance fees, and the fee booth looked just like an entrance station in a national park in the Lower 48. Alaskans with Golden Eagle Passports were especially upset when they learned that their annual pass did not cover user fees, only entrance fees. (In most

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[84] Castellina interview; "Alternate Fuel Source Tapped at Kenai Fjords," *National Parks* 78 (Fall 2004): 12-13.
[85] Jim Ireland interview.
[86] Jim Ireland interview; Jim Ireland comments on draft report.
[87] Jim Ireland comments on draft report.

parks, user fees were collected when a visitor took a tour boat or camped in a campground; collecting the user fee on the Exit Glacier Road confused the issue.) Finally, one of these patrons complained to the regional director, and from that day forward anyone who had a Golden Eagle Passport was exempt from paying the user fee. Still the program remained unpopular.[88]

The Exit Glacier Area Plan and GMP Amendment and Winter Use Policy

As anticipated, the Exit Glacier area experienced increasing use, which strained the Park Service's ability to preserve a quality visitor experience, especially during times of peak use. In the Finding of No Significant Impact that accompanied the DCP, Castellina and Field Director Robert Barbee commented as follows:

> The park's resource management staff has begun working on a carrying capacity study for Exit Glacier that will be completed before embarking on any of the more ambitious projects listed under alternative C (i.e. a new ranger station, expanding parking, etc.) The goal at Exit Glacier is to proceed carefully and incrementally to upgrade the current facilities, extend and improve access and yet retain the experience and environmental integrity that visitors have expressed the desire to retain.[89]

The carrying capacity study promised in this statement languished, however, as the park staff lacked personnel and resources to complete it. Over the years, carrying capacity studies by the Park Service had evolved into complex, interdisciplinary exercises that cost a lot of money. One reason for their complexity was that carrying capacity limits, while attractive to managers in the abstract, were difficult to defend in their particulars. When adopted elsewhere, carrying capacity limits had been challenged in court or, as in the case of the Park Service's ban on motorized use of river trips through the Grand Canyon, actually overturned by Congress.[90] As a result, managers wanted objective, measurable criteria with which to defend carrying capacity limits. According to the standards in place by the late 1990s, a carrying capacity study had to integrate a natural resource study component, a social science survey component, and a planning and public involvement component aimed at producing a GMP amendment. Each of these separate components involved separate funding sources, which effectively stymied the effort for the Exit Glacier area until more generous funding became available at the end of the

[88] Jim Ireland interview.
[89] U.S. Department of the Interior, National Park Service, *Final Frontcountry Development Concept Plan*, 22.
[90] Patricia E. Aspland and Katherine A. Pawelko, "Carrying Capacity: Evolution of Management Concepts for the National Parks," *Trends* 20, no. 33 (1983): 23-25.

decade. By 1998, however, the park staff was concerned that the park was managing the Exit Glacier area without the benefit of a carrying capacity study despite the DCP's mandate for one. In particular, park staff worried that when the Exit Glacier Road was paved, large tour buses would start coming. While the area was already absorbing large numbers at peak times, it was unclear what would happen when whole busloads of people were introduced into the setting. Would those "pulses" of pedestrian traffic following each bus's arrival push visitor use beyond the area's carrying capacity?[91] Chief of Resource Management Jeff Troutman finally cobbled together funding for the project in 1999.

The aim of the carrying capacity study was to identify numeric visitor capacities that would preserve the quality of the visitor experience. *Carrying capacity* in this context paralleled the carrying capacity concept used in range and wildlife management: it was the optimum sustainable population of a species (in this case, humans) in any given environment. But it differed in that *recreational carrying capacity* took into account human perceptions as well as human impacts on the environment. Use of the carrying capacity concept for visitor management evolved rapidly in the 1990s and in its newest form it was called the Visitor Experience and Resource Protection framework, or VERP. Like earlier recreational carrying capacity frameworks, such as the Limits of Acceptable Change framework that came into use in the previous decade, VERP rested on five basic elements, as described in the VERP handbook. These were: (1) a description of *desired future conditions* for park resources and visitor experiences, (2) identification of *indicators* or quality experiences and resource conditions, (3) establishment of *standards* that define minimum acceptable conditions, (4) formulation of *monitoring techniques* to determine if and when management action must be taken to keep conditions within standards, and (5) the development of *management actions* to ensure that all indicators are maintained within specified standards.[92] VERP used a combination of carrying capacities and management zones. Since the existing general management plan (GMP) already prescribed management zones, park staff decided that the VERP would require a GMP amendment and environmental assessment.[93]

Park staff began the project with $500,000 for natural resource and social science research. Spread over three fiscal years, a little more than half the research funding would come from the Natural Resource Protection Program (NRPP) and the remainder from the park base operating budget. The GMP amendment phases of the work would be funded by GMP planning monies. Park ranger Shannon Skibeness was appointed Exit

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[91] Troutman interview.

[92] U.S. Department of the Interior, National Park Service, *VERP: The Visitor Experience and Resource Protection (VERP) Framework: A Handbook for Planners and Managers* (Denver: Denver Service Center, 1997), 11.

[93] Jeff Troutman, "Prevent Major Impacts to Exit Glacier Area of Kenai Fjords National Park by Implementing a Carrying Capacity Plan," no date, File: Kenai Fjords NP Correspondence/Misc., Office of Planning, National Park Service, Washington, D.C.; Castellina interview.

Glacier Carrying Capacity Team Leader and was to devote full time to the project. Robert Manning, professor in the School of Natural Resources at the University of Vermont and author of the handbook on VERP, and Darryll Johnson, sociologist and director of the Cooperative Park Studies Unit at the University of Washington, were put on the team as technical consultants.[94]

Although use of the carrying capacity concept for visitor management in high-use areas of national parks was not unusual, it had been seldom seen before in the Alaska setting. Efforts to establish carrying capacities for the park road in Denali and for cruise ships in Glacier Bay had been highly controversial, and there were few other Alaska precedents. The term "carrying capacity" hinted at future restrictions on public use, and any move to restrict use in an ANILCA park was bound to run into a thicket of differing interpretations about what ANILCA had to say on the subject of public access and special allowances for "traditional use." This is what eventually happened for Kenai Fjords National Park. Two specific public-access/traditional-use issues arose. The first was the aforementioned fee system; the second involved winter use policy and snowmobile access.

Prior to this time, park managers had had relatively little to say about snowmobile use of the Exit Glacier area. In the superintendent's 1982 statement for management, it was said that "only a modest amount of snowmobiling and cross country skiing" occurred in the park, mostly in the Exit Glacier area.[95] In the 1984 GMP, snowmobiles were listed along with boats and aircraft as a form of "traditional" access to the park area.[96] The GMP provided little other guidance on winter use policy. In the early 1990s, park officials had cooperated with a citizens' group called the Exit Glacier Winter Recreation Planning Group to maintain winter trails for recreation. The group was composed of the Seward Nordic Ski Club, the Seward Mushers and Sled Handlers Association, and the Seward Riders Club, as well as local business people. Castellina had helped the group obtain a swing gate midway up the Exit Glacier Road so that the road could be closed to vehicular traffic following snowstorms. The group wanted to prevent four-wheel-drive trucks from driving the road after significant snowfalls or thaws because the vehicles would tear up the snow base and create deep ruts that would then freeze, making a poor surface for snowmobiles, skis, and dog sleds alike. This issue brought snowmobile users together with skiers and dog mushers.[97] The various types of winter users were also united in their support of development of the Exit Glacier area, including the addition of a public use cabin for winter use.

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[94] Jeff Troutman, "Prevent Major Impacts to Exit Glacier Area of Kenai Fjords National Park by Implementing a Carrying Capacity Plan," no date, File: Kenai Fjords NP Correspondence/Misc., Office of Planning, National Park Service, Washington, D.C.
[95] National Park Service, Alaska Region, "Statement for Management, Kenai Fjords National Park," 1982, Series D18, Administrative History Files, Archives, KEFJ.
[96] National Park Service, *General Management Plan, Kenai Fjords National Park, Alaska*, 46.
[97] Anne D. Castellina to Robert Boyd, December 18, 1991, File D30, Central Files, KEFJ.

In the winter of 1998-99, the Seward Military Recreation Camp purchased 20 snowmobiles and began renting them to soldiers so they could snowmobile out the Exit Glacier Road. Snowmobile use of the road suddenly increased to some 20 to 40 machines per day on occasion. People who enjoyed non-motorized winter recreation in the area were offended by the interruption of peace and tranquility. The situation turned acrimonious, polarizing the motorized and non-motorized users. When the non-motorized community advocated restrictions on motorized access, the motorized community mobilized broad support against any sort of ban.[98]

The park was caught in the middle. On one hand, the sudden increase in snowmobiles changed the wintertime ambiance at Exit Glacier, and the DCP called for preserving the quality of the visitor experience. Resource managers also worried that snowmobile users would attempt to ride onto the glacier or up the Harding Icefield Trail, either of which would be dangerous. On the other hand, the park had supported snowmobile access earlier in its history, and those snowmobile users who had been active in the citizens' group in the early 1990s thought that the park should maintain its commitment to motorized access.[99]

In this difficult situation two park employees stepped forward to mediate a solution. Jim Ireland and Mike Tetreau organized a citizens' forum, in which they got people on opposite sides of the issue to talk with each other in small breakout groups. The result was gratifying: a consensus-based effort to develop mutually acceptable protocols for sharing the resource. The thing that brought everyone together, it seemed, was a common desire to resolve the conflict at the local level without any further involvement by the federal government.[100]

As the park proceeded with the VERP for Exit Glacier in the early 2000s, the issue of snowmobile access eventually came to the fore, even though park officials had had no intention of giving so much emphasis to winter-use issues when they initiated the process. The problem was whether snowmobile use of the Exit Glacier developed area was properly termed a "traditional use." If so, then ANILCA's provisions on traditional use would apply and off-road snowmobile use would be allowed unless specifically prohibited. If not, then the code of federal regulations would apply and snowmobile use would not be allowed unless specifically authorized. The VERP team tried to downplay the issue, but the National Parks and Conservation Association (NPCA) and The Wilderness Society insisted that it be addressed.[101]

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[98] Jim Ireland interview.

[99] National Park Service, Alaska Regional Office, "Environmental Assessment, Construction of a Public Use Cabin, Exit Glacier, Kenai Fjords National Park, Alaska," Series L7617, Administrative History Files, Archives, KEFJ; Jim Ireland comments on draft report.

[100] Jim Ireland interview.

[101] "Discussion of Options for the Exit Glacier Area Plan/EA," July 6, 2004, File EG FONSI background, RM Files, KEFJ; Hall interview (2008); Jim Ireland interview. NPCA first engaged the issue in comments on the 1982 statement for management. "We realize that snowmobiling activities are allowed in the park through a legislative compromise in ANILCA," the NPCA stated. "The activity should be closely

Park staff prepared a white paper on "Snowmachine Use in Kenai Fjords," which aimed to ferret out all the various legal authorities and policies pertaining to this question. Citing ANILCA, the Code of Federal Regulations, Executive Order 11644 on use of off-road vehicles on public lands, the congressional record on ANILCA, and Kenai Fjords planning documents, the eight-page memorandum exhibited the many crosscurrents on this issue. The key language in the Code of Federal Regulations cited by the environmental groups was as follows:

> The use of snowmobiles is prohibited, except on designated routes and water surfaces that are used by motor vehicles or motorboats during other seasons. Routes and water surfaces designated for snowmobile use shall be promulgated as special regulations. Snowmobiles are prohibited except when their use is consistent with the park's natural, cultural, scenic and aesthetic values, safety considerations, park management objectives, and will not disturb wildlife or damage park resources.[102]

The NPCA contended that the Park Service must resolve whether or not snowmobile use was in fact a "traditional use" in the park. In the absence of a determination, the NPCA held, the system-wide regulation would be binding.

When the question over snowmobile use arose, the Park Service was then in the process of defining "traditional" activities in Denali National Park. The VERP team hoped that the problem could be resolved by adopting Denali National Park's definition when it became final. However, once "traditional" activities had been defined in Denali, the regional office decided that the definition was specific to that park. With input by Interior solicitor Chris Bochman, the regional directorate found that to apply the definition more widely (as in Kenai Fjords) would risk inviting a legal or political challenge to the definition that it did not want to incur at that time.[103] By this time, the Park Service had already published a draft environmental assessment in which certain alternatives would restrict snowmobile access. After due consideration, Regional Director Marcia Blaszak decided that the Park Service would issue a final plan and environmental assessment putting forward a "Modified Preferred Alternative" that simply excised the controversial points on winter use from the plan. Despite some people's feeling that the Park Service should resolve then and there whether snowmobile use within Kenai Fjords National Park was legitimately a "traditional" activity as stated in the

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monitored and limited to the Harding Icefield (access point at Exit Glacier) without expansion into other areas of the park." (T. Destry Jarvis to David E. Moore, June 28, 1982, Series D18, Administrative History Files, Archives, KEFJ.

[102] 36 CFR 2.18(c) quoted in Heather Rice and Terry Humphrey "Snowmachine Use in Kenai Fjords," June 9, 2004, with edits and additions by Jim Ireland, August 27, 2004, File EG FONSI background, RM Files, KEFJ.

[103] Jim Ireland comments on draft report.

GMP, the regional director found that the park did not have adequate documentation for such a determination and the only way forward was to put the matter aside.[104]

With regard to winter use, the *Final Exit Glacier Area Plan* allowed snowmobiles on the road and in the parking area, prohibited their use on the paved portion of the trail and in the pedestrian zone (the network of unpaved trails in the outwash plain), and took "no action" on winter use management of the other three zones. In other words, outside of the visitor facilities zone and the pedestrian zone, the Exit Glacier area would continue to be managed as a natural zone based on the 1984 GMP.[105] In the Finding of No Significant Impact that accompanied the final plan, the Park Service indicated that it would collect additional data on types and levels of winter visitor use, winter wildlife habitat utilization, and other relevant factors before it took action on winter use in the other three zones. It further noted:

> Under ANILCA Section 1110 (a), snowmachines may be used in conservation system units for traditional activities. The NPS intends to define the term "traditional activities" before further planning decisions are made for snowmachine use in the area. Until this term is defined, the NPS cannot determine what, if any, activities are traditional within Kenai Fjords National Park.[106]

Concerning summer use, meanwhile, the *Final Exit Glacier Area Plan* established five management zones and identified desired future conditions and allowable uses in each. The five zones were visitor facilities, pedestrian, hiker, backcountry semi-primitive, and backcountry primitive. It remained for the park to develop indicators and standards as well as monitoring techniques and management actions for each management zone. The VERP team had made a start on these components, and in 2006, Christina Kriedeman, biological technician, was tasked with refining them so that the plan would provide more complete guidance for management. Five years after the *Final Exit Glacier Area Plan* was published, the process of refinement was still underway. In addition to such longstanding concerns as competition over limited parking, crowded conditions on trails, and proliferation of social trails, Kriedeman worked with other indicators and standards such as the presence of exotic plants and the mix of natural and introduced sounds. By 2009, a major goal of the plan was to provide monitoring

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[104] Teleconference notes, July 6, 2004, and "Options for the Exit Glacier Area Plan," September 9, 2004, File EG FONSI background, Office Files, KEFJ.

[105] U.S. Department of the Interior, National Park Service, *Final Exit Glacier Area Plan, General Management Plan Amendment, Kenai Fjords National Park* (2004) at http://www.nps.gov/kefj/parkmgmt <May 12, 2008>.

[106] U.S. Department of the Interior, National Park Service, *Finding of No Significant Impact, Exit Glacier Area Plan and General Management Plan Amendment, Kenai Fjords National Park, Alaska* (October 2004) at http://www.nps.gov/kefj/parkmgmt <May 12, 2008>.

techniques that were feasible and affordable and to offer management actions that were on a gradient, beginning with non-controversial actions such as visitor education and progressing toward potentially controversial actions, such as limiting the number of hikers on the Harding Icefield Trail.[107]

Visitor Protection in the Backcountry

Visitor use of the backcountry increased over what it had been in the 1980s, although it remained minimal. Most backcountry use was by parties of sea kayakers. Jim Pfeiffenberger, who worked as a seasonal ranger in Aialik Bay, recalls that Northwestern Lagoon in the early 1990s "was a place where you felt like you could kayak and have it to yourself. Maybe there were five or six groups per summer; now there can be that many groups simultaneously."[108] It was the rare group that paddled all the way from Seward around the headlands to the fjords. Most groups were dropped off by charter boat in one of the fjords and were picked up again a few days later. People chartered fishing boats and launched their kayaks from the deck. Later, around the end of the decade, water taxis came into use. Water taxis were specially designed to make beach landings so that their clients could launch from shore. Due to the time and expense of chartering a vessel out of Seward, Aialik Bay received the most use by sea kayakers, then Northwestern Lagoon and Harris Bay, while McCarty Fjord and Nuka Bay received the least use (although charter air flights from Homer provided access to the more southerly coastal areas).

Kenai Fjords National Park was typical of parks (especially parks in the Lower 48) inasmuch as the small frontcountry area at Exit Glacier received most visitor use while the giant expanse of backcountry area received very little. To provide a minimum level of visitor protection in the backcountry the park continued to put two teams of two rangers on the coast each summer. As in the 1980s, the coast was divided into two sectors (informally referred to as districts), with one team stationed in Aialik Bay and the other in Nuka Bay. The Aialik Bay team had the ranger cabin at Coleman Bay but the living conditions for the Nuka Bay team remained quite primitive. The latter had just two platform tents, one for cooking and one for sleeping. Since these were not hard-sided, the Nuka Bay rangers had to take stronger precautions against bear trouble. Moreover, Nuka Bay was a damp and buggy place, and being so far from Seward it was very isolated. Radio communication with park headquarters was poor. The Nuka Bay rangers could call a Coast Guard radio station in Kodiak if they had an emergency. Under the

[107] Christina Kriedeman, interview by Theodore Catton, August 11, 2009.
[108] Pfeiffenberger interview.

circumstances, some rangers reveled in the adventure while others found it to be an ordeal.[109]

In the early years, the park tended to staff the coast with pairs of rangers who were new to the park and did not know each other. The social interaction between these two individuals in such a remote outpost was intense, and often by the second half of the season there was a lot of conflict and by the end of the season neither person was interested in coming back. The park experimented with using couples in these isolated duty stations and discovered that it generally worked better. Jim and Susan Pfeiffenberger were the third ranger couple to work on the coast when they were stationed in Aialik Bay for two consecutive summers in 1992 and 1993. They thrived on the experience and were grateful that the Park Service had begun to take a more positive approach to accommodate couples in the organization around that time.[110]

As with other coast ranger teams, Jim and Susan Pfeiffenberger were part of the resource management division and reported to its chief, Jeff Troutman, but they also had collateral law enforcement duties and reported to the chief ranger, Peter Fitzmaurice. Susan had the stronger background in biology and took the lead in resource management activities, while Jim had the law enforcement commission and took the lead in law enforcement activities. "Basically we would structure our days around whatever resource management project we were working on," Jim Pfeiffenberger recounts. If they were working on a survey of bald eagle nests, they would move along the coast looking for those, and if they sighted a group of kayakers they would go contact them. If they found someone in need of assistance, they attended to that situation. "We would pick up duties as we went," he explains.[111]

Emergency situations were rare. One evening, a kayak party washed up on the beach in front of the Aialik Bay ranger cabin, separated from its guide. A strong wind had come up and these kayakers were too weak to paddle against the white caps on the bay. The Pfeiffenbergers put the party in the zodiac and they went in search of the guide, who was also in a kayak. They found her out in the bay looking for her clients, soaking wet from the white caps and wearing only gym shorts and a bikini top. The Pfeiffenbergers then got them all back to the public use cabin. On another occasion, the Pfeiffenbergers saw a kayak party camped on the beach too close to Aialik Glacier. Before there was time to warn them the glacier calved a large chunk of ice, which sent a wave crashing into their campsite, soaking everyone and washing some of their gear into the bay. The Pfeiffenbergers helped them recover the gear and then asked if they needed further assistance. The leader insisted the party was fine, but one member appeared to be badly shaken. Jim Pfeiffenberger "strategically separated" this person from the leader

[109] Fitzmaurice interview.
[110] Pfeiffenberger interview.
[111] Ibid.

and asked her if she wanted help, whereupon she requested a ride back to the party's main camp.[112] Such incidents were typical of the coast rangers' search and rescue efforts.

In August 1998, a law enforcement and security team of the Department of the Interior conducted an audit of the law enforcement (LE) program at Kenai Fjords National Park. The team made one finding that had a sharp effect on visitor protection in the backcountry. It found that the LE chain of command was divided, with the seasonal rangers at Exit Glacier reporting to the chief ranger and the seasonal rangers at Aialik Bay and Nuka Bay reporting to the chief of resource management. It recommended that all LE personnel be in the same chain of command. Castellina duly consolidated the park's LE budget under the chief ranger beginning with fiscal year 1999. With the coast rangers formally pulled into law enforcement, it was no longer permissible to pair one LE ranger with one non-commissioned ranger in the field since the latter was not trained to provide backup should the LE ranger need to respond to an incident. The upshot of all this was that the park had to consolidate the two coast ranger teams into one, which henceforth made multi-day patrols on the coast while operating from a home base in Seward. The Park Service presence along the southern sector of coastline was reduced to almost nil. In some ways a step backward for the park, the reduction in force on the coast came about as part of the process of professionalizing the law enforcement function in the Park Service.[113]

The reorganization also took account of the increasing need for visitor protection services in Aialik Bay. Backcountry use of the coastal area increased in the late 1990s, largely as a result of an increase in commercial guide and water taxi services available in Seward. As Aialik Bay began to take on the character of a frontcountry area, receiving considerable day use, commercial operators showed more interest in taking clients farther south along the coast.[114] As visitor use increased, rangers dealt with more visitor mishaps and violations and issued more citations. In 1999, rangers assisted kayakers who ventured too close to Holgate Glacier and were swamped by a large wave created by calving ice. The rangers assisted the kayakers in recovering their boat and gear and then left them with their campsite "secured." That same summer, the ranger team assisted the U.S. Coast Guard in a rescue of boaters who were stranded on Bear Glacier beach after their boat capsized. Other backcountry users had to be instructed in proper food storage, and in one instance an area was closed after a brown bear obtained food.[115]

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[112] Ibid.
[113] U.S. Department of the Interior, Office of Managing Risk and Public Safety, Law Enforcement and Security Team, "Law Enforcement Policy Compliance Evaluation," Report No. PCE-05-1998, August 1998, and Superintendent to Associate Director, February 26, 1999, Office Files, KEFJ; Jim Ireland interview.
[114] Anne D. Castellina to Pat Norman, January 31, 2000, Series L1425, Central Files, KEFJ.
[115] Anne D. Castellina to Pat Norman, January 31, 2000, Series L1425, Central Files, KEFJ; Aialik Bay Rangers End of Season Report, 2000, Digital Files, KEFJ.

8

Charting the Unknown

Resource Management, 1990-2004

Toward a New Paradigm for Natural Resource Management – Origins of the Southwest Alaska Network – Black Oystercatcher Study - Black Bear Studies – Restoration and Rare Plants Protection - Glacier Studies and Landscape Mapping – Archeology – Collections Management – Historic Preservation - Ocean Alaska Science and Learning Center

Toward a New Paradigm for Natural Resource Management

When the oil slick from the ruptured tanker *Exxon Valdez* washed ashore in Kenai Fjords National Park, the disaster brought home how little resource managers and scientists actually knew about the coastal ecology of the park. In the nine-plus years since the park's establishment, nothing like a comprehensive biological inventory had yet been made. This circumstance was largely beyond park managers' control. Kenai Fjords, like other ANILCA parks, had had nowhere near the level of resource management staffing found in parks in the Lower 48 during the 1980s. If the level of staffing was expressed in terms of an acres-to-manager ratio, the gap between ANILCA units and other units in the national park system was profound.[1] In the decade following the *Exxon Valdez* oil spill, the Alaska Region would begin to close that gap. But in April 1989, personnel who were faced with a grueling and depressing damage assessment and cleanup effort felt a sense of shock when they contemplated the dearth of baseline information available to them.

[1] The Wilderness Society and other conservation groups made these comparisons often. In a 1990 publication, *The Alaska Lands Act: A Broken Promise*, The Wilderness Society stated that Kenai Fjords National Park had six full-time equivalent employees, or one employee per 9.2 million acres (p. 25). The NPS Alaska Region itself noted in 1988 that "there are currently two research wildlife biologists serving 53 million acres, one resource management specialist for each 3.1 million acres, and one research ecologist, one management biologist, and two full time subsistence specialists for the entire region." (National Park Service, Alaska Region, "A Comprehensive Resource Proposal," September 1988, p. 7, Alaska Resources Library and Information Service.)

One reason the oil spill disaster made such a powerful impression was that the Park Service had just begun to talk about the need for a comprehensive approach for gathering baseline information in all national parks. In 1987, it declared, "It is the policy of the National Park Service to assemble baseline inventory data describing the natural resources under its stewardship, and to monitor those resources forever – to detect or predict changes that may require intervention, and to provide reference points to which comparisons with other, more altered parts of the home of mankind may be made."[2] One year later, Congress supported the Park Service initiative with a new line item for inventory and monitoring in the budget, and the Park Service established the Inventory and Monitoring (I&M) Program, initiating pilot projects in four national parks that were already engaged in this type of field research.[3] In time, as the program took hold, I&M would become the Park Service's response to the challenge of ecosystem management.

It must be emphasized that another ten years would pass before the national I&M Program fully arrived in Kenai Fjords and actual field work commenced under that funding source. For reasons that will be explained below, the national program was a long time in the making. Still, the conceptual underpinnings of I&M began to influence resource management in the park as early as 1988 – when Dale Taylor, wildlife research biologist in the Alaska Region, invited resource management specialist Bud Rice to participate in an inventory and monitoring workshop in Anchorage – and in the 1990s it became clear that the I&M Program was moving the Park Service toward a new paradigm in natural resource management.[4] Thus, staff at Kenai Fjords were propelled in that new direction by two factors at once: near at hand, the lesson of the oil spill, and trickling down from higher levels in the agency, the growing influence of the I&M Program service-wide.

The oil spill acted as a catalyst for change in more than one way. It affected the natural resource management program psychologically as media reporting on the event thrust Kenai Fjords into the limelight in the worst possible circumstances. Televised images of oil-stricken birds and sea otters in Prince William Sound, on the Kenai coast, and at Katmai brought a national awareness of these pristine places at the very point when they ceased being pristine. If the passage of ANILCA in 1980 marked Alaska's passage from the nation's last frontier to the nation's last great wilderness, then the *Exxon Valdez* oil spill nearly a decade later created the psychological moment when the nation realized that its last great wilderness was still vulnerable. Public dismay over the event

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[2] Quoted in U.S. Department of the Interior, National Park Service, "Draft Standards and Guidelines for Natural Resources Inventorying and Monitoring," December 1987, KEFJ 13605/N/012, Administrative History Files, Archives, KEFJ.

[3] Associate Regional Director to Superintendents, October 27, 1988, KEFJ 13605/N/012, Administrative History Files, Archives, KEFJ.

[4] Inventory and Monitoring Questionnaire, undated, and Wildlife Research Biologist to Regional Chief Scientist, undated memo on Inventory and Monitoring Workshop, KEFJ 13605/N/012, Administrative History Files, Archives, KEFJ.

led Congress to drop any further consideration of the first Bush administration's initiative to open the Arctic National Wildlife Range (ANWR) to oil drilling.[5] Less dramatic but more relevant for Kenai Fjords, Congress also passed a law that strengthened protection of coastal resources from the threat of future oil spills.[6]

The oil spill led to more funding for resource management in Kenai Fjords. During the crisis, the Park Service resorted to emergency spending and Congress supported its action.[7] As a result, the park obtained its first raw burst of biological inventories in April 1989. Additional seabird and marine mammal surveys were conducted in the summer of 1989 and the following year using oil spill response funds.[8] After the nearly $1 billion settlement with Exxon Corporation, the Exxon Valdez Oil Spill Trustee Council began funding research projects relating to resources damaged by the spill. However, the trustee council distributed far larger sums for research to multiple-use agencies than it did to the Park Service. That imbalance stemmed in part from the trustees' emphasis on the Prince William Sound area that had been hardest hit by the disaster, in part from weak Park Service access to the trustee council's decision process, and in part from the limitations of the park's resource management staff, which was simply too small to document damages and apply for grants on a level with competing agencies.[9] The park did eventually obtain one substantial though indirect boost to its science program from the Exxon settlement. With the help of settlement money, Seward's animal rescue center evolved into the $56 million Alaska SeaLife Center in 1998. That led in turn to the establishment of the Ocean Alaska Science and Learning Center (OASLC).

Ironically, it was in January 1989, less than three months before the oil spill, that the Alaska Region held an inventory and monitoring workshop in Anchorage and invited all resource management specialists based in the Alaska parks to participate. In advance of this workshop Bud Rice completed the questionnaire for Kenai Fjords, and then used it to compile a list of research and resource inventory and monitoring projects currently underway in the park. Although it was not his intention, Rice's list revealed how thin the park's baseline information was at this crucial moment in the park's history.

Rice's list contained eleven items, half of which related to climate, water, or topography rather than flora and fauna. They were:

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[5] Nelson, *Northern Landscapes: The Struggle for Wilderness Alaska*, 255.

[6] Oil Pollution Act of 1990, P.L. 101-380, 104 Stat. 484. Section 7001 c (4) of the act established a research program to monitor and evaluate effects of oil discharges on natural systems, including ecologically sensitive areas (104 Stat. 561). When Peter Armato was hired as coastal ecologist, the position was funded at $150,000 under a separate congressional authority. However, as the position was intended to serve a cluster of units and problems arose, half that money was eventually added to base funding for Katmai and Lake Clark and was effectively lost to Kenai Fjords.

[7] Kurtz, *Lessons to be Learned*, 32-33.

[8] National Park Service, *Resource Management Plan, Kenai Fjords National Park* (Anchorage: Alaska Regional Office, 1994), 25.

[9] Kurtz, *Lessons to be Learned*, 71-75; "Research Needed in Alaska Parks," *National Parks* 73 (March/April 1999): 20-21.

1. *Weather*. The NPS collected temperature and precipitation data all year at Exit Glacier and during the summer at Aialik Bay and Nuka Bay.
2. *Snow*. The Soil Conservation Service collected data on snow depth near the Nuka Glacier for runoff prediction.
3. *Stream gages*. The NPS had a stream profile gage site near the Nature Trail below Exit Glacier, where it took readings from May through October, and it had installed stream gages in streams below mining claims at Nuka Bay.
4. *Glacier photography*. The NPS compiled images of the surface of Exit Glacier from a remote camera on loan from the University of Alaska Fairbanks.
5. *Mapping*. The U.S. Geological Survey was engaged in mapping exposed rock surfaces in the Seldovia Quadrangle, which included the area of the park.
6. *Lichenometry*. Piggybacking on the U.S. Geological Survey's mapping project, Rice had been taking measurements of *Rhizocarpon geographicum*, or map lichen, to attempt to establish growth curves and length of time that nunataks had been exposed. While visiting these nunataks, Rice also collected plant specimens for the park's plant inventory.
7. *Wetlands*. The U.S. Fish and Wildlife Service had field checked vegetation typing for the National Wetlands Inventory.
8. *Bald eagles*. The NPS monitored bald eagle nest sites each summer during July in an effort to track the eagle population and recognize adverse impacts to the coastal eagle population.
9. *Gull colonies*. The NPS surveyed two Glaucous-winged gull colonies on deglaciated islands in the fjords each summer in mid-June to monitor reproductive rates and changes in colony populations.
10. *Marbled murrelets*. The NPS had recently entered into a cooperative agreement with Forest Service researcher C. John Ralph of the Redwood Sciences Lab in Arcata, California to locate nesting sites and habitat of the marbled murrelet.
11. *Campsites*. The NPS made an inventory of backcountry campsites along the coast and monitored conditions around each one.

In the same memorandum, Rice compiled a list of the park's research needs, as follows:

1. *Fishery baseline study*. Little was known about the park's fishes. Most species found in the park were anadromous, spending part of their life cycle in freshwater streams and part in the ocean. In areas recently covered by retreating glaciers, streams were being newly colonized by anadromous fish. Some of these populations were being commercially harvested. The NPS needed to inventory and monitor these populations.

2. *Vegetation succession at Exit Glacier*. As one of the most heavily visited park areas in Alaska, vegetation succession had a high profile in this locale. The NPS needed vegetation succession studies for interpretation and management.
3. *Mountain goats at Exit Glacier*. The NPS needed to determine if the human presence in the area was affecting mountain goat use of the area.
4. *Black bear home range study*. It was thought that black bears in the Kenai Fjords had the smallest home range of black bears anywhere. The NPS needed to study the black bear's home range and habitat use on the coast so as to give the animal adequate protection.
5. *Harding Icefield*. Little was known about the ice field and the NPS needed better knowledge for interpretation and visitor protection, particularly if an ice field tour operation were to materialize.[10]

In the aftermath of the oil spill, the first indication that resource management was acquiring a new footing in Kenai Fjords came at the end of 1990, when Superintendent Castellina reorganized the park administration and made resource management a separate division. With the help of an increase in the park's base funding, Rice was promoted to chief of the division and Mike Tetreau was hired into a new, full-time, biological technician position. Together, they prepared a draft resource management plan for the park (finalized a few years later in 1994). At the end of 1991, Rice took another promotion and moved to the regional office in Anchorage, where he kept a hand in the park's resource management issues. During those pivotal years from 1989 to 1991, the resource management staff began to step up the park's inventory and monitoring, as well as reassess earlier studies.

One such reassessment involved the bald eagle survey. No other study was so revealing of the influence that the national I&M Program began to exert on the park's resource management staff in the early 1990s. Beginning in the early 1980s, coastal rangers had included an inventory and monitoring of bald eagle nest sites as part of their seasonal activities. The coastal rangers focused on the bald eagle because it was one of the park's sensitive species. They mostly conducted the bald eagle survey during June and July of each summer. The survey consisted of inventorying all active nest sites and monitoring them year after year to learn whether the nests remained active and how much reproduction occurred. However, without consistent survey protocols, results were inconsistent. For example, rangers' observations of each nest varied from as little as fifteen minutes to several hours. Nests were generally observed from below, by Zodiac boat, although when conditions were right rangers went ashore to look for sign on the ground underneath the nest. In the summers of 1989 and 1990, biologists with the Fish and Wildlife Service conducted their own bald eagle survey by helicopter. From their

[10] "Research and Resource Issues, Kenai Fjords National Park, Alaska," January 1989, File RM – RM Planning and Research, RM Library, KEFJ.

vantage point looking down on the nests, the FWS biologists could sometimes make more accurate counts of the number of chicks in each nest. Weather conditions formed another variable for both survey methods. When the park's data set and the FWS data set were compared, managers discovered numerous differences in how the nests were categorized and observed, which limited the reliability of the data.[11]

In response to the *Exxon Valdez* oil spill, the Park Service seized upon bald eagle inventory and monitoring data as one slender reed on which to track ecosystem changes before and after the disaster. Accordingly, Anne Hoover-Miller was contracted in 1989 to perform the first compilation of information on past surveys and observations of bald eagle nests within the park. Tetreau subsequently entered this information into a database. When the data were synthesized, certain data points suggested that there was a moderate decline in the percentage of active nests one year after the oil spill; however, according to the data there had been a greater percentage decline in active nests from 1986 to 1987, followed by an equivalent percentage increase from 1987 to 1988. Further clouding this picture, the total number of known nests had increased from approximately 40 to 60, due to more intensive surveying in response to the oil spill.[12] All of this pointed to the need for a more systematic approach to inventory and monitoring.

In 1991, the Park Service reevaluated the effectiveness of the bald eagle survey program. Tetreau prepared a report, which included an analysis of the bald eagle's suitability as an *indicator species* or marker for tracking broader developments in the ecosystem. One reason the bird was a good indicator species was that it was relatively easy to find. With its large size, white head, and big nests, the bald eagle could be readily located and identified. On the other hand, bald eagle populations could be affected by many different environmental variables, both natural and human-caused, so a decline in bald eagle numbers could be a shaky indicator of any given change in the environment. "One disadvantage of the bald eagle's location at the top of the food chain is that there are so many influential factors, it can be difficult to determine which variable(s) is causing a change in the population," Tetreau wrote. "Thus, the health of the bald eagle population can be an overall indicator of many characteristics associated with undeveloped areas, or an indicator of changes in specific variables if enough is known about the relationship in question."[13] Tetreau's report pointed out limitations in the bald eagle survey program but in the end he recommended that the program be continued.

The mountain goat was another key species that received more monitoring in 1990 and 1991. Like the bald eagle, the mountain goat was the subject of early inventory and monitoring efforts in the park, and like the bald eagle survey those pioneer efforts yielded mixed results. As noted in an earlier chapter, the park made population counts in

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[11] Michael D. Tetreau, "Bald Eagle Nest Surveys in Kenai Fjords National Park, 1986 to 1990," June 18, 1991, Accession KEFJ-00204, Archives, KEFJ.
[12] Ibid.
[13] Ibid.

1981 and 1985. Recognizing that there were problems in the data, Bud Rice and Layne G. Adams, wildlife research biologist in the regional office, conducted another population count in 1990 with a view toward establishing effective protocols to standardize data collection in the future. The main issue was that counts made by fixed-wing aircraft or helicopter each had advantages and disadvantages but taken together the results were inconsistent. Another challenge was to make counts at regular intervals, since experience had shown that funding for aerial surveys was sometimes redirected to other projects and when counts were sporadic the data had less validity. Rice and Adams framed their 1990 study so as to test different variables; then they made three surveys, one in a Piper Super Cub airplane and two in a Bell Jet Ranger helicopter, in July and August 1990. Although their study report concluded with seven recommendations, it pointed to the need for further testing and refinements before a final set of protocols could be established.[14] Toward that end, another count was made in 1991.[15]

The Park Service made a survey of marine mammals in bays and adjacent to coastal islands off the Kenai Fjords coast in April 1990, one year after the hasty biological surveys done in response to the oil spill. The project was undertaken by Gary Vequist, a marine scientist at Glacier Bay National Park, in cooperation with Fish and Wildlife Service biologists. The team made the survey using a chartered 43-foot fishing vessel and a 13-foot inflatable boat. Targeting just four selected areas to provide comparative data with the 1989 survey, both boats cruised within 100 meters of shore at speeds under 10 knots, completing the survey in nine days. Although the effort was directed at monitoring oil spill impacts on these wildlife populations, Vequist cautioned against drawing too strong inferences from the data. "Several variables such as weather, sea conditions, or food availability can affect marine mammal abundance in the area," he wrote. "It is difficult to account for all variables. Therefore with just two years data it is difficult to determine, with any degree of accuracy, the percentage change that can be attributed to the oil spill."[16]

The biologists reported actual numbers sighted, or what would later be termed "minimum counts." They did not develop population estimates with confidence intervals, as would become more common in later wildlife surveys. In the case of Steller sea lions and harbor seals, comparative data were available from the survey by Fish and Wildlife Service biologist Ed Bailey in 1976 and the joint Park Service-Fish and Wildlife Service survey by Rice and Nishimoto in 1986. Although the 1976 and 1986 surveys were made in summer while the 1989 and 1990 surveys were made in April, the population counts were nonetheless put into a table for comparison. The counts in 1976

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[14] Bud Rice and Layne G. Adams, "Mountain Goat Population Study, Kenai Fjords National Park, 1990," Series N1615, Administrative History Files, Archives, KEFJ.
[15] Superintendent's Annual Report for 1991, Annual Narrative Reports, Central Files, KEFJ.
[16] National Park Service, Alaska Region, *Marine Mammals in Bays and Adjacent to Coastal Islands off the Kenai Fjords Coast*, Natural Resources Progress Report AR-90/06 (Anchorage: National Park Service, 1990), 4.

and 1986 showed as much as a 66 percent decline (in the case of the Outer Island rookery). If the population counts in 1989 and 1990 were not directly comparable (because of the month of the survey) they were so low as to provide nothing to counter the appearance of a downward trend.[17] On April 5, 1990, just a week prior to the survey, the National Marine Fisheries Service published a notice in the *Federal Register* listing the Steller sea lion as a threatened species. The causes of the population decline were unknown, although some studies pointed to long-term adverse changes in the sea lion's diet in response to commercial fishing pressure on its preferred prey species.[18]

Beyond participating in the 1990 marine mammal study the Park Service did not attempt to monitor sea lion populations, since sea lion populations were confined to offshore islands and waters outside the park. Although the sea lion's well-being was an obvious concern to park officials, and was in fact mentioned in the enabling legislation, the park deferred to the Fish and Wildlife Service for further research on the species.

The park took a more active interest in harbor seals, which used ice bergs located at the head of Aialik Bay for sheltering young pups, although the habitat for these animals, too, lay just outside the park's jurisdiction. Previous to the 1990 marine mammals survey, studies by Anne Hoover-Miller had documented a steep decline in the harbor seal population in Aialik Bay from 1980 to 1989. Starting in 1990, the park made annual counts of harbor seals in Aialik Bay.[19]

All of the foregoing studies were aimed at developing baseline information on animal populations and then monitoring those populations so that if a population showed a marked decline then resource managers could recommend a management response in a timely manner. The emerging I&M Program differed from the park's inventory and monitoring activities in some key respects. Whereas the park's resource management team focused on inventory and monitoring of resources that were of immediate concern to park management (sensitive species, resources that potentially stood in harm's way of development or visitor use) the national I&M Program would focus on indicators of long-term ecosystem health. It would seek to develop a broader set of indicators and to monitor changes over a broader time frame. It would demand a very high standard of research protocols so as to ensure compatibility of data over wide areas and across long time spans. Nevertheless, as the national I&M Program was taking shape, its emphasis on quality data changed how resource managers approached those customary activities at the park level.[20]

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[17] National Park Service, Alaska Region, *Marine Mammals in Bays and Adjacent to Coastal Islands off the Kenai Fjords Coast*, Natural Resources Progress Report AR-90/06 (Anchorage: National Park Service, 1990), passim.

[18] "Listing of Steller Sea Lions as Threatened Under the Endangered Species Act," *Federal Register* 55, no. 140 (July 20, 1990), 29793-98.

[19] Anne Hoover-Miller, "Live Feed Video Monitoring of Harbor Seals," in U.S. Department of the Interior, National Park Service, Alaska Support Office, *Alaska Park Science* 3, no. 1 (Spring 2004): 25-27.

[20] Hall interview (2008). Jeff Troutman, chief of resource management starting in December 1992, called the I&M Program "a huge effort, a paradigm shift" (Troutman interview). Also see National Park Service,

Origins of the Southwest Alaska Network

The national I&M Program was developed by Steve Fancy, program manager in the Washington Office, and it was propounded in NPS-75, *Natural Resources Inventory and Monitoring Guideline* (1992). The first component of the program was to develop twelve basic inventories for all parks covering air quality, air-quality related values, climate, geologic resources, soil, water bodies, water quality, vegetation mapping, species lists, species distribution, cartographic resources, and relevant scientific literature. The second component featured the small group of prototype parks (expanded from four to eleven, but still including Denali), which were to design and implement long-term ecological monitoring, with the idea that other parks would eventually follow down a similar path. The third component, and the one that most immediately affected Kenai Fjords, was called Vital Signs and revolved around the familiar concept of indicator species. Among all units in the national park system, 270 were included in the I&M Program. (Units omitted were those in urban settings with a small land base.) The 270 units were to be organized into networks for the purpose of facilitating collaboration, information sharing, and economies of scale in I&M Program work. Each network was to devise a set of *vital signs* for long-term monitoring that would fairly represent telltale elements in the ecosystems common to all units in that network.

As soon as all parks were on board this train, the train derailed. It would take until the end of the decade to get it back on track. The reason for the derailment was, like the program itself, centered far away from Kenai Fjords National Park. In 1993, Secretary of the Interior Bruce Babbitt conceived of the National Biological Survey (NBS) as a way to cut through environmental politics, encourage interagency cooperation, and facilitate ecosystem management. Babbitt's concept was to transfer all research-grade biologists from various Interior agencies to a new agency, which, like the U.S. Geological Survey, would not be beholden to any one land management system. As scores of research biologists (including a large number in the Alaska Region) were suddenly transferred out of the Park Service, it put the new I&M Program in a turmoil. Moreover, Babbitt's vision for the NBS soon provoked intense opposition in Congress, as agricultural landowners imagined that the ill-named National Biological Survey stood for a comprehensive, coast-to-coast, door-to-door inquiry that would subvert private property rights. Distracted by the uproar over the NBS, Congress did not fund the Park Service's

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Resource Management Plan, Kenai Fjords National Park, 25, where it states: "A primary thrust of the resource management program has been the gathering and collating of baseline data and information. Though this remains a primary focus of the current program, a shift toward long-term monitoring of key natural resources is beginning. Park staff are able to make incremental additions to the baseline data base such as the distribution of flora and fauna, but significant leaps forward seem near impossible without the assistance of highly trained and qualified personnel."

I&M Program at anywhere near projected levels through the rest of the decade. By 1999, total annual funding for the I&M Program averaged less than $40,000 per park.[21]

One of the first tasks described in NPS-75 was to situate each park within a grouping of parks that had shared characteristics. For Kenai Fjords, this preliminary task raised some issues. From an ecosystem standpoint, the park could be grouped either with Glacier Bay and Sitka, or with Katmai, Lake Clark, and Aniakchak. From a logistical standpoint, it was easier to be grouped with Katmai and Lake Clark, since those parks were much closer than Glacier Bay to the park headquarters at Seward. The staff at Glacier Bay wanted Kenai Fjords to come into its "cluster" or *network* (the latter term eventually stuck), because it would bring more financial resources to the network. However, the staff at Kenai Fjords decided that the park should be with Katmai, Lake Clark, and Aniakchak in what became the Southwest Alaska Network (SWAN). According to Jeff Troutman, chief of resource management, who was responsible for that decision, the main reason was that Kenai Fjords personnel were then working with Katmai personnel to develop a joint brown bear study, which had established links between the two parks. Ironically, the joint brown bear study subsequently fizzled amidst confusion over how the networks were to function.[22]

At the end of the decade, Congress finally loosened the purse strings for I&M. In 1998, the National Parks Omnibus Management Act of 1998 expressed congressional support for fully integrating natural resource monitoring and other science activities into the management processes of the national park system. In consultation with Congress, the NPS announced a five-year program called the Natural Resource Challenge to strengthen natural resource management throughout the system. The Natural Resource Challenge gave I&M highest priority. Congress supported the program with a dramatic increase in the annual appropriation for I&M, raising the amount by $7.3 million in FY 2000. There were further significant increases in funding in the next two years.[23]

Troutman remembers one of the first indications that the I&M Program was ramping up occurred when staff members from the Alaska Resources & Library Information Services (ARLIS) in Anchorage visited the park and went through filing cabinets and desk drawers in a quest for scientific literature to include in the Natural Resources Bibliography (one of the twelve basic inventories called for in NPS-75). Soon thereafter, Troutman began to attend meetings of key resource management staff in the Alaska Region, followed by breakout meetings for each network, aimed at planning the many inventories to be done.

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[21] U.S. Department of the Interior, National Park Service, Natural Resource Program Center, *Strategic Plan for Natural Resource Inventories, FY 2008 – FY 2012*, Natural Resource Report NPS/NRPC/NRR—2009/094 (2009), p. vii, at http://science.nature.nps.gov/im <May 14, 2009>.
[22] Troutman interview.
[23] U.S. Department of the Interior, National Park Service, Natural Resource Program Center, *Strategic Plan for Natural Resource Inventories, FY 2008 – FY 2012*, Natural Resource Report NPS/NRPC/NRR—2009/094 (2009), pp. 3-5, at http://science.nature.nps.gov/im <May 14, 2009>.

By 2000, it was decided that the species list – perhaps the most challenging of the twelve basic inventories – would be confined to vascular plants and small mammals. The main object of the inventory was to develop baseline data on species diversity and species' spatial distribution in each of the 270 units included in the I&M Program. At the park level, resource managers, working with science specialists, had to decide on an appropriate sampling of geographic areas within the park. These inventories were not wildlife censuses but rather a determination of species presence or absence in each area. Even so, they were complex undertakings. Just the planning and logistics involved stretched the park's capabilities. "Scientists and crews needed a platform for getting out there," Troutman explains. The "platform" included camps, scientific equipment, and transportation to and from remote locations. "So it was a huge effort and it focused our attention almost exclusively for a few years," Troutman says.[24]

The Park Service contracted with Joseph A. Cook and Stephen O. MacDonald of the Museum of Southwestern Biology at the University of New Mexico to do the small mammal inventory. Field work was accomplished in July 2003, with the field crew sampling ten locations using a total of 34 trapline transects. The sampling areas were spread over the length of the park in a variety of habitats and elevations. As Cook and MacDonald observed in their report, an interesting feature of the park's faunal assemblage is that the Kenai Peninsula lacks several mammal species that occur north of Turnagain Arm. The narrow isthmus that connects the peninsula to the rest of Alaska has apparently limited colonization of the peninsula since the Ice Ages. The mammal fauna of Kenai Fjords National Park is "heavily influenced by past and present glaciations," Cook and MacDonald noted, being "comprised of immigrant species from diverse regions." These conditions increased the potential for distinctive populations or subspecies.[25]

One aspect of the small mammal inventory that differed from previous wildlife inventories in the park was the emphasis on collection of specimens. Specimens were valuable for myriad reasons. Most importantly, they allowed for positive identification of species; the I&M Program placed enormous emphasis on quality and consistency of data. Specimens could also be examined in the laboratory for such things as parasites. Resource managers did not object to the collection of specimens in principle, but they were anxious to put appropriate sideboards on it. It was one of the things Troutman evaluated as he went through the process of selecting people to do the inventory. "I remember one of the proposals that came back was to get out there and use shot guns to collect pikas and to set up snap traps on trees to collect squirrels," Troutman relates. "I

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[24] Troutman interview.

[25] Joseph A. Cook and Stephen O. MacDonald, *Mammal Inventory of Alaska's National Parks and Preserves, Kenai Fjords National Park, Annual Report 2003*, report prepared for National Park Service (Anchorage: National Park Service, Southwest Alaska Network, Inventory and Monitoring Program, 2004), 6, 17.

went through the roof." At Troutman's insistence, some small mammals (Hoary marmot, red squirrels) were live-trapped and released rather than taken as specimens.[26]

The issue of specimen collection did not end there. In their report, Cook and MacDonald asserted, "The most valuable product of this and any inventory is the collection of well-documented and diverse preparations of scientific specimens." More pointedly, they wrote: "Federal tax dollars used for biodiversity assessments are most efficiently spent if agencies recognize the critical need for vouchers [specimens] and provide support in both field and museum budgets for their preservation and maintenance." Specimen collection topped their list of recommendations. "Future monitoring efforts should include a sampling regime that regularly vouchers diverse preparations (specimens) of representative species," they wrote.[27]

The vascular plant inventory occurred on a parallel track with the small mammal inventory. The Park Service contracted with the Alaska Natural Heritage Program, Environmental and Natural Resources Institute, University of Alaska Anchorage for the inventory. As with the small mammal inventory, the effort began with a literature review preparatory to a short, intense season of field work, which took place in July 2003. As prescribed in NPS-75, the inventory was designed to meet three program goals: first, to document at least 90 percent of the species of vascular plants expected to occur in the park; second, to describe the distribution and abundance of species of special concern; and third, to provide baseline information for a monitoring program. Some 120 collection sites were closely explored by foot, and specimens were collected, recorded, and pressed for each separate species. The inventory found a total of 561 species. Of the total, 201 were new records for the park.[28]

Besides moving ahead with the twelve basic inventories, the SWAN also worked on developing the "vital signs" component of I&M. As chief of resource management, Troutman worked with his counterparts at Katmai and Lake Clark to develop a list of vital signs for the network's long-term monitoring program. During the winter of 2002-03, the group held public scoping meetings. The list of vital signs was essentially complete by 2004, although it would undergo refinements after that (Table 2).[29]

The SWAN vital signs laid the foundation for ongoing involvement by park staff in the I&M Program. However, it did not supplant park-based inventory and monitoring activity, because the park still required short-term monitoring of sensitive resources not addressed by the SWAN vital signs matrix. Black bears, for example, were a concern to

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[26] Troutman interview.

[27] Cook and MacDonald, *Mammal Inventory of Alaska's National Parks and Preserves, Kenai Fjords National Park, Annual Report 2003*, 18-20.

[28] Matthew L. Carlson, Robert Lipkin, Michelle Sturdy, and Julie A. Michaelson, *Kenai Fjords National Park Vascular Plant Inventory Final Technical Report*, report prepared for National Park Service by Alaska Natural Heritage Program, Environmental and Natural Resources Institute, University of Alaska Anchorage (Anchorage: National Park Service, Southwest Alaska Network, Inventory & Monitoring Program, 2004), iii, 1-6.

[29] Troutman interview; Hall interview (2008).

the park even though they were not a particularly worthwhile indicator of ecosystem health for the whole network and were therefore not selected for the long-term monitoring program. High-use areas in the park, such as the Harding Icefield Trail, also required a more fine-grained monitoring regime than what the I&M Program was intended to provide. Still, the park-based inventory and monitoring and the network-based I&M Program were by and large complementary rather than competing activities, and in more than one instance efforts initiated by the park were later absorbed into one or another inventory and monitoring program being performed on a larger geographical scale.

Table 2. SWAN Vital Signs (2008)

Weather and climate	Visibility and particulate matter
	Weather and climate
Marine nearshore	Geomorphic coastal change
	Harbor seal
	Kelp and eelgrass
	Marine intertidal invertebrates
	Marine birds
	Black oystercatcher
	Sea otter
Landscape dynamics and terrestrial vegetation	Glacier extent
	Landscape processes
	Repeat photography
	Vegetation complexes
	Sensitive vegetation communities
	Insect outbreaks
	Volcanoes and earthquakes
Lakes, rivers and fish	Surface hydrology
	Freshwater chemistry
	Resident lake fish
	Salmon
Terrestrial animals	Brown bear (not in KEFJ)
	Wolf (not in KEFJ)
	Moose (not in KEFJ)
	Caribou (not in KEFJ)
	Bald eagle
Human activities	Resource harvest (not in KEFJ)
	Visitor use
	Invasive/exotics

Black Oystercatcher Study

One of the first such research efforts by the park involved a multi-year study on the nesting success of the black oystercatcher. Resource managers knew that the black oystercatcher population had been reduced by effects of the oil spill, and they observed that the population did not appear to be recovering well in the following years. They were concerned that the increase in backcountry use on the coast could be inhibiting the bird's recovery. The black oystercatcher makes its nest directly on the beach, making a shallow scrape and laying its eggs in a place where they will blend with the surrounding rocks. After the eggs are hatched, the chicks must also rely on camouflage to avoid detection by predators. Resource managers hypothesized that beach campers were unintentionally causing adults to abandon their nests or that they were accidentally stepping on eggs and chicks. Resource managers also considered the possibility that wakes from tour boats were washing away some nests. In 1999, the Park Service initiated a multi-year project to study relationships between human activity and nesting success. The study focused on inventory and monitoring of nest sites in three locations: Aialik Bay, Northwest Fjord, and the southwest shore of Resurrection Bay. All individual birds were banded each year. Besides plotting the location of breeding pairs using Global Positioning System (GPS) technology, researchers made camp about 100 yards from selected nest sites and observed the birds' behavior before, during, and after a visit to the beach by backcountry users. Park managers anticipated that this funded research project would provide results that the park could share with other conservation units where recreational use might be impairing black oystercatchers' ability to reproduce.[30]

Figure 24. Black oystercatcher. (Web photo.)

[30] Michael Tetreau, "Monitoring Nesting Success of the Black Oystercatcher," in U.S. Department of the Interior, National Park Service, Alaska Support Office, *Alaska Park Science* 3, no. 1 (Spring 2004): 30-31; Troutman interview.

After six years of study, it appeared unlikely that beach campers had a significant impact on the black oystercatchers' nesting success. When backcountry users camped nearby, the adult pair would generally be upset for a short while and then return to the nest and resume incubating the eggs. Nesting failures showed relatively little correlation with the amount of nearby human activity. Moreover, nesting success in the park, while low overall, was probably no lower than other areas in the species' range where human activity was practically nil. Nests on islands had better success than nests on the mainland, suggesting that landlocked predators were a factor. The possibility remained

Figure 25. Meg Hahr, ecologist, observing black oystercatchers, June, 2008. (Digital Files, KEFJ.)

that camps attracted predators such as bears and ravens, which then discovered the bird nests. But if such a connection existed, the converse might also apply: camps would tend to keep away shy predators such as wolverines. Looking at the data, park managers found little justification for closing beaches to give nesting sites greater protection. From a statistical standpoint, a bird nest inadvertently destroyed by a camper was very likely to fail from other causes in any case. From a protection standpoint, therefore, it was probably more effective simply to inform backcountry users about the problem and expect them to take care not to trample nests.[31]

[31] Tetreau, "Monitoring Nesting Success of the Black Oystercatcher," 30; Tetreau interview; Hall interview (2008).

At the completion of the black oystercatcher survey project, park managers decided that black oystercatcher populations should continue to be monitored if possible until a nest density and diet monitoring program could be implemented. With the advent of the Nearshore Gulf Ecosystem Model monitoring program, park managers adopted a standard operating protocol for monitoring the bird's nest occupancy, density, and diet.[32]

Black Bear Studies

About the same time that the park began researching the black oystercatcher, park managers proposed a comprehensive study program on the ecology and status of black bears in Kenai Fjords. Although park managers had been concerned about protecting bears from poachers ever since the park was established, they still knew very little about the bear populations in the park. They did know that two species of bear inhabit the park, brown bear (*Ursus arctos*), and black bear (*Ursus americanus*), and that both species are common around Seward and Exit Glacier while the smaller black bear is predominant on the coast where the combination of steep and narrow terrain, thick vegetation, and lack of salmon streams does not favor the larger species. As public use of the backcountry increased, especially around Aialik Bay, park managers became concerned that backcountry campers could displace black bears from their preferred habitat areas and stress the population.[33]

The first phase of black bear research in the park began in 2000 as researchers began to study what habitats on the coast the black bears most preferred, and to investigate whether human activity – specifically, overnight camping at shoreline campsites – was disrupting the bears' natural foraging patterns. Over the next three summers, 21 individual bears were captured and radio-collared. Each radio collar emitted a GPS signal every one to two hours, allowing researchers to plot each individual bear's movements over time. A draft report from the study asserted that black bears in Kenai Fjords National Park prefer areas of tall shrub and herbaceous vegetation and avoid areas of dwarf shrub, mixed deciduous forest, or alpine vegetation, and that the current level of human activity on the coast did not appear to have a significant effect on the black bears.[34] Another study component involved videotaping and observing black bear behavior when people approached the animals on foot, in motorboats, or by kayak. Preliminary results from these field observations indicated that bears were generally

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[32] Ami Wright, "KEFJ Black Oystercatcher End of Season Field Report," 2007, Digital Files, KEFJ.
[33] Elizabeth Manning, "Of Black Bears and Men – Kenai Fjord's Coast Focus of Study," *Anchorage Daily News*, July 17, 2000. According to this article, Chief Ranger Peter Fitzmaurice stated that the park had nine reports of bears shot by humans in defense of life and property between 1983 and 1994. Park managers suspected that some additional quantity of bears were taken without detection.
[34] Blair French, Kyran Kunkle, and Ian D. Martin, "Effects of Human Activities on Black Bears (*Ursus Americanus*) in Aialik Bay, Kenai Fjords National Park, Alaska," December 3, 2003, Digital Files, KEFJ.

unaffected until people approached within 100 meters.[35] The bear study was not concluded. As various problems developed, it was divided into two separate projects under two different principal investigators. No final report ever emerged from either project.[36]

The park did not wait for the results of these studies to introduce bear-proof devices at certain locations so that bears would not get conditioned to human foods. The park installed bear-proof garbage cans and steel food-storage boxes in the campground at Exit Glacier. It took similar measures to discourage bears from approaching ranger residences at Exit Glacier and public use cabins on the coast. And despite qualms about introducing any sort of development in backcountry campsites, it placed bear wires at campsites with trees and it constructed a food storage building at those without trees.[37]

Figure 26. Black bear on Kenai Coast. (Digital files, KEFJ.)

Restoration and Rare Plants Protection

With each increase in visitor use and development, the resource management staff had more work to do in restoring natural vegetation to disturbed areas, guarding against threats to rare plants, and combating infestations of exotic weeds. These efforts focused primarily on the Exit Glacier development area and the Harding Icefield Trail corridor, but they also extended to backcountry campsites as well as other use sites on the coast.

In the former area, visitor use facilities were gradually "hardened" to keep visitors from going off-trail and damaging vegetation. Resource management staff continually monitored trail transects for natural rates of revegetation where trail construction or shortcutting had resulted in severe erosion and loss of vegetation. To halt loss of soil and vegetation, the trail was improved with cribbing. In 1995, several sections of the Harding

[35] National Park Service, "Black Bear – Human Interaction Project," *Ocean Alaska Science and Learning Center Research Project Summary* (Spring/Summer 2003) at http://www.oceanalaska.org/pdf/research/blkbear <August 25, 2009>.
[36] Shelley Hall, comments on draft report.
[37] National Park Service, *Resource Management Plan, Kenai Fjords National Park*, 36; Superintendent's Annual Report for 1995, Annual Narrative Reports, Central Files, KEFJ; Troutman interview.

Icefield Trail were rerouted to alleviate impacts on fragile tundra and to protect the pale poppy, which was on the list of threatened plants.[38]

On the coast, meanwhile, park staff periodically inventoried coastal backcountry campsites and recorded their condition. The first inventory was made in 1988 by coastal rangers and the campsite condition assessments followed protocols developed for Gates of the Arctic National Park and Preserve. Further backcountry campsite surveys were conducted in 1993 and 1997 using a methodology developed for the Park Service by Jeff Marion. At the end of the 1997 field season, Mike Tetreau modified the survey protocols to fit conditions at Kenai Fjords. He also interpreted the data from the 1988 survey and entered it into the park's computer database. Additional surveys were made according to the new protocols in 2001 and 2003. Tetreau made an analysis of the survey data in 2004. The results were fairly benign. While the conditions of specific sites changed from survey to survey, some sites showed deterioration while others showed improvement. No individual site showed a steady worsening trend and the mean condition of all backcountry sites did not change significantly.[39]

Resource management staff cleaned up an old tailings pile near the Beauty Bay mine. The project was initiated after Bud Rice reported finding a dead moose calf in a sandy area below the mine and tailings. The park staff investigated it further and confirmed that the sandy area was a former settling pond containing arsenic-laden soil that had leached from the tailings. Natural effects of water runoff threatened to spread the contaminated soil downstream. Resource managers considered two options: excavating and removing the contaminated soil, or capping it under a layer of concrete. The regional office selected the latter option and the area was capped.[40]

Glacier Studies and Landscape Mapping

The park stepped up monitoring of glaciers. In 1991, the federal government convened an interagency conference on research and monitoring of glaciers, and Rice attended along with resource management specialists from other Alaska parks.[41] The park's efforts to monitor glaciers began with horizontal photography of coast glaciers from the water. It also sought to locate and index the historical record of oblique and vertical aerial photographs taken by the U.S. Geological Survey (USGS). Aerial

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[38] National Park Service, *Resource Management Plan, Kenai Fjords National Park*, 49; Superintendent's Annual Report for 1995, Annual Narrative Reports, Central Files, KEFJ.
[39] Michael D. Tetreau, "Backcountry Campsite Surveys in Aialik Bay, Resurrection Bay and Northwestern Fjord – Kenai Fjords National Park, Alaska," draft report, November 16, 2004, Digital Files, KEFJ.
[40] Superintendent's Annual Report for 1995, Annual Narrative Reports, Central Files, KEFJ; Troutman interview.
[41] Associate Regional Director to Superintendent, July 17, 1991, Series N3031 Geological Features and Studies Glaciers (Ice and Frost Action), Box 21, Acc. 00395 Alaska Support Office Administrative Files, ARCC; National Park Service, *Resource Management Plan, Kenai Fjords National Park*, 26.

photographs for the area dated back about two decades. The Park Service obtained more aerial photographs in 1993 and 1994. More recently, Doug Capra, Jim Pfeiffenberger, and other park staff accompanied USGS geologist Bruce Molnia on several trips aboard the *M/V Serac* to do repeat photography, again from sea level. The idea was to pinpoint the exact location from which photographs of the glaciers had been taken by the USGS geologists Grant and Higgins in the early twentieth century, and to make new photographs of the glaciers from these same vantage points. On one of these trips the team was joined by retired USGS geologist Austin Post, who had been the first scientist to study the glaciers after Grant and Higgins.[42]

In the meantime, the park supported efforts by a handful of climate scientists studying the Harding Icefield. The scientists were interested in the Harding Icefield because the ice field and its outflowing glaciers were known to be thinning and shrinking at some of the fastest rates observed anywhere on the planet.[43] Understanding the rate at which the ice mass was diminishing was part of the larger project of modeling how the melting of the world's glaciers would affect sea level rise. Because of their fast rate of melting, the world's mountain glaciers were thought to be contributing more to sea level rise than both the Greenland and Antarctica ice caps. By one estimate, Alaska's melting glaciers contributed as much as nine percent of the observed rate of sea level rise in the second half of the twentieth century.[44]

In the mid 1990s, data on the area and surface elevation of the Harding Icefield and its outflowing glaciers were obtained using altimeter readings taken from a small aircraft flying 50 to 300 meters above the surface of the glaciers. These flights were made down the centerlines of main glacier trunks and major tributaries, and the resulting elevations were compared with USGS topographic maps made in the 1950s to 1970s. In the early 2000s, more data were acquired from Landsat images taken from the space shuttle. To obtain these data, the Park Service entered an interagency agreement with the National Aeronautic and Space Administration (NASA). In 2005, NPS scientist Bruce A. Giffen co-authored a paper on changes in the Harding Icefield with two NASA scientists.[45]

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[42] Capra interview.

[43] J. Van Looy, R. Forster, and A. Ford, "Accelerating thinning of Kenai Peninsula glaciers, Alaska," *Geophysical Research Letters* 33, L21307 (2006): n.p. Among 13 glaciers studied, the authors calculated an average thinning of .47 meters per year from 1950 to 1994/96 and .72 meters per year from 1994/96 to 1999. For the latter period, they calculated that Northeastern Glacier was thinning by 2.26 meters per year and Dinglestadt Glacier by 1.89 meters per year. For comparison, Patagonian ice fields were thinning by 1.0 meters per year from 1968/75 to 2000, Vernagt Glacier in the Alps was thinning by .87 meters per year since 1990, and Place Glacier in British Columbia was thinning at 1.4 meters per year over the same period.

[44] Hall et al., "Changes in the Harding Icefield and the Grewingk-Yalik Glacier Complex, Kenai Fjords National Park."

[45] Dorothy K. Hall, Bruce A. Giffen, and Janet Y. L. Chien, "Changes in the Harding Icefield and the Grewingk-Yalik Glacier Complex, Kenai Fjords National Park," April 19, 2005, technical paper available at Alaska Resources Library & Information Services, Anchorage, Alaska.

In 1995, Bob Satin, a geologist and volunteer on the park staff, placed a radio transmitter in a reinforced plastic tube and dropped it into a crevasse in Exit Glacier, initiating a long-running experiment to estimate the rate of flow of the glacier. Every year or two the glacier would cough up the tube, and park staff would retrieve it and drop it into another crevasse at a different location on the glacier. GPS readings allowed park staff to estimate flow rates, which ranged from 4 to 19 inches per day.[46]

Figure 27. Mike Tetreau, resource management specialist, Northwestern Fjord, September 1998. (Photo by Marlene Norman, Digital Files, KEFJ.)

Plant succession in the deglaciated area below Exit Glacier continued to receive study. Picking up on earlier research by NPS scientist Gary Ahlstrand, forest ecologists D. J. Helm and E. B. Allen analyzed the forest canopy in the floodplain using vertical transects at random sample locations. For each vertical transect the researchers recorded all species encountered from ground level up through the canopy. Helm and Allen presented a "vegetation chronosequence" for the Exit Glacier area that differed in important ways from vegetation successions around many coastal glaciers in Alaska because of Exit Glacier's inland location and the predominance of black cottonwood (*Populus balsamifera*).[47] Joel Cusick, a GIS specialist in the regional office, made a study of the vegetation on successive moraines below Exit Glacier. By taking core samples of trees and comparing growth rates, he plotted a nutrient gradient. Cusick's work in the late 1990s formed the basis for a series of simple interpretive signs along the road to Exit Glacier, each one indicating the approximate year in which the glacier had retreated to that particular point.

The park's vegetation was also studied on a landscape level. In the 1990s, the NPS was in the process of developing ecological landscape classifications for all natural areas in the national park system. Landscape-level mapping was done to provide a

[46] "Exit Glacier – Flowing at a Glacial Pace," undated, copy provided to author by Chuck Lindsay, Digital Files, KEFJ.

[47] D. J. Helm and E. B. Allen, "Vegetation Chronosequence near Exit Glacier, Kenai Fjords National Park, Alaska, U.S.A.," *Arctic and Alpine Research* 27, no. 3 (1995): 246-57. (Copy available at RINS 24-01-100, RM 18, RM Library, KEFJ.)

framework for stratifying biological inventory and monitoring programs to insure that field sampling was distributed across a wide range of environmental gradients. Following a methodology developed by the U.S. Forest Service known as EcoMap, or ecoregion mapping, the NPS coordinated this effort with the Forest Service, the USGS, and The Nature Conservancy, as well as other partners.[48] The aim was to classify ecosystem components within a hierarchy of differing spatial and temporal scales. Areas were partitioned into ecological sections and subsections. In this framework, smaller-scale features, such as vegetation and soils, nested within larger-scale components such as climate and physiography. By the end of the 1990s, the NPS was completing landscape-level mapping for all parks in Alaska. For landscape-level mapping at Kenai Fjords, the NPS contracted with the Alaska Natural Heritage Program, Environmental and Natural Resources Institute, University of Alaska Anchorage (the same entity that performed the vascular plant inventory a few years later). The result of this landscape-level mapping project was a partitioning of the park into ecological sections and subsections for what the NPS called the National Hierarchical Framework. The park spanned two ecological sections, Kenai Mountains and Northern Gulf Fjordlands. Within the park, the latter was made up of three ecological subsections: Peninsula and Island Granitics (islands and capes), Fjordland Undifferentiated Sedimentary Rocks (the coastal area behind the islands and capes), and Coastal Lowland-Valley (Resurrection River valley).[49]

Archeology

Archeology on the Kenai coast, like biological inventory and monitoring, was still in its infancy when the park was hit by the *Exxon Valdez* oil spill. As with the park's biological resources, the disaster served to heighten interest in the park's archeological resources. And as in the case of the natural sciences, the heightened interest in archeology after 1989 set the stage for substantial increases in funding support that followed about ten years later.

Little was known about the Kenai coast's archeological and ethnographic resources when Kenai Fjords National Park was established, and not much more was accomplished until the year of the *Exxon Valdez* oil spill. In the 1970s, the standard source on the region's prehistory remained Frederica de Laguna's seminal work, *The Archaeology of Cook Inlet, Alaska* (1934). During the D-2 planning process, the NPS

[48] USGS, "Alaska Ecoregions Mapping," (2008) at http//agdc.usgs.gov/data/usgs/erosafo/ecoreg/index.html <August 26, 2009>.
[49] Gerald F. Tande and Julie Michaelson, "Ecological Subsections of Kenai Fjords National Park, Alaska," report prepared for U.S. National Park Service by Alaska Natural Heritage Program, Environmental and Natural Resources Institute, University of Alaska Anchorage, October 2001, technical paper available at Alaska Resources Library & Information Services, Anchorage, Alaska.

consulted with Chugach Natives, Inc., the Native regional corporation, on historic use areas of the Chugach people (pursuant to Native land selections under Section 14 (h) of ANCSA). Numerous sites were identified within the Area of Ecological Concern for the Harding Icefield-Kenai Fjords proposal. Site identification was based on interviews with older Natives and historical records, and the NPS plotted the sites on a 1:250,000 scale quad map.[50] During the first decade of the park's existence, archeological investigation along the Kenai coast was limited to one brief survey of the Nuka Bay area in June 1983. Subsequently, the Nuka Bay ranger team, consisting of Bud Rice and Bob Hakenen, discovered a Native village site with at least twelve house pits located on the mainland opposite Nuka Island, but without an archeologist on staff the park made only a cursory record of the site.[51]

On July 31, 1989, Mike Yarborough, an archeologist employed by Exxon, discovered an extensive cultural site in the intertidal zone and in the forest near above a beach near McArthur Pass. The cultural site included a surface artifact scatter extending along the beach for about 90 meters, with at least one prehistoric and one historic component present. Yarborough reported that most of the artifacts were oiled, and that a substantial portion of the site had a heavy coating of fresh tar and weathered mousse that penetrated as much as ten centimeters into the beach cobble. Ten days after Yarborough's discovery, an interagency team of archeologists led by Anne Worthington of the NPS and including Yarborough returned to the site to evaluate how the site might be affected by cleanup operations. On the basis of these preliminary surveys, the regional archeologist informed the incident commander at Kenai Fjords that the find appeared to be "an archeological site of great importance."[52]

The discovery of the McArthur Pass site was significant in two respects. From the standpoint of how people understood the prehistory of the Kenai coast, it revealed the fact that this forbidding coastline had once held higher numbers of human inhabitants than previously imagined. The size of the village site surprised archeologists, who had expected to find only seasonal camp and small village sites in the area. It now appeared that prehistoric peoples had found certain localities on the Kenai coast that gave them access to an abundance of resources, especially marine resources, and that prehistoric peoples had formed permanent settlements in these localities which were occupied in some cases for long durations in different time periods. As one report on the site summed up this new perspective, the Kenai coast now appeared to be "a transitional zone

[50] Chuck Gilbert to Don Follows, January 16, 1976, KEFJ 13289/001/030b, Accession KEFJ-00205, Alaska Task Force collection, Archives, KEFJ.
[51] Superintendent to Regional Director, July 27, 1983, Series A26, Administrative History Files, Archives, KEFJ.
[52] J. Schaaf, "Draft Scope of Work for Mitigation of Adverse Effects of Cleanup Operations for Spilled Oil at Archeological Site…, Kenai Fjords National Park," April 19, 1990, and Regional Archeologist to Incident Commander, September 23, 1989, Box 1 of 3, Acc. 79-96-1102, Federal Records Center – Alaska Region.

between a dispersed site and resource pattern in Prince William Sound and an extremely dense site distribution on Kodiak Island."[53]

The discovery of the McArthur Pass site was also significant for how it focused efforts to conserve archeological resources in the park. In the context of the oil spill cleanup, it gave archeology a seat at the table. Paul Gleeson, archeologist with the Alaska Regional Office, spoke at a public symposium on the cleanup effort held in Anchorage in March 1990. "It came as a surprise to most people how many sites are in this area," Gleeson said. "Many artifacts on beaches are now oiled, and altered as a result. This may alter the record of these nonrenewable resources." Gleeson described the efforts of the previous summer as "combat archaeology" and admitted that the NPS still had no comprehensive plan for cultural resources inventory but was focused for the moment on "playing catchup with cleanup operations." Among other concerns, archeologists worried that the chemical effects of oil contamination on artifacts could interfere with radiocarbon dating, that changes to vegetation patterns could lead to accelerated erosion and destruction of artifacts, and that the cleanup itself would disturb sites and lead to further looting of sites.[54]

The McArthur Pass site posed a tricky problem for managers who had to weigh concerns about protecting archeological resources against concerns about cleaning up the environment. Cleanup efforts at the site were suspended in 1989 out of concern that the archeological site would be further impaired. Exxon archeologists prepared a site report and mitigation plan in the spring of 1990. In its review of the mitigation plan, the NPS called for more data recovery, including excavation of test pits, within the oil-contaminated intertidal zone. Exxon responded that it wanted to leave the asphalt tarmat in place to minimize subsurface disturbance. The NPS insisted that the tarmat should be broken up and removed, subject to monitoring by Exxon archeologists, because leaving it in place would be detrimental to the environment. A final mitigation plan was agreed to by Exxon, the NPS, the SHPO, and the Chugach Alaska Corporation. Cleanup crews accompanied by Exxon archeologists were deployed at the site on four more occasions in 1990 and 1991.[55]

Beyond its relevance to the oil spill cleanup, the McArthur Pass site impressed managers with the fact that many archeological resources on the Kenai coast existed within the intertidal zone, where they were exceptionally vulnerable to both looting and natural erosion. The reason sites existed there was because the environment was so

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[53] Robert C. Betts, Christopher B. Wooley, Charles M. Mobley, James C. Haggerty, and Aron Crowell, *Site Protection and Oil Spill Treatment at SEL-188, An Archaeological Site in Kenai Fjords National Park, Alaska* (Anchorage: Exxon Shipping Company and Exxon Company, 1991), 153.

[54] Paul Gleeson, untitled paper, in *Restoration Following the* Exxon Valdez *Oil Spill, Proceedings of the Public Symposium Held in Anchorage, Alaska, March 26-27, 1990* (Anchorage: Restoration Planning Work Group, 1990), 85.

[55] Betts, et al., *Site Protection and Oil Spill Treatment at SEL-188, An Archaeological Site in Kenai Fjords National Park, Alaska*, 56-57.

dynamic. Tectonic subsidence caused many prehistoric occupation sites in the area to drop toward sea level, where they would eventually get destroyed by wave action. Furthermore, prehistoric peoples had probably inhabited other areas intermittently that were subject to repetitious glacier advances and retreats. Thus, it now seemed that Kenai Fjords National Park encompassed a rich and scarcely investigated archeological record that existed in precarious relationship to the obliterating effects of both ice and sea.[56]

In 1993, the NPS funded an archeological survey of the three eastern bay systems in the park: Harris Bay, Aialik Bay, and the west shore of Resurrection Bay. It was decided to focus on the eastern section of the park because previous surveys had focused on Nuka Bay and the coastal area that included the McArthur Pass site. The study was conducted as part of the Park Service's System-wide Archaeological Inventory Program (SAIP). The lead archeologist for the study was Dr. Aron L. Crowell of the Arctic Studies Center, Smithsonian Institution. The interdisciplinary team included USGS geologists who helped select study areas based on coastal geomorphology, Late Holocene glacial movements, and paleoenvironmental history. NPS archeologist Jeanne Schaaf was project manager and assisted with field research in Northwestern Lagoon. The park supported the study with use of the research vessel, *M/V Serac*. Several village sites were discovered and recorded, all dating from about A.D. 1200 to 1920. One occupation site in Harris Bay was thought to have been abandoned around the end of the eighteenth century when the face of Northwestern Glacier approached to within a few hundred meters. Investigators took this as evidence that glacier advances in the Little Ice Age had obliterated other sites located farther up the bays. In addition, the survey found geologic evidence of a major earthquake around A.D. 1170 that caused the shoreline of Aialik Bay to fall at least 1.8 meters, with resulting submergence and destruction of occupation sites located on beaches and spits up to that time.[57]

Starting in 2002, Crowell headed a three-year research effort focused on three archeological sites in Aialik Bay that had been identified in the previous study. With funding through the OASLC, the project included field work, lab analysis, and educational outreach. Based on radiocarbon dating of artifacts, one site was estimated to have been occupied from about 950 A.D. to perhaps 1800, another from 1785 to 1820, and the third from 1850 to 1890 (with some items found at the latter site dating to the early twentieth century). Crowell invited involvement by Native residents of Port Graham, Nanwalek, and Seldovia, many of whom maintained that their grandparents or great grandparents had been born along the outer coast of the Kenai Peninsula. The Native community involvement included student and adult participation in field work

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[56] Crowell and Mann, *Archaeology and Coastal Dynamics of Kenai Fjords National Park, Alaska*, 4. Also see, William B. Workman, "Archaeology of the Southern Kenai Peninsula," *Arctic Anthropology* 35, no. 1 (1998): 146-59. Workman describes the cultural traditions for Kachemak Bay with comparative references to the outer coast.

[57] Crowell and Mann, *Archaeology and Coastal Dynamics of Kenai Fjords National Park, Alaska*, 5.

(both as volunteers and paid technicians), site visits by elders, and oral history interviews.[58]

Collections Management

Park staff were responsible for accessioning cultural artifacts, natural history specimens, and historical materials into park collections. For the first 20 years of the park's existence, collections grew without much oversight except when regional office staff visited the park and did some cataloguing. No one on the park staff was specifically assigned with that duty until about 2000, when Mike Tetreau was formally designated custodial officer and began entering the collections into the Automated National Catalog System as one of his many collateral duties. Shannon Kovac was hired as the park's first museum technician in 2005.[59]

The park's original Scope of Collection Statement, approved in 1988, called for a "synoptic natural history collection" to include plant and animal specimens representative of all species found in the park, together with mineral and fossil specimens representative of its geology and paleontology, and a cultural collection made of objects pertaining to the history and ethnography of the people who settled the area, together with all archeological artifacts collected from sites in the park. Early efforts by park staff to fill out these collections were mainly confined to Bud Rice's work in collecting plant specimens for the herbarium.[60] Archeological artifacts collected in the 1980s were mostly turned over to the regional curator in Anchorage, while those collected by Crowell and his team in 1993 were partly placed with the regional curator and partly held by Crowell in Anchorage.[61]

The early park collections were stored in two cabinets in the first-floor Interpretive Collection Room of the Seward Visitor Center, an area that doubled for storage of research and audio-visual projects and other miscellaneous interpretive materials. The collections cabinets were kept locked when not in use by interpretive staff. An inspection report on the collections in 1989 noted that although the temperature and relative humidity in the room were monitored with a hygrothermograph, frequent use of the room by the interpretive staff meant that temperatures and relative humidity were variable.[62]

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[58] Dr. Aron L. Crowell, "The Outer Coast Project: Kenai Fjords Oral History and Archaeology (2002-2006) Final Technical Report, Grant SI 634019, Ocean Alaska Science and Learning Center, Kenai Fjords National Park, Seward, Alaska," no date, Digital Files, Kenai Fjords National Park.
[59] Shannon Kovac, interview by Theodore Catton, June 1, 2009.
[60] "Kenai Fjords National Park, Preliminary Observations and Recommendations, Collections Management Plan," 1989, Series H2015, Administrative History Files, Archives, KEFJ.
[61] Kovac interview.
[62] "Kenai Fjords National Park, Preliminary Observations and Recommendations, Collections Management Plan," 1989, Series H2015, Administrative History Files, Archives, KEFJ.

Some improvements were made in collections storage in the early 1990s. Cabinet drawers were cleaned and lined with acid-free paper. Manuscript collections, which included rangers' original field notes and journals, and photographs taken by the Alaska Task Force in 1975, were transferred to a dedicated second-floor room next to the natural resource management office, where they would be safe in case of a flood. Security remained lax, with no alarm system for the storage room, no visitor log, and no dead-bolt lock. The building as a whole was equipped with an automatic sprinkler system. All in all, the storage arrangements fell short of guidelines specified in NPS-28, *Cultural Resources Management Guideline*, and Special Directive 80-1 on storage of museum collections.[63]

By the mid-1990s, park staff anticipated that collections storage would be brought up to standard in the new interagency visitor center. When plans for that building kept running into problems, the park fell further behind in meeting standards. Eventually, park collections were moved to a new administrative building in downtown Seward, where they were placed in a locked vault. Although the new storage room had better security, it still lacked proper environmental controls. Since the Park Service only rented the building, it was reluctant to make improvements on the storage room. These makeshift circumstances still pertained when Mike Tetreau worked on entering the collections in a database in the early 2000s.

While the park awaited a collections storage facility with proper environmental controls, the new location in the locked vault afforded UV protection as well as improved security, and park staff developed environmental monitoring and housekeeping protocols, an emergency operations plan, and documentation of visitors and researchers. In 2009, the collection consisted of over 20,000 archeological specimens, over 52,000 archival objects, and some 4,000 biological specimens. The collection was housed at the park, the Alaska Region Curatorial Center, the Arctic Studies Center, and the University of Alaska Fairbanks Museum. The latter consisted mostly of biological specimens collected by the SWAN.

Historic Preservation

In the mid 1980s, the Cultural Resources Division of the Alaska Region launched a program to perform mine-site cultural resource inventories for all units in the region. The impetus for the program was the 1985 lawsuit over the Alaska Region's lack of compliance with the Mining in the Parks Act. Besides inventorying and evaluating the

[63] "Kenai Fjords National Park Collection Management Plan," prepared by Rozell Overmire and Sara Conklin for Jean Swearingen, Regional Curator, National Park Service, Alaska Region, 1995, Series D18, Administrative History Files, Archives, KEFJ. Apparently an alarm system was installed soon thereafter. According to Jim Ireland, the building had an alarm system when he arrived in 1998, with a code known only to certain RM staff. (Jim Ireland comments on draft report.)

historical significance of all mining claims in Alaska under Park Service jurisdiction, another aim of the program was to enable the Cultural Resources Division to assist the Mining and Minerals Branch in its review of mining plans of operation, which were required for all active mining operations under the Mining in the Parks Act. As the Park Service's programmatic agreement with the SHPO stated, "Where possible, NPS will place stipulations in the final mining Plan of Operations to assure that there will be no adverse effects to historic properties."[64] Since the number of mining claims under NPS jurisdiction was estimated at around 5,000, with most being located in remote places, this was an ambitious program. Logan Hovis, a historian in the regional office with an expertise in mining technology, was part of the original Anchorage-based team. He remembers that as program funding waned year by year, the region fielded three teams of cultural resource specialists in 1986, two in 1987 and 1988, and just one in 1989, the year of the *Exxon Valdez* disaster. "The oil spill gave us a new lease on life," Hovis comments wryly, recalling that his team finally visited Kenai Fjords in August of that year.[65] Since Kenai Fjords had to compete in the Cultural Resources Mining Inventory and Monitoring Program with several other Alaska units that had extensive mining histories, it was not surprising that it came well down the list in order of priority.[66]

The four-person team traveled by charter air service to Nuka Bay to survey a total of five mining properties in eight days. The five mine sites were Surprise Bay No. 1 (Waterfield property), Surprise Bay Lode Nos. 1-5 (Kinney property), the Glass-Heifner Claim on Beauty Bay, the Nukalaska Mine above Shelter Cove, and the Blair-Sather Prospect on the south shore of Yalik Bay. The first three were selected because they were administratively active claims; the fourth was selected for its potential historical significance. Each site was recorded on a cultural resource site inventory form, which included a detailed site description, sketch map, photographs, and evaluation. A primary concern of the team was to be able to comply with Section 106 of the National Historic Preservation Act should any of the mine claimants submit a mining plan of operations. While surveying each site from the standpoint of historical significance, the team also took stock of public safety hazards (hidden mine shafts, explosives) and environmental liabilities (mine water seepage, tailings piles, unsightly debris), with a view toward future cleanup operations.[67]

Although the Nuka Bay area had seen considerable mining activity in the 1920s and 1930s, most of the sites, viewed individually, did not possess much historical

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[64] "Programmatic Agreement Among National Park Service, Alaska Region, Alaska State Historic Preservation Officer, Advisory Council on Historic Preservation, Regarding Mining Operations in Alaska National Parks," 1988, Series H4217, Administrative History Files, Archives, KEFJ.
[65] Hovis interview.
[66] Becky M. Saleeby, *The Quest for Gold: An Overview of the National Park Service Cultural Resources Mining Inventory and Monitoring Program* (Anchorage: National Park Service, Alaska Region, 2000), 7-9.
[67] "Cultural Resource Mining Inventory and Monitoring Program, Kenai Fjords Field Inventory Schedule," undated, Series H4217, Administrative History Files, Archives, KEFJ.

significance. This was owing to the fact that there had been several smaller episodes of mining over the years since the district was active. The few remaining miners, working with very little capital support in such a remote location, had helped themselves to abandoned machinery, making a jumble of everything. "Everyone down there for the past fifty years has stolen from everyone else," Hovis explains. "Stuff has been pilfered and moved around." Although the scattered items had never left the mining district, they had been hauled from one mine site to another for the purpose of adaptive reuse until little remained of each site's original layout. Thus, while the total assemblage of machinery in the district was probably fairly intact, most individual sites had poor historical integrity.[68] The Surprise Bay No. 1 (Waterfield property) probably was the best illustration of this pattern: the site was an "amalgamation" of elements dating from several episodes of mining activity from the 1930s through the 1980s, and with so much modern-era equipment turned into refuse, it gave the overall impression of a junkyard.[69] The Nukalaska Mine was an exception to this pattern, probably because the upland location of the mine, mill, and camp had put it out of reach for easy pilfering. Even though the buildings on this site were in ruins, it had superior historical integrity.[70] The cultural resources team decided that two of the four sites, the Surprise Bay Lode Nos. 1-5 (Kinney property, also known as the Sonny Fox Mine), and the Nukalaska Mine, were potentially eligible for listing on the National Register of Historic Places. In the following year, regional office staff prepared Determination of Eligibility reports for the two properties. In both cases, the SHPO concurred with the Park Service's affirmative findings.[71]

The cultural resources team returned to Nuka Bay in July 1991 to survey additional mine sites. It recorded six historic mining sites, including the Alaska Hills Mines Corporation property, the Nuka Bay Mining Company property, and the Rosness and Larson property, and returned to the Nukalaska Mine for some additional field reconnaissance. This brought the total number of documented mining sites to eleven. No new Determination of Eligibility reports followed from the 1991 site visits.[72]

The historical mining properties in Nuka Bay, taken as a whole, represented a significant slice of Alaska's mining history. That fact was brought out in the historic resource study (HRS) for Kenai Fjords National Park, which regional office staff completed in 1998. The HRS, *A Stern and Rock-Bound Coast*, by Linda Cook and Frank

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[68] Hovis interview.
[69] K. Miller and L. Hovis, Cultural Resource Site Inventory Form [Surprise Bay No. 1], August 11, 1989, Series H4217, Administrative History Files, KEFJ.
[70] L. Hovis and M. Elder, Cultural Resource Site Inventory Form [Nukalaska Mine], August 11, 1989, Series H4217, Administrative History Files, KEFJ.
[71] Cook and Norris, *A Stern and Rock-Bound Coast*, 176, 194.
[72] Acting Chief, Division of Cultural Resources, to Superintendent, April 6, 1992, Series H4217 KEFJ General, Box 6, Acc. 00395 Alaska Support Office Administrative Files, ARCC; Cook and Norris, *A Stern and Rock-Bound Coast*, 159-204.

Norris, contained some 50 pages on Nuka Bay mining history. Logan Hovis describes the significance of the Nuka Bay mining district this way:

> The interesting thing about this place is the small scale effort. To me it's interesting how people with limited amounts of cash could still play in the hardrock game. They were not public companies – not trying to sell stocks and mine the public – they were actually trying to get the gold out. They never got big. Had they gotten big they would have played out very quickly and any larger investment would have been wasted.[73]

To preserve that story, it was necessary to broaden the field of view and evaluate individual mining properties in relation to the larger mining district. That conceptual problem was not unique to Nuka Bay. Historic preservationists had been struggling with issues of scale ever since the National Register of Historic Places had come into existence.

A half decade after the Nuka Bay mining sites were recorded, the Park Service created the Cultural Landscape Inventory (CLI) in order to accommodate and standardize efforts to apply a broader field of view. A macro equivalent of the Park Service's existing List of Classified Structures (LCS), the CLI was intended to be a comprehensive inventory of all historically significant landscapes within the national park system. Like the LCS, the CLI was designed to assist the Park Service in fulfilling its responsibilities under the National Historic Preservation Act. Inventoried landscapes were listed on, or eligible for, the National Register of Historic Places.[74]

In 2004, Samson Ferreira, a historical landscape architect in the regional office, served as principal author of a CLI for the Nuka Bay mining district. With Mike Tetreau, he conducted a field reconnaissance of the Alaska Hills, Nukalaska, Nuka Bay Mines, Sonny Fox, Beauty Bay, Rosness and Larson, Goyne-Waterfield, Lang, Skinner, Hatcher, Kesnoff and Smith, and Blair-Sather mine sites. The CLI defined a Nuka Bay Historic District of 48,000 acres, containing historic and prehistoric Native village sites together with twelve documented mine sites. (Two sites, the Sonny Fox and the Nukalaska sites, were each defined by discrete site boundaries inside the district boundary.) When evaluated on this scale, the cultural landscape was judged to have a high level of integrity.[75]

The State Historic Preservation Officer (SHPO) reviewed the cultural landscape documentation submitted by the Park Service and concurred with the Park Service that the cultural landscape was eligible for listing according to two of the four National

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[73] Hovis interview.
[74] National Park Service, Cultural Landscapes Inventory, *Nuka Bay Historic District, Kenai Fjords National Park* (Anchorage: National Park Service, 2004), 1.
[75] Ibid, 20-22.

Register criteria (a and d). That is, the SHPO found the cultural landscape to be: a) associated with events that had made a significant contribution to the broad patterns of the nation's history; and d) with potential to yield information important in the nation's past. However, the SHPO stipulated that it found the cultural landscape had only local, not state, significance. Moreover, in the SHPO's view, criterion d applied only to mine sites, not Native sites. The SHPO did not concur with the Park Service's preliminary assessment that the cultural landscape was eligible under the remaining two National Register criteria (b and c); namely, that it was b) associated with lives of persons significant in the nation's past; and c) embodied distinctive characteristics of a type, period, or method of construction.[76] After considering the SHPO's comments, the Park Service found the Nuka Bay Historic District eligible for listing based on National Register criteria a, c, and d.

Figure 28. L-R: Shannon Kovac, cultural resources specialist; Ian Haskins, coastal ranger; Nick Iannelli, coastal ranger, performing a site condition assessment, June 2008. (Digital Files, KEFJ.)

Park managers did not have the means to preserve the buildings, ruins, and machinery in the Nuka Bay Historic District from natural decomposition. Indeed, the wet climate caused the wooden structures to deteriorate at a rapid rate. Rather, the cultural landscape designation simply recognized that this evidence of human occupation had a place in the natural landscape. Mine site cleanup, which would proceed over the coming years, would be performed in such a way as to minimize disturbance of cultural features that were environmentally benign.

The park made one effort to restore a historic building in another section of the park. The Placer Creek Cabin, located near Exit Glacier, was believed to date from the 1940s and had originally served as a base for mining and trapping activities. In recent decades it had seen recreational use. In 1995, Placer Creek flooded, soaked the already

[76] Judith E. Bittner to Marcia Blaszak, September 3, 2004, in National Park Service, Cultural Landscapes Inventory, *Nuka Bay Historic District, Kenai Fjords National Park* (Anchorage: National Park Service, 2004). Consideration of criterion b was based mainly on involvement in the area by Earl Pilgrim and Robert Hatcher. The SHPO argued that these figures were more closely associated with other mining districts.

rotting sill logs, and deposited 12 inches of silt around them, which was certain to hasten their decay. Since the historic resource doubled as a recreational use cabin, managers decided to intervene and arrest the process of natural deterioration. The Placer Creek Cabin restoration project involved elevating the cabin with hydraulic jacks and cribbing, replacing the bottom three logs, and setting the cabin on a new, gravel-fill foundation and pressure-treated, rot-resistant timbers. In addition, gravel was extracted from the nearby creek channel; cabin windows were replaced; hearth, stove, and chimney were removed and replaced; and a pit toilet was installed. The work was accomplished over two summers. A decade later, the creek flooded again, more violently this time, spinning the cabin off its new foundation and filling it with gravel. By this time, managers had already decided to revert to a "passive preservation" approach, so the cabin was left to its fate.[77]

Ocean Alaska Science and Learning Center

The Natural Resource Challenge promoted science and learning centers as an innovative new approach for improving resource management in the national park system. They were to lead the way in making park science more accessible to the public as well as making park resources more accessible to scientists working outside the agency. Science and learning centers were also to be at the cutting edge of the Park Service's efforts to do more partnering in research and education. Each science and learning center was to serve as a hub for developing partnerships with universities. In 2000, there were just four existing science and learning centers spread throughout the national park system. These were located at Great Smoky Mountains National Park, Point Reyes National Seashore, Cape Cod National Seashore, and Rocky Mountain National Park. Kenai Fjords was to be among the first parks to acquire a new science and learning center under the Natural Resource Challenge.[78]

There were three components in the park's proposal that were key in making it a winning proposal. The first component was that the physical facilities for the science and learning center already existed: it would be located in the Alaska SeaLife Center. "The $50,000,000 state of the art 125,000 square foot Alaska Sealife Center provides the perfect venue for both research and education activities," the proposal stated impressively. The complex contained laboratory and research space, a research library, environmental education rooms, public viewing galleries, and more. Additional

[77] "Placer Creek Cabin," undated, and Mark Luttrell, "XXX Assessment of Actions Having an Effect on Cultural Resources [Placer Creek Cabin Restoration Project]," June 12, 1997, Series H4217, Administrative History Files, Archives, KEFJ; Shannon Kovac, "Kenai Fjords National Park Archeological Site Condition Assessments, August 15, 2007, copy provided to author by Shannon Kovac, Office Files, KEFJ; Kovac interview.
[78] Armato interview.

environmental education classrooms were planned for the new Kenai Fjords National Park visitor center and administrative headquarters, which was currently slated to be built on a site adjacent to the Alaska SeaLife Center.[79]

The second major strength in the proposal was its research focus. The Natural Resource Challenge proposed that each cluster of national park system units in the I&M Program would eventually have its own science and learning center. The Alaska SeaLife Center's focus on marine life was a good marriage with the SWAN's emphasis on coastal ecology.[80]

The third element in the proposal that made it attractive was that it featured the Alaska SeaLife Center. The center was already a strong partner of the park. Peter Armato sat on the center's Scientific Advisory Committee and Diving Control Board. When the center sent dive teams to collect marine specimens in waters adjacent to the park, the park provided transportation aboard its research and patrol vessel, the *M/V Serac*. The Alaska SeaLife Center partnered with Kenai Fjords Tours in taking school groups onboard the science boat, with park interpretive rangers contributing science instruction.[81]

It helped, too, that the Alaska SeaLife Center was a darling of Senator Ted Stevens. Soon after the park submitted the proposal one of the senator's staff, Lisa Sutherland, on a trip to Seward, made her yearly visit to the Alaska SeaLife Center. Afterwards she met with Superintendent Castellina, said she was excited to see the Park Service involvement with the center, and asked what more could be done to grow that partnership. Castellina told her about the pending proposal for a science and learning center. Sutherland asked how much money would be needed to get the center established. Castellina knew the protocol: a superintendent was strictly forbidden to inform congressional people of any specific funding need unless asked directly about it. The reason for this protocol was to prevent superintendents from undercutting one another or the regional director in a competition for congressional favors (as well as to keep them within the law, which prohibits lobbying with appropriated moneys). In this instance, Sutherland had unmistakably posed a direct question to Castellina. With that in mind, Castellina felt free to give her a cost estimate. A few months later, Castellina received a telephone call from the Washington Office announcing that the Park Service budget included an item for a science and learning center at Kenai Fjords. Not only had it been authorized, it came with a $645,000 increase in the park's base funding.[82]

Peter Armato was appointed director of the new Ocean Alaska Science and Learning Center (OASLC) in 2000. In the center's startup year, Armato prudently concentrated on funding projects that were already in progress. These projects had

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[79] Learning Center Challenge Action Plan, no date, copy provided to author by Peter Armato, OASLC Files, KEFJ.
[80] Ibid.
[81] Ibid.
[82] Castellina interview.

already been through a vetting process and had been determined useful. Meanwhile, Armato worked with the Alaska SeaLife Center in developing a mission statement and invited research proposals for the following year. One of the first projects that the OASLC funded was harbor seal research in Aialik Bay. This project was soon followed by others such as research on Steller's eiders. Meanwhile, the center sponsored education programs including a teacher's workshop (in association with the marine science boat operation by Kenai Fjords Tours), a monthly research seminar series, and an environmental education outreach program directed toward Alaska Native villages. Lisa Matlock, an interpretive ranger, was the park's lead person in getting the learning center's education program started. In November 2001, a second OASLC staff position was created for her. Matlock left in 2002, and Jim Pfeiffenberger, a former seasonal park ranger, was hired in her place. Pfeiffenberger brought a new emphasis to the OASLC's education outreach, developing educational products such as audiovisual programs, handouts, and other materials designed for use by educators and interpretive rangers. Through the OASLC education program, SWAN and park science programs became better known to educators as well as the general public.[83]

Through its partnerships with various educational institutions, OASLC was well positioned to make park science more visible. For example, it was an active partner in the Smithsonian-led archeology and oral history project, supporting the project with

Figure 29. Bear DNA survey crew, 2005. (Digital Files, KEFJ.)

[83] Ocean Alaska Science and Learning Center, "Semi-Annual Progress Report of Alaska SeaLife Center Activities as part of the Ocean Alaska Science and Learning Center," September 29, 2004, RINS 03—8-

grants, producing a 40-minute audiovisual program about the project that was presented to the general public at the Alaska SeaLife Center, and enlarging the project's educational benefits through an outreach program. As part of its outreach program, the OASLC introduced middle and high school students to the concept of archeological stratigraphy by allowing students to discover artifacts in a fictional site and interpret the site based on their findings.[84]

Under Armato's leadership, the OASLC remained a "virtual" entity in what he considered to be the spirit of the Natural Resource Challenge. Rather than using the center's annual funding allotment to build up a permanent staff and infrastructure, Armato aimed to keep these to a minimum and to concentrate instead on partnering with the Alaska SeaLife Center and other institutions. While each learning center came with a base increase for the host park, the money was supposed to function as seed money for leveraging grants for research and education projects that would benefit the host park as well as other units in the bioregion. In Armato's view, some science and learning centers were formed in the years after 2000 that did not live up to that original vision. Nine years after the OASLC was authorized, Armato remained committed to that vision.[85]

101, RM Files, KEFJ; Matlock interview; Tetreau interview.

[84] Aron L. Crowell, "Connecting with the Past – The Kenai Fjords Oral History and Archeology Project," in U.S. Department of the Interior, National Park Service, Alaska Support Office, *Alaska Park Science* 3, no. 1 (Spring 2004): 37.

[85] Armato interview.

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Echoes of ANCSA

Land Protection, 1988-2009

Land Status at Establishment – The Native Corporation Lands – Cooperative Management of Native Corporation Lands – Recent Development on Port Graham Corporation Lands - The Native Allotment, the Private Inholding, and Pedersen Lagoon – The State Lands - The Proposed Bear Glacier Addition – Management of Mine Operations and Acquisition of Mining Claims

Land Status at Establishment

Atypically, Kenai Fjords National Park was established with a considerable part of the federally-owned land area in limbo. The lands in limbo were called "state selected" and "Native selected" lands, because they had been selected by the State of Alaska and Native corporations pursuant to the Alaska Statehood Act and the Alaska Native Claim Settlement Act (ANCSA) respectively. The land selections were part of the massive process of transferring 147 million acres of public domain to the State of Alaska and Native regional and village corporations. The task of surveying and confirming these land selections and actually transferring ownership fell to the Bureau of Land Management (BLM). Owing to the massive scale of the land transfers, BLM was not even half done with the job when ANILCA was enacted in 1980. ANILCA recognized and honored the unique legal status of selected lands – nowhere outside Alaska did the federal government own and manage parklands that were earmarked for transfer out of the public domain – but it added stipulations to the land transfer process as it affected conservation units. Kenai Fjords was not the only ANILCA park with state and Native selected lands within its boundaries, but it had more to lose than any other park. Fifteen percent of the park's total land area and over sixty percent of the coastline were on the block for conveyance out of the park.

The total land area of the park including non-federal land was estimated to be 669,500 acres. This total included 19,470 acres of state selected lands, 119,900 acres of Native selected lands, 120 acres in one Native allotment application, and 5 acres in one parcel of private land. There were also three groups of unpatented mining claims which

overlapped the Native selected lands. Once selected lands and the allotment were transferred, the land in federal ownership would be considerably diminished. The architects of ANILCA had envisioned that most if not all of this acreage would somehow go back into federal ownership, making the park whole again, but it was up to the Park Service to find a way for that to be done.[1]

The park's land status was further compromised by the awkward location of the selected lands. The state had selected all of Nuka Island and a strip of mainland on the opposite side of Nuka Passage, while the Native village corporations of Port Graham and English Bay had selected lands covering most of the remainder of the Kenai Coast. The only portions of coast not selected were the upper reaches of McCarty Fjord, Northwestern Lagoon, Holgate Arm, and the Aialik Peninsula. Without exaggeration, the park's land protection plan described the Native selected lands as "the heart of the Kenai Fjords." The lands slated for transfer included most of the terrain suitable for camping, hiking, and sport fishing, as well as for public use cabins and administrative facilities. It was unclear how the lands might be used after they were conveyed to their new owners. The Park Service saw potential adverse uses such as recreational development, subdivision and sale, limited timber harvest, and salmon enhancement and hatchery projects.[2]

The Native selected lands in the park were themselves somewhat provisional. ANCSA provided each Native village corporation with a certain entitlement based on population. The Port Graham and English Bay corporations were authorized to select more than their entitlement because there was a shortage of available land close to these villages. The farther away from the village the selections were made the more apt they were to overlap with other village corporations' land selections. Where selections by different Native corporations overlapped, final conveyance would be based on priority lists developed by each corporation and submitted to BLM. BLM estimated that when all Native land selections in the Chugach region were sorted out according to each Native corporation's priorities, the Port Graham and English Bay corporations would end up with about 77,090 acres in Kenai Fjords National Park. It remained to be seen which Native selected lands in the park would actually be transferred, but it was obvious that the corporations would cherry pick the most accessible lands.[3]

ANCSA divided Alaska into twelve regions and established a Native regional corporation in each region. Village corporations were clustered by region, and Native shareholders in each village corporation also held shares in the regional corporation. The Kenai Peninsula fell within the Chugach region. Under ANCSA, the Native regional corporation, Chugach Alaska Corporation, would automatically acquire subsurface rights

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[1] "Kenai Fjords National Park Land Protection Plan," 1988, Series D18, Administrative History Files, Archives.
[2] Ibid.
[3] Gilbert interview.

in all lands conveyed to village corporations within the Chugach region. In addition, Chugach Alaska Corporation had its own land selections within the park. Both the village corporations and the regional corporation had made selections under ANCSA's Section 14 (h) (1), which provided for the conveyance of lands containing cemetery sites and historic places. Altogether, the three Native corporations claimed 30 sites covering approximately 4,000 acres inside the park boundary. Wherever the 14 (h) (1) selections by village and regional corporations overlapped, the village selection took precedence. BLM estimated that after these competing selections were sorted out, about 1,000 acres of surface estate would be conveyed to the regional corporation.[4]

The Park Service addressed the park's precarious land status in a land protection plan, which was drafted in 1985 and finally approved in January 1988. One of Castellina's first official acts as superintendent was to put her signature on it. Chuck Gilbert, a planner in the regional office, was the primary author of the plan. He was familiar with Kenai Fjords National Park from his work as assistant to keyman Don Follows in the 1970s, as well as from his prominent role in preparing other planning documents in the early 1980s, including the GMP. Indeed, much of the strategy laid out in the land protection plan followed from ideas already formulated and vetted in the GMP. Gilbert wrote the plan in the context of the Department of the Interior's 1982 statement of policy on the Land and Water Conservation Fund, which pushed land managers to find alternatives to land purchases whenever possible. Under the new policy, land managers were to give more effort to securing the land's protection through exchange or donation or even a conservation easement, reserving actual purchase as a tool of last resort. Since land acquisition was such a costly and lengthy effort, the land protection plan ranked the park's needs in order of priority.[5]

First in priority were the lands selected by the Port Graham and English Bay village corporations. The plan recommended a short term and a long term action for when these lands were removed from federal ownership. In the short term, the Park Service would attempt to enter an agreement with the Native corporations for those lands to be registered in the Alaska Land Bank. The Alaska Land Bank program was established under Section 907 of ANILCA. Its purpose was to protect both the Natives' interests and the national interest until the lands could be acquired by the federal government. Native corporation lands entered in the Alaska Land Bank were to be maintained in their natural condition and the owner was to be given immunity from adverse possession and taxation of the property. But it was understood that the Native corporations would not be content with this arrangement indefinitely. The agreements and the land bank were "interim protective measures." In the long term, the goal was to

[4] "Kenai Fjords National Park Land Protection Plan," 1988, Series D18, Administrative History Files, Archives.
[5] "Kenai Fjords National Park Land Protection Plan," 1988, Series D18, Administrative History Files, Archives; Gilbert interview.

acquire the lands in fee simple by purchase or exchange. This short term/long term approach had been discussed with the Native corporations, and they had tentatively agreed to support it.[6]

Second and third in priority were the one tract of private land and the one Native allotment, each of which the park wanted to acquire in fee simple. The private land was located near the head of Aialik Bay and was undeveloped and not in use. It was in a prominent location where any future development would impair the scenery and impact the visitor experience in that popular section of the park. The Native allotment, which awaited patenting by the BLM, was located in Verdant Cove of Aialik Bay. There was a Quonset hut on the property but it was not currently in use. Verdant Cove was valuable as an anchorage and backcountry campsite, and the Park Service wanted to protect the land from potential development of more facilities or timber harvest.[7]

Fourth in priority was the cemetery and historic site selections of the Chugach Alaska Corporation. The Park Service hoped to protect these lands through an agreement by which the Native corporation would relinquish the selections and the cultural resources would be protected by the park. If it could not get an agreement and the selections were conveyed, then the deeds would contain covenants protecting the cultural resources, as provided for under ANILCA. The Park Service in that case would seek an agreement that addressed Park Service involvement in studies, protection, and management of the lands.[8]

Fifth in priority were Nuka Island and the nearby mainland areas. By the time the land protection plan was prepared, these lands were in state ownership. They had mostly passed into state ownership shortly after the park was established, although some patents were delayed for a few years. Congress had included these areas in the park, the plan noted, with the expectation that the Park Service and the state would enter cooperative agreements on recreational development and protection of these areas. Following Congress's bidding, the Park Service hoped to enter cooperative agreements with the state. It had no interest in acquiring the state lands by purchase but, if offered, would give "serious consideration" to acquiring them by exchange.[9]

Sixth in priority was Pedersen Lagoon. The state claimed ownership of all submerged lands and tidelands in and around the park, including this 215-acre lagoon, but the land protection plan singled out this area for its important scenic and biological resources. The Park Service's first course of action would be to apply to the Alaska Department of Natural Resources for closure of this area to all forms of appropriation

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[6] "Kenai Fjords National Park Land Protection Plan," 1988, Series D18, Administrative History Files, Archives.
[7] Ibid.
[8] Ibid.
[9] Ibid.

under state laws, such as mining of sand and gravel. If its request was denied, the Park Service would then seek to acquire title to these state lands through exchange.[10]

The seventh and last priority described in the land protection plan pertained to the unpatented mining claims around Nuka Bay. The land and resources surrounding the unpatented mining claims would be protected by regulation of mining activities under NPS mining regulations. There were, in addition to these seven priorities, three areas outside the park boundary that the Park Service was interested in adding to the park: the Chiswell and Pye islands, state tidelands and submerged lands along the coastline of the Kenai Fjords, and an area of approximately 7,500 acres referred to as the proposed Bear Glacier addition.

The Native Corporation Lands

Superintendent Moore initiated talks with the Port Graham and English Bay corporations in 1982. Both corporations agreed with the Park Service that the preferred alternative, once Native selected lands in the park became Native corporation property, would be for the park to re-acquire those same lands by purchase or exchange.[11] Talks did not progress much beyond this general agreement, however, as BLM and the Native corporations still had work to do before the conveyances could occur. In 1988, Donald D. Emmal, president of English Bay Corporation, took up the matter with Regional Director Evison, proposing that the corporation exchange all of its selected lands in Kenai Fjords for federal lands in the Arctic National Wildlife Range (ANWR). Acting Regional Director Richard J. Stenmark responded that the Park Service was "very interested" in this proposal and that it had already broached the issue with the regional corporation, since it too had an interest. "As the eventual owner of the subsurface estate of any surface lands conveyed to the English Bay and Port Graham village corporations in the park, the Chugach Alaska Corporation is a primary party to any such exchange," Stenmark explained.[12]

The *Exxon Valdez* oil spill in 1989 created a new framework for negotiating a land deal. For one thing, it shut down discussion of opening ANWR to oil exploration and ended talk of a land exchange involving ANWR. For another, it opened up the question of Exxon Corporation's liability for natural resource damages. The Native corporations sued Exxon for damages along with the state and federal governments. Soon after the spill, the Native corporations completed their priority lists for the selected

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[10] Ibid.

[11] Superintendent to President, Port Graham Corporation, December 15, 1982, and Superintendent to President, English Bay Corporation, December 15, 1982, Series A26 Reading File Jan-Feb-Mar 1982, Administrative History Files, Archives, KEFJ.

[12] Richard J. Stenmark to D. D. Emmal, March 14, 1988, Series L1425 Holdings KEFJ, Box 9, Acc. 00395 Alaska Support Office's Administrative Files, ARCC.

lands in the park, a requirement for BLM to move forward with the process of land conveyance. To no one's surprise, the priority lists favored shoreline property over ridge top property. The priority lists also included nearly all of the areas stricken by the oil spill. Both the Native corporations and the Park Service began to imagine scenarios by which the anticipated settlement money from Exxon would provide the federal government with the wherewithal to purchase the Native lands in the park. Following the nearly $1 billion settlement reached between Exxon and the State of Alaska and the United States in September 1991, the English Bay Corporation submitted a proposal to the Exxon Valdez Oil Spill Trustee Council to fund a federal purchase of its lands in Kenai Fjords. Park Service officials were initially hopeful that the proposal would be funded, but the submission proved to be premature because the English Bay Corporation and the Park Service soon became embroiled in a dispute over which lands in the park would be conveyed. The land conveyance was not so imminent, therefore, as the proposal had assumed.[13]

At issue was a petition by the English Bay Corporation to exchange seven sections of validly selected lands in the park for an equivalent acreage along the coastline of the park. The English Bay Corporation claimed that the exchange was allowed under Section 1410 of ANILCA, which covered the selection of lands in conservation units in cases where Native village corporations were found to be underselected to meet their entitlements. The Park Service held that the corporation had already made those selections, therefore if the Secretary of the Interior were to allow the exchange it would exceed the intent of Section 1410. Both the BIA and BLM supported the English Bay Corporation's position. On January 15, 1993 (in the final days of the Bush administration), Assistant Secretary of the Interior John Schrote ordered BLM to validate the English Bay Corporation's petition; however, on February 16, 1993, (shortly after the Clinton administration took office) Secretary of the Interior Bruce Babbitt suspended the order for review.[14] The impasse had significant ramifications for the English Bay Corporation in its claim against Exxon. Counsel for the Trans-Alaska Pipeline Liability Fund challenged an award made to the corporation for damages to lands surveyed but not yet conveyed, since the award was made contingent on proof that the corporation had made "irrevocable selection" of the affected lands.[15]

Through this trying process, park officials sometimes walked a fine line between giving due consideration to the integrity of the park and appearing to begrudge the Native corporations for taking land they legitimately had coming to them. In 1989, a reporter for

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[13] Tom Kizzia, "Natives Claim Most of Coastline in Park," *Anchorage Daily News*, November 18, 1989; C. Gilbert, notes of telephone conversation with Don Emmal, January 24, 1992, File: English Bay, RM Files, KEFJ; Sandy Rabinowitch, Note to Jack Morehead and Paul Haertel, December 29, 1992, File: Chief Ranger Peter Fitzmaurice files, Archives, KEFJ.

[14] Acting Assistant Secretary for Fish and Wildlife and Parks and Acting Secretary for Land and Minerals Management to Secretary, April 28, 1993, File: English Bay, Resource Management Files, KEFJ.

[15] Barry Roth to Dan Hanson, May 18, 1993, File: English Bay, Resource Management Files, KEFJ.

the *Anchorage Daily News* asked Bud Rice what park officials thought about the impending land conveyance. "We're horrified. There just doesn't seem to be much we can do about it," Rice was quoted as saying in an article that ran under the headline, "Natives claim most of coastline in park."[16] The article and the remark by Rice elicited a stern rebuke from the editor of the Native-owned *Tundra Times*, who reminded readers that Alaska Natives had occupied those lands long before the park was established.[17] Superintendent Castellina, asked by a reporter for the *Seward Phoenix Log* what the conveyance would do, answered bluntly: "It will gut the park." She went on to explain that it would jeopardize the park's ability to support studies on the ecosystem and to protect the shoreline from unsightly development.[18] In another interview, Castellina said: "My fear is miles and miles of posted no-trespassing signs where it's been an awesome experience for so many years. The irony is, the park service is the one who gets accused all the time of locking up lands."[19] When it seemed that the Park Service and the Native corporations were close to an agreement in the fall of 1994, letters and postcards poured in from citizens across the nation urging the Exxon Valdez Oil Spill Trustee Council to fund the land purchase.[20] The trustee council agreed to support it in principle, but the parties could not agree on a price, so the deal fell apart.[21]

BLM finally began to complete the conveyances in November 1995. The Park Service's Alaska Regional Office had a timber valuation study done during the winter of 1995-96 and Park Service officials negotiated with the two Native village corporations simultaneously through the following winter. The parties reached agreement on the purchase price and the trustee council passed a resolution in February 1997 to allocate the money. The English Bay Corporation entered a sale and purchase agreement with the United States in May 1997. But the Port Graham Corporation decided that in the final analysis it would rather have the land than the money. The different decisions taken by the two village corporations was attributed to the different economic conditions in the two communities. The village of Nanwalek, formerly English Bay, needed money for the community's cash-strapped medical and social programs and to create an education endowment for sending members away to college. The village of Port Graham, meanwhile, found that it needed jobs more than money, and it hoped that tourism development might create jobs for some members of the community. Unfortunately,

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[16] Tom Kizzia, "Natives claim most of coastline in park," *Anchorage Daily News*, November 18, 1989.
[17] "Chugach Region deserves better," *Tundra Times*, November 27, 1989.
[18] Adam Orth, "Native land deal 'guts' Kenai Fjords park," *Seward Phoenix Log*, January 7, 1993.
[19] Tom Kizzia, "Parkland title ready to switch to Native hands," *Anchorage Daily News*, December 21, 1994.
[20] Two examples among many are Walfredo and Carolina Reyes to Exxon Valdez Oil Spill Trustee Council, October 21, 1994, and Ann Ghicadus to Mr. Ayers and Trustee Members, October 24, 1994, Series L14, Central Files, KEFJ.
[21] Tom Kizzia, "Parkland title ready to switch to Native hands," *Anchorage Daily News*, December 21, 1994.

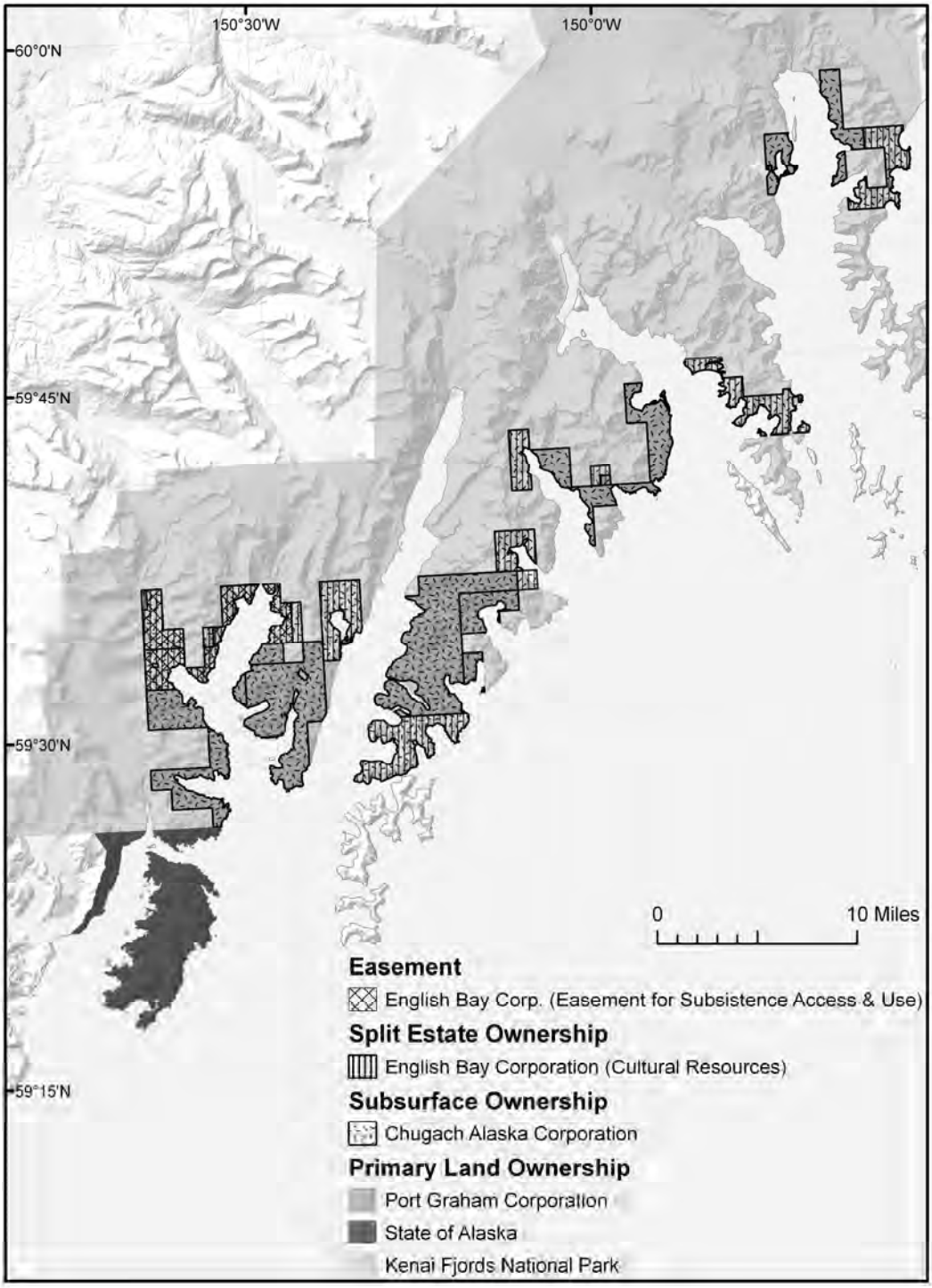

Figure 30. Land ownership as planned and soon to be effected in 2009.

when Port Graham declined to sell, the trustee council reallocated the money for land purchases elsewhere.[22]

Still, the deal with the English Bay Corporation gave Interior officials cause to celebrate. For $15.37 million, the United States acquired a total of 30,258 acres in Kenai Fjords National Park and 2,279 acres in the Alaska Maritime National Wildlife Refuge. The English Bay Corporation's shareholders reserved the right to conduct subsistence hunting and fishing on approximately 9,000 acres in the vicinity of Beauty Bay and the North Arm of Nuka Bay, and it reserved the right to collect and preserve cultural artifacts on all the lands. The English Bay Corporation was pledged to set aside $500,000 from the proceeds of the sale for the study of cultural resources on its former lands when the final conveyances took place. In 2009, the process was not yet completed.[23]

Cooperative Management of Native Corporation Lands

When Secretary Babbitt signed the land sale agreement in May 1997, he established subsistence rights in Kenai Fjords National Park where they had not existed before. In a sense, the only park created by ANILCA without subsistence use had now been brought into the fold with all the other Alaska parks that did have subsistence. Park officials, however, perceived the subsistence rights as more symbolic than anything else. The area was too remote from the village of Nanwalek to be of much practical use for subsistence activities. To get from the village of Nanwalek to Nuka Bay by boat would require a long and hazardous trip in open ocean all the way around the southern tip of the Kenai Peninsula. It would actually be more expeditious for village members to go to Homer, drive from Homer around to Seward, and take a boat from Seward to Nuka Bay. Apart from conducting a subsistence resource inventory on lands located along North Arm and Beauty Bay in 1997, the park did not attempt to manage subsistence use. Park staff assumed that virtually none occurred.[24]

The people of Port Graham acquired use rights within the park as well, but their rights were based on the Port Graham Corporation's ownership of approximately 42,100 acres within the park. As shareholders in the corporation, they had rights of access to those lands and could use the land as the corporation allowed. As in the case of Nanwalek, park officials doubted that subsistence activities would actually occur on Port Graham Corporation lands in the area. A conversation that Castellina had with Lydia

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[22] Castellina interview.

[23] Office of the Secretary, "Secretary Babbitt Announces Major Land Protection Agreement for Kenai Fjords National Park" (press release), May 19, 1997, and Anonymous, "Purchase of the English Bay Corporation lands in Kenai Fjords National Park and Alaska Maritime National Wildlife Refuge" (typescript note), February 10, 1997, Series L1425 English Bay Lands, Office Files, KEFJ.

[24] Castellina interview. The subsistence resource inventory is noted in Ian D. Martin, "Nuka Bay Ranger Station 1997 Field Season Final Report," September 9, 1997, Digital Files, KEFJ.

Robart, a member of the Port Graham Village Council, was instructive. While touring Aialik Bay by boat together, Robart remarked to Castellina that she could see no reason why her village would want to retain lands in the park – the area was simply too far away to be of use. But Robart passed away soon afterwards, and new people elected to the village council opposed selling the land on principle.[25] So the Port Graham Corporation took a different approach from the English Bay Corporation, treating the land in the park as both a cultural inheritance and an economic asset.

Park officials began to discuss cooperative management with Port Graham village leaders as soon as the Port Graham Corporation submitted its final priority lists to BLM. The first matter to come up was easements. According to ANCSA, the Park Service needed to preserve public use access on Native selected lands by obtaining easements from the Native corporations. Park staff decided where it needed to request easements for campsites, routes, and beach landings. (The latter constituted points of access under the law when water taxis began making landings to off-load kayakers and their equipment). Then the park organized a trip on the *Serac*. Chief of Resource Management Troutman and Chief Ranger Fitzmaurice accompanied Pat Norman, the president of Port Graham Corporation, and other village leaders on a tour of the coastline in which they inspected the various locations for easements. Route easements were given a standard 25-foot width, and campsite easements were generally described as one acre, but Troutman recalls establishing boundary corners for some of these easements. The NPS completed the easements with BLM in 1995.[26]

Two of the four public use cabins on the coast (Aialik Bay and Delight) were on Port Graham Corporation lands. The Park Service had located these cabins on Native selected lands intentionally since ANILCA recommended that it do so.[27] After the cabins were built, the Park Service considered moving them all to lands that would remain in federal ownership, but decided against it. When the lands transferred to Port Graham Corporation ownership, the Park Service entered into a lease for each cabin. Initially the amount was set at $5000 per cabin per year. The Park Service paid for all maintenance and propane use, administered the registration system, and collected the user fees. After one year the Park Service found that the revenue did not cover costs so it negotiated the cost of the lease down, arguing that it could not intentionally operate at a loss. The Port Graham Corporation decided to terminate the lease of the Delight Cabin. Currently the Aialik Bay Cabin is the sole cabin under a lease arrangement.[28]

For two years, the Park Service and the Port Graham Corporation jointly staffed one of the two coast ranger teams. During the summer of 1997, Marlene Norman and

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[25] Castellina interview.
[26] Mike Tetreau, "Kenai Fjords National Park Land Status," December 2, 2004, Digital Files, KEFJ; Superintendent's Annual Report, 1995, Annual Narrative Reports, Central Files, KEFJ; Troutman interview.
[27] Castellina interview.
[28] Armato interview.

Loreen Young, both of Port Graham village, worked with park staff on the outer coast. Primarily they teamed with Sean Brennan, seasonal park ranger, to form the Aialik Bay team. In 1998, Young returned for a second season. The Park Service obtained a grant to fund the two Port Graham ranger positions, and it was Castellina's hope that after a few years the village corporation would take over funding and the program would become self-sustaining. After the second season, Castellina, Troutman, and Jim Ireland, flew to Port Graham for an end-of-season-review meeting with the village leaders. Besides discussing how certain operational aspects of the program might be improved, Castellina's purpose was to explain that the NPS did not want to be responsible for funding the positions indefinitely; it was anxious for the Port Graham Corporation to take it on in the coming year. (Part of the park's difficulty in supporting continuation of the status quo was that it had just been directed to transfer coast ranger operations from the resource management division to the ranger division, and it could not afford to staff the whole coastal operation with law enforcement rangers.) Park officials and Port Graham representatives discussed whether the Port Graham Corporation might fund the Nuka Bay team. They discussed scenarios in which the Nuka Bay ranger team was funded by the Native corporation and staffed by NPS personnel, or in which it was funded and staffed by the Native corporation and the NPS provided training and other types of assistance. They also considered an arrangement whereby the two entities would each field a ranger team in Nuka Bay and the two teams would work together on common goals. After due consideration, the Port Graham Corporation notified the park that it was not interested in funding a ranger team, and so the trial program was discontinued after two years.[29]

There were other reasons why the effort to develop a shared ranger presence on the coast did not take hold. With a population of less than 200 residents, Port Graham had a hard time recruiting people interested in the ranger job. Most residents preferred to work in the fishing or canning industries where jobs were located closer to home. The two women who participated in the trial program were sometimes uncomfortable with being in an organizational culture that was so removed from the village life to which they were accustomed. Also, the Port Graham Corporation's interests did not coincide seamlessly with the Park Service's mission. Port Graham's stated goals for cooperative management were to prevent trespass, to prevent poaching, and to collect user fees. It did not necessarily share the Park Service's goals to manage natural and cultural resources or to facilitate public enjoyment.[30]

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[29] "Summary of NPS Discussion on Co-Management with Port Graham," October 20, 1998, Series L1425, Administrative History Files, Archives, KEFJ; Jim Ireland interview; Patrick Norman to Anne Castellina, January 14, 1999, Series L1425 Port Graham, Office Files, KEFJ.

[30] "Summary of NPS Discussion on Co-Management with Port Graham," October 20, 1998, Series L1425, Administrative History Files, Archives, KEFJ. According to this document, a draft memorandum of agreement on cooperative management was prepared in 1996 but on the advice of the corporation's attorneys the MOA was never finalized and signed.

Although the Port Graham Corporation withdrew its interest in participating in joint ranger patrols, cooperative management continued insofar as the park regularly sought permission from the Native corporation to conduct management activities on Port Graham lands and it regularly notified the Native corporation of what occurred. These management activities ranged from readiness to respond to emergencies involving visitors in distress, to biological research projects, to monitoring of sensitive archeological sites.[31]

Recent Development on Port Graham Corporation Lands

As early as 1989, the Port Graham Corporation announced its interest in developing a for-profit guest lodge in Aialik Bay. Park officials were dubious about such a venture. President Pat Norman tried to mollify Park Service concerns while asserting the corporation's prerogative to develop the land as it saw fit. "It wouldn't be in our benefit to develop in a way that takes away from its natural beauty," Norman said that year, "but we will probably end up in a conflict between how we want to develop and [Park Service] priorities."[32]

From time to time, the Park Service and the Port Graham Corporation engaged one another on this issue. In 2006, there was discussion of a conservation easement to cover the Port Graham lands in Aialik Bay. However, the parties could not find a funding source. When those negotiations terminated, Port Graham Corporation entered a lease agreement with a developer, Alaska Wildland Adventures, and plans went forward to build a guest lodge. Meanwhile, the land purchase program administered by the Exxon Valdez Oil Spill Trustee Council entered a final stage with a focus on smaller parcels of property. With about $6 million remaining of the nearly $1 billion fund that it had started with, the trustee council was in the process of wrapping up its work. The Park Service submitted a proposal to acquire about 2,500 acres of Port Graham Corporation lands in Aialik Bay. The trustee council gave its preliminary blessing to the project, passing a resolution that provided about $35,000 to

Figure 31. Pedersen Lagoon and Aialik Bay. (Web photo.)

[31] Anne D. Castellina to Pat Norman, January 31, 2000, Series L1425, Central Files, KEFJ.
[32] Quoted in The Wilderness Society, *The Alaska Lands Act: A Broken Promise* (Washington: The Wilderness Society, 1990), 25.

the Park Service for investigations, such as hazardous material surveys and appraisals. The initiative came too late to shut down the lodge development, which was already covered by a lease. But it revived hopes that the Port Graham Corporation lands in Aialik Bay would be conveyed to the Park Service.[33]

The Native Allotment, the Private Inholding, and Pedersen Lagoon

The one Native allotment in the park consisted of two parcels, one 80 acres and the other 40 acres, both in Verdant Cove. The land belonged to Alma Dodge, a mixed-blood Aleut who, with her husband Jack, lived in Seward in the 1950s. After moving to Palmer, the couple built a Quonset hut on the 40-acre tract and Dodge filed for an allotment in the summer of 1968, claiming that they used the parcels "for subsistence purposes in the traditional Native manner." They occupied the site during four summers from 1968 to 1973 and then moved to Washington state. Questions later arose about the adequacy of their claim to one of the parcels, and although Dodge died in 1983, BLM finally issued a Certificate of Allotment for both parcels to the Dodge estate in 1988.[34] As of 2009, the property belonged to Dodge's daughter, Linda Sue Anderson. Neither Dodge nor her daughter ever expressed an interest in selling the property, so the Park Service never made any moves to acquire it.[35] With the permission of the owners, rangers sometimes used the property as a spike camp while patrolling the area.[36]

The one parcel of private land in the park was a little less than five acres and was located on shoreline in upper Aialik Bay. The pre-park history of this property began in July 1957 when Seward resident Bernard W. ("Bill") Younker built a one-room cabin, tent frame and gas and oil locker, and used the site for a seal hunting camp. In November 1959, Younker sold the improvements to William F. Hart, Jr., an Anchorage resident. In 1963, a BLM official made a preliminary finding that Hart had earned title to the property and a patent was eventually issued to Hart for 4.86 acres in March 1972.[37] By the time of the park's establishment, it belonged to Dave Roseneau, a bird biologist with the Fish and Wildlife Service whose home was in Homer. Since Roseneau worked for a conservation agency, park officials felt relatively confident that the owner would not make any adverse use of the property. Periodically, the NPS inquired with Roseneau whether he was interested in selling the property but these inquiries never led anywhere. Roseneau eventually listed the property for sale, and in 2009 it was purchased by Alaska Wildland Adventures.[38]

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[33] Gilbert interview.
[34] Cook and Norris, *A Stern and Rock-Bound Coast*, 127-28.
[35] Mike Tetreau, "Kenai Fjords National Park Land Status," December 2, 2004, Digital Files, KEFJ.
[36] Castellina interview.
[37] Cook and Norris, *A Stern and Rock-Bound Coast*, 128.
[38] Gilbert interview; Shelley Hall interview by Theodore Catton, May 27, 2009.

No action was taken on acquiring the 215 acres of state-claimed submerged lands in Pedersen Lagoon. As the park soon gained acceptance by the people of Seward and Alaskans generally, and Aialik Bay proved such a popular destination for sightseeing, it seemed exceedingly unlikely that ADNR would ever authorize mining of sand and gravel at that location.[39]

The State Lands

Nuka Island is approximately nine miles long by three miles wide. The western shore, facing Nuka Passage, is indented by five bays, which offer some of the few safe anchorages along the Kenai Coast from Seward to Seldovia. The most scenic bays are Mikes Bay and Herring Pete's Cove, the latter named for the island's longtime resident, "Herring" Pete Sather, who, with his wife Josephine, occupied a homestead and fox farm. In August 1961, Sather was lost on his boat in a storm. His wife Josephine left the island a year later. Other families occupied the property intermittently into the early 1970s. Early in the D-2 process, the Park Service identified Mikes Bay and the newly deserted Herring Pete's Cove as the two best locations for a lodge within the proposed park area because either site would be protected from tsunamis coming from the Gulf of Alaska.[40]

Figure 32. Josephine Sather at Herring Pete's Cove. (Web photo.)

Despite the Park Service's early interest in Nuka Island (keyman Don Follows once prepared a report on why Nuka Island was important to include in the proposed national park) official concern about the area quickly waned after the state acquired ownership in the early 1980s. One reason for this change of heart was that state officials did not particularly warm to the idea of cooperative management with the Park Service. The other reason was that with passage of time it became evident to park officials that adverse land uses were unlikely to develop in the area, so there was little reason for the Park Service to concern itself anymore. In 1989, the state legislature added all of the state lands inside Kenai Fjords National Park to Kachemak Bay State Park. Two years later, the state park superintendent, Christina D. Titus, wrote to Superintendent Castellina requesting her help

[39] Chuck Gilbert, personal communication with author, April 22, 2009.
[40] Cook and Norris, *A Stern and Rock-Bound Coast*, 122-23; Ronnie Chappell, "Mining, Logging Considered for Island," *Anchorage Daily News*, May 15, 1986.

in getting the Kenai Fjords National Park brochure revised so that the map would depict the new state park boundary.[41] Castellina evidently complied with this request, as a new brochure was issued that not only showed the mainland area as part of Kachemak Bay State Park, it also showed the national park boundary in a new location north of Nuka Passage (where state lands abutted federal lands) and dropped Nuka Island off the southern edge of the map. These revisions made sense as an accurate depiction of the park boundary but it was only a de facto change since Congress never acted on it.[42]

Soon after the lands were conveyed to state ownership, the Alaska Department of Natural Resources (ADNR) prepared a management plan for Nuka Island. ADNR stated that Nuka Island would be managed primarily for recreational use and wildlife habitat, although it did not rule out the potential for other types of resource exploitation such as mining, grazing, or timber harvest. The plan contemplated a main visitor lodge development in either Home Cove or Mikes Bay and a secondary lodge development in Herring Pete's Cove. The latter would utilize the abandoned homestead site. The land would be retained in state ownership and a lease would be issued to a private enterprise to develop each site. The rest of the island would be preserved in an undeveloped state.[43]

The Park Service was generally supportive of this plan. Superintendent Moore thought one lodge development would be enough, and he advocated for a stronger commitment by the state not to pursue other types of resource development, but he heartily endorsed the basic thrust of the plan to manage the area for recreational use.[44] Moore indicated to state officials that the Park Service would assist with cleanup of the former homestead by offering use of the park boat and volunteer support. Citing that commitment, ADNR's management plan stipulated that cleanup and rehabilitation of the historic buildings would be made a condition of the lease. "The restoration of the house and surroundings should be done in a way that gives visitors a sense of the historic use of the site (as a marine homestead and fox farm)," the plan stated.[45] Gilbert remembers that the Park Service made at least one joint trip with state officials to Nuka Island, and this cooperative planning effort may have occurred around the time that ADNR prepared the management plan.[46]

Finding anyone interested in developing a lodge proved difficult. The state eventually deeded two parcels on Herring Pete's Cove and Mikes Bay to the University of Alaska, hoping that the university would market the business opportunity more aggressively. The university's Statewide Office of Land Management put out a request

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[41] Christina D. Titus to Anne Castellina, May 28, 1991, File: State Park Selection Nuka Island, Chief Ranger Peter Fitzmaurice Files, Archives, KEFJ.
[42] Gilbert interview.
[43] Alaska Department of Natural Resources, Division of Land and Water Management, *Nuka Island and Vicinity Management Plan* (Anchorage: Alaska Department of Natural Resources, 1986), 57.
[44] Ronnie Chappell, "Mining, Logging Considered for Island," *Anchorage Daily News*, May 15, 1986.
[45] Alaska Department of Natural Resources, Division of Land and Water Management, *Nuka Island and Vicinity Management Plan* (Anchorage: Alaska Department of Natural Resources, 1986), 57.
[46] Gilbert interview.

for proposals "for firms interested in leasing land and developing a remote lodge facility" but it did not get any takers. An online public notice for the recreational development, posted by the same office, was last updated in July 2000.[47] By then, Park Service officials followed the state's effort with an air of detachment. Alaska had many wilderness lodges that were accessible only by boat or plane, and they generally struggled to survive economically. The business depended on advance bookings and getting people in and out on schedule. When a wilderness lodge was weathered in, which was not infrequent, one batch of clients had to stay over while another batch had to wait or cancel. It did not take long for bad weather to cause these remote operations to go seriously awry. By the beginning of the twenty-first century, the market for wilderness lodges was saturated and a number of these businesses were up for sale. Under the circumstances, it did not appear likely that anything would happen soon on Nuka Island.[48]

The Proposed Bear Glacier Addition

Of the three desired additions discussed in the land protection plan, none had much chance of materializing. The U.S. Fish and Wildlife Service was not interested in giving up the Pye or Chiswell islands, nor was the State of Alaska interested in transferring tidelands or submerged lands to the park. Although everyone could agree that the park boundary, running along the mean high tide line and excluding the intertidal zone and offshore islands, made little sense from the standpoint of resource management, the situation was unlikely to change.[49] The third proposed addition, the area between Bear Glacier and Callisto Peak, stood a slightly better chance of success because it mostly involved mainland area.[50]

The existing park boundary ran due north and south along township lines, and while the straight line coincided fairly closely with the crest of the mountains directly west of Seward it sliced through the end of Bear Glacier and left most of the Bear Glacier forelands outside the park. Furthermore, it left a corridor of public domain two miles wide between the park and Caines Head State Recreation Area. This area was administered by BLM. As this corridor took in the mountainous uplands around Callisto

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[47] Request for Proposals (1994) in File: State Park Selection Nuka Island, Chief Ranger Peter Fitzmaurice files, Archives, KEFJ; Online Public Notice (2000) at http://notes5.state.ak.us/pn/pubnotic.nsf <April 19, 2009>.

[48] Gilbert interview; Mow interview.

[49] Park officials and state officials could be equally hard-nosed when it came to asserting their jurisdiction above or below the mean high tide line. During the oil spill cleanup, differences arose over whether ATVs should be used on the beach, or whether oily debris that had been collected in garbage bags should be left out overnight, and on occasion the park ranger and the state representative actually took sticks and drew "a line in the sand" to show where they would each have their way in these matters (Tetreau interview).

[50] The state was on record against the proposed Bear Glacier addition in a comment letter on the draft land protection plan, dated August 22, 1986. See Anne Castellina to Marilyn Heiman, July 8, 1999, with enclosure, Series L14, Central Files, KEFJ.

Peak, it was a prime area for hunting of mountain goats and a difficult area in which to mark a clear park boundary.[51]

Nearly twenty years after the park's establishment, Castellina raised the issue of the Bear Glacier addition again during a teleconference with Interior officials on use of the Exxon Valdez Oil Spill trust funds. Owing to the peculiar natural dynamism of this interesting area, there were new reasons for suggesting that it be added to the park. Bear Glacier had retreated substantially since 1980. As it retreated, a lake formed around the glacier terminus, and as the lake grew in size it spread out of the park onto BLM land where the state has jurisdiction over navigable waters. Starting in the summer of 1998, jet ski operators in Seward began offering jet ski rides on the state-controlled portion of the lake. The lake was used by sea otters and harbor seals and was also popular with sea kayakers. The park received complaints from sea kayakers who were galled by the noise and fumes put out by the jet skis, as well as by the disturbance they caused to wildlife.[52]

Figure 33. Aerial view down Bear Glacier to Bear Lake and Gulf of Alaska, September 1988. (Photo by Bud Rice, Acc. 43, Cat. 614, Box 2, No. 30, KEFJ.)

Castellina also reminded Interior officials of the difficulty of posting the park boundary as it currently existed in the area. The park was concerned about hunting trespass and poaching of mountain goat and black bear across that indistinct boundary.

[51] Associate Regional Director to Superintendent, July 13, 1987, Series L14, Central Files, KEFJ.
[52] Anne Castellina to Marilyn Heiman, July 8, 1999, Series L14, Central Files, KEFJ.

The proposed addition would move the park boundary eastward so that it followed the natural watershed boundary between Bear Glacier and Resurrection Bay.

The Kenai Peninsula Borough had recently completed a draft Kenai area plan in which it recommended that the state legislature add this whole corridor, approximately 10,000 acres, to the Alaska state park system. The superintendent sought to build on that local initiative by proposing to the state that approximately 7,500 acres be added to the national park and the other 2,500 acres be added to the state park. It would create a common boundary between the two parks, eliminate the intervening "no man's land," and place that boundary along an easily recognizable ridge line. At the same time, Castellina wanted to begin working with the state and the National Marine Fisheries Service, which had jurisdiction over marine mammals, to secure a temporary emergency closure of the state's portion of Bear Lake to jet skis.[53]

Figure 34. Bear Glacier tour. (Web photo.)

The park was unable to get ADNR cooperation with either of these initiatives. Jet ski use on the state's portion of the lake continued. In recent years, ADNR has issued at least three land use permits to recreational outfitters for staging base camps in the Bear Glacier area. In May 2009, the state permitted a more developed ecotourism camp in the area that included tent platforms with weather ports, heaters, cook tent, and other amenities. The park expressed concern about the cumulative effect of increased development and recreational use in this sensitive area.[54]

Management of Mine Operations and Acquisition of Mining Claims

When Kenai Fjords National Park was established there were just three groups of mining claims within the area that were administratively active claims. All three were located in the old Nuka Bay Mining District, one of the most remote sections of the park. None had seen much more than a minimum of annual assessment work done in the past decade, nor had any been determined to be a valid claim, nor were any patented. As each

[53] Anne Castellina to Marilyn Heiman, July 8, 1999, Series L14, Central Files, KEFJ.
[54] Superintendent to Alaska Department of Natural Resources, April 10, 2008, Digital Files, KEFJ. See also a video clip of jet ski amongst icebergs beside Bear Glacier posted on YouTube, dated July 27, 2008, at www.youtube.com/watch?v=lvGiklTLW7s <April 23, 2009>.

group of claims was accessible by water, none involved rights of access across park land as provided for under ANILCA except for one set of claims in Surprise Bay where a short access road crossed a bit of park land. For all of these reasons, the draft land protection plan completed in 1985 did not even mention the mining claims. The final land protection plan approved in January 1988 did, but it accorded them lowest priority, recommending that the land and resources surrounding these claims should be protected not by acquisition of the claims but by regulation of the small-scale mining operations. "Compliance with these regulations," the plan explained, "will result in mining activities with minimal and acceptable effects upon park resources and uses."[55]

Viewed in wider context, it is no wonder that the small-scale mining operations in Nuka Bay appeared almost negligible to park managers. After passage of ANILCA, the Park Service was given jurisdiction over 51 million acres in Alaska, much of it dotted with remote mining claims. The Alaska Region estimated that it had upwards of 5,000 mining claims under its purview. This number far exceeded the number of mining claims in all other regions of the national park system combined. Moreover, it had to assume oversight of these far-flung operations in a hostile political environment. The mining industry had been one of ANILCA's staunchest opponents, and the industry had many friends both in Alaska state government and in the Reagan administration who were passionate about protecting mineral rights wherever they existed. The Park Service's Alaska Region, forced to adopt a get-along policy until Alaskans became more accepting of the large new NPS presence in their state, took the position that mining in the parks could not and would not be curtailed overnight. Rather, the Alaska Region would regulate the activity and attempt to curtail its worst environmental consequences. But in reality, the Alaska Region could not even do this much, for it had a puny minerals management staff. Under the Mining in the Parks Act of 1976, the NPS was required to approve a plan of operations for any mining activity to occur on park lands. Swamped by such plans of operations, the Alaska Region's review and permitting process in the early 1980s was cursory at best.[56]

Under the circumstances, it was not long before the regional office committed an embarrassing oversight involving one of the mine sites in Kenai Fjords National Park. In July 1983, Acting Regional Director Bill Welch issued miners David Paul Carriere and John M. Kinney a permit to conduct mining operations at the Surprise Bay lode claims No. 1 through No. 5. The permit was based on review of the miners' proposed plan of

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[55] "Kenai Fjords National Park Land Protection Plan," 1988, Series D18, Administrative History Files, Archives.

[56] Watkins, "The Perils of Expedience," 68. The Mining in the Parks Act also closed all national park system units to mineral entry; two of the six areas that allowed mineral entry prior to 1976 were in Alaska: Mount McKinley National Park and Glacier Bay National Monument. For figures on how many mining claims existed in the Alaska Region in this period, see Alaska Regional Office, Mining and Minerals Branch, Minerals Management Division, "Alaska Region Abandoned Mineral Lands Program," August 16, 1989, Series L3023, Central Files, KEFJ.

operations. Immediately after issuing the permit, the NPS was advised by the Alaska Department of Environmental Conservation (ADEC) that the concentrate leach system described in the plan had not been approved by the state. The NPS then requested that the miners provide clarification of their process, and when Kinney duly amended his hand-written plan of operations with a typed, two-page description, Regional Director Roger Contor forwarded this item to ADEC for its review and comment. ADEC found the amended plan of operation deficient as well, and offered a set of technical questions that the miners still needed to address. ADEC was concerned about mercury pollution of two anadromous streams as well as contamination of the miners' own drinking water. "Mr. Kinney's proposal to process 1 ½ tons of tailings per day, then subsequently increasing to 7 ½ tons per day, represents a very sizable operation," the ADEC field officer, S. J. Cyr, wrote. "Unless properly controlled, monitored, etc., the by-products of such a gold recovery operation, over a period of weeks and months, might conceivably leach chemical contaminants into the groundwater and/or state waters." Things were clearly upside down when the Park Service's standards for mining in a national park were not as stringent as ADEC's.[57]

Blunders such as this one did not go unnoticed by environmental groups, who were especially concerned about mining pollution in Alaska's wild rivers. In 1985, the Northern Alaska Environmental Center, the Alaska Chapter of the Sierra Club, and the Denali Citizens Council joined forces in filing suit against the government, claiming that the NPS Alaska Region was not upholding its responsibilities under the Mining in the Parks Act. On July 22, 1985, the United States District Court for Alaska issued a preliminary injunction, enjoining the Park Service from issuing any more permits until it had completed environmental impact statements for Denali, Wrangell St. Elias, and Yukon-Charley. The court also declared that permits issued prior to the injunction, lacking the proper documentation, were null and void. In order to lessen its economic impact, the injunction would take effect on October 15, allowing mine operators to complete their current summer operations.[58]

The court injunction stung the Alaska Region and convinced the leadership to revamp the regional office's Mining and Minerals Branch, increasing its staff and changing how it conducted oversight. (As the environmental compliance workload surrounding the region's hundreds of active mining claims continued to grow, eventually drawing in legal experts as well as natural and cultural resource staff, it was joked around the office that these people were all working to keep the regional director out of jail.[59])

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[57] Bill Welch to David Paul Carriere and John M. Kinney, July 28, 1983, Lynn S. Griffiths to Carriere, August 24, 1983, Roger Contor to S. J. Cyr, with enclosure, February 9, 1984, and Cyr to Jack Heesch, February 17, 1984, Series L3023, Central Files, KEFJ.

[58] Regional Director to Mining Operator/Claimant, October 30, 1985, Series L2431, Central Files, KEFJ; Paula P. Easley to Roger Contor, September 3, 1985, Series L3023 Mining and Minerals – General 1985, Box 13, Acc. 00395 Alaska Support Office Administrative Files, ARCC.

[59] Hovis interview.

In the meantime, in the months immediately following the court injunction, another of Kenai Fjords National Park's three active mining claims came to the fore: the Surprise Bay Mine operated by Henry W. Waterfield. Waterfield tested the Park Service's resolve to shut down operations after October 15.

Waterfield had filed his mining plan of operations with the NPS in February 1985 and Acting Regional Director Robert L. Peterson had issued a permit in May 1985 – two months prior to the court injunction. Following the court injunction, Waterfield enlisted the support of the Alaska Resource Council (ARC). In a letter to Regional Director

Figure 35. Surprise Bay. (Web photo.)

Roger Contor, the ARC's executive director, Paula Easley, observed that the Surprise Bay Mine was one of very few year-round mine operations in the Alaska parks. (She did not indicate how many employees might be affected; certainly the mine operation was very small.) Because the mine would not be shutting down for the season in any case, she suggested that the NPS expedite its review of Waterfield's revised plan of operations, which Waterfield would soon submit, so that the mine operation would be cleared to continue operations after October 15. Waterfield submitted his revised plan of operations on October 10. Lynn Griffiths, the branch chief, responded to Waterfield that the NPS could not possibly process the proposed plan before the October 15 deadline.

Furthermore, Griffiths listed a score of technical issues that Waterfield still needed to address. Without an approved permit, Waterfield suspended his mining operation.[60]

One week after Griffiths denied Waterfield's request, Regional Director Boyd Evison signed a general information letter that was sent to all parties involved with active mining claims in Alaska parks. The letter was copied to all Alaska park superintendents, the Sierra Club, and the Solicitor's Office. The letter enclosed copies of the pertinent regulations and a sample plan and it explained that the Park Service's environmental compliance effort would include archeological and historical site assessments. It suggested that mine plans of operations submitted by December 31, 1985 would likely get processed in time to allow mine work during the following summer, but no temporary permits would be issued in the meantime.[61]

NPS regulatory procedures and requirements slowly smothered Waterfield's proposed mine operation. In the first place, Evison's time estimate proved optimistic; it took the Park Service a year and a half to complete its review of the Waterfield's new plan and to get the environmental compliance documentation in order. The review process now included preparation of an environmental assessment and issuance of a finding of no significant impact. In March 1987, Regional Director Evison authorized the mine operation to proceed as soon as Waterfield filed a performance bond of $19,759.[62] This unexpected hurdle delayed Waterfield for three more years as he searched for financial backers. Ironically, the plan itself covered just three years, so by the time Waterfield was ready to begin operations in April 1990 he was informed that his permit was about to expire. He amended the plan so as to extend it for another three years. At this point, the NPS added a new wrinkle: it wanted the plan changed so that site cleanup would precede actual mining operations. "In order to expedite the processing," the NPS stated, "we recommend separating the actions…into two distinct phases." The NPS went on to describe in three more paragraphs what Phase I, or the cleanup work, should include.[63] The cleanup work was finally enough to discourage Waterfield from trying anything further. After Waterfield died, his heirs continued to file on the claim each year to keep it administratively active.[64]

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[60] Lynn S. Griffiths to Henry W. Waterfield, February 25, 1985, Robert L. Peterson to Henry W. Waterfield, May 12, 1985, and Griffiths to Waterfield, October 23, 1985, Series L3023, Central Files, KEFJ; Paula P. Easley to Roger Contor, September 3, 1985, Series L3023 Mining and Minerals – General 1985, Box 13, Acc. ARCC 00395 Alaska Support Office Administrative Files, ARCC.

[61] Regional Director to Mining Operator/Claimant, October 30, 1985, Series L2431, Central Files, KEFJ. This packet of information was sent to five mining operators/claimants in Kenai Fjords. They were Donald C. Glass and Max L. Heifner, John M. Kinney, Henry W. Waterfield, Roger Winkler, and Mel Tipton Associates. (Acting Chief, Mining and Minerals Branch to Superintendents, with enclosure, November 5, 1985, same file.)

[62] Regional Director to Henry W. Waterfield, March 27, 1987, Series L3023 Mining and Minerals General 1987, Box 14, Acc. 00395 Alaska Support Office Administrative Files, ARCC.

[63] Floyd Sharrock to Henry Waterfield, June 15, 1990, Series L8023 Mining and Minerals KEFJ 1989, Box 15, Acc. 00395 Alaska Support Office Administrative Files, ARCC.

[64] Castellina interview.

Kinney submitted a three-year plan of operations for the Surprise Bay No. 1 and No. 2 lode claims in 1989. He proposed to begin with approximately 1,500 cubic yards of ore already on hand on the surface, which would be put through a jig system, and then he would proceed to extract more ore from the mine and to do some exploratory drilling. He dropped his earlier plan to use a leach concentrate system; no chemicals would be involved in any of the three mining operations.[65] Regional Director Evison approved the plan in February 1991 subject to Kinney's posting of a $10,295 bond. Attached to the permit was a list of 23 stipulations concerning how equipment and materials would be moved or stored on site. These were taken from the Park Service's 66-page environmental assessment, prepared by Page Spencer in the regional office.[66]

The park monitored Kinney's mining activity over the next three years. Park officials believed the amount of mining was minimal; it seemed that the site was more valuable to Kinney as a base from which to do commercial fishing. Park officials wanted to show that he was using the mine site for other purposes so that they could shut down the operation; however, it was difficult to produce evidence that he was not mining. Park officials confronted Kinney when they found a pair of old-growth tree stumps that were outside the claims. Evidently he had sawn down the trees and milled them into lumber. They also noted that Kinney used a creek bed instead of a designated access road to reach his property from the water. Kinney pleaded *nolo contendere* to the charge of timber trespass and was convicted, fined $1,600, and placed on probation for one year. When his permit expired in 1994 he did not attempt to get another one. He donated the claims – mineral rights to an area of approximately 100 acres together with three dilapidated buildings – to the United States in March 1995.[67] As part of the complicated deal surrounding the donation, Kinney was paid wages to remove buildings and debris from the site. Ironically, he removed some of the structures but left behind a shed and bunkhouse that had been built with the illegally milled lumber as well as a tailings pile that was not on the claims. The Park Service considered whether to maintain the two buildings for administrative purposes, but plans as of 2009 called for their removal.[68]

The park's third active mineral claim in 1980 was the Beauty Bay Mine, which belonged to Don Glass and Max Heifner. They had purchased the property in 1963 and worked the mine every summer until 1979. Glass was the more active participant in the venture while Heifner joined him on-site on just three occasions. The two men worked the mine for the last time in the summer of 1981. Discouraged by the advent of Park

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[65] Elizabeth A. Benson to John M. Kinney, November 19, 1990, Series L3023, Central Files, KEFJ.
[66] Regional Director to John M. Kinney, February 20, 1991, and U.S. Department of the Interior, National Park Service, Alaska Regional Office and Kenai Fjords National Park, "Environmental Assessment and Regional Director's Analysis Three Year Plan of Operations Surprise Bay Claims 1-3 Kenai Fjords National Park Alaska," February 22, 1991, Accession KEFJ-00204, Archives, KEFJ.
[67] Troutman interview; Chief, Land Resources Program Center to Superintendent, November 9, 2004, Series L14, Central Files, KEFJ.
[68] File KEFJ 02-104, Surprise Bay No. 1-No. 5, John M. Kinney, Retired Deed No. 3, Lands Division Records, ARO.

Service administration over the area, they later sold the property to Waterfield on contract, with an arrangement that ownership would revert to them when Waterfield died. When the property came back to them at Waterfield's death, they sold it to Tom DeMichele of Seward in 1994. DeMichele subsequently entered a lawsuit against Don Emmal and the English Bay Corporation over contested ownership of the property. The case was tried in 1999, two years after the English Bay Corporation had sold the land to the United States. The judgment went against DeMichele, thereby clearing title for the United States.[69]

[69] Frank Norris, notes on interview with Max Heifner, December 19, 1996, File English Bay, RM Files, KEFJ; *Thomas A. De Michele et al. v. English Bay Corporation et al.*, Final Judgment, April 26, 1999; Peter Fitzmaurice to Anne Castellina, email, March 15, 2000, File: KEFJ English Bay Retired Deeds Nos. 10, 11, 12, Lands Division Records, ARO.

10

Harbinger of Climate Change

Recent Developments, 2004-2009

Dignitaries Visit – Superintendent Jeff Mow – The Mary Lowell Center – The Maintenance Operation – The IT Revolution and Security – Recent Developments in Budget and Administration – Recent Developments in Visitor Use – Recent Developments in Resource Management – Recent Developments in Interpretation – The Park Goes Carbon Neutral

Dignitaries Visit

In August 2005, four U.S. senators visited Kenai Fjords National Park as part of a fact-finding tour on global warming. The bipartisan delegation included Senator Hillary Clinton (D-NY) and Senator John McCain (R-AZ), then the leading presidential hopefuls in their respective parties, as well as Senator Susan Collins (R-ME) and Senator Lindsey Graham (R-SC). Both Clinton and McCain were accompanied by staffers and Secret Service agents. The Senate delegation was picked up at the Hotel Captain Cook in Anchorage by the superintendent and chief ranger and taken by van to Exit Glacier and then by boat into Resurrection Bay. Glenn Juday, a professor of forest ecology at the University of Alaska Fairbanks and co-author of the Arctic Climate Impact Assessment, accompanied the delegation and provided commentary during the day-long visit. At a press conference in Anchorage, Clinton declared that the scientific evidence in support of climate change theory was "overwhelming." McCain stated, "The question is how much damage will be done before we start taking concrete action."[1]

This high-profile visit was followed by other dignitary visits: a contingent from the Conference of Mayors when that organization met in Anchorage, a group from the Union of Concerned Scientists, a group of Harvard University scientists, former President Jimmy Carter, Senator Carl Levin (D-MI), and more. What all of these dignitaries had in common was an interest in observing the effects of climate change firsthand. The

[1] Mow interview; Jim Ireland comments on draft report; senators quoted in Andrew Buncombe, "Global Warming: Will You Listen Now, America?" *The Independent* (London), August 19, 2005.

signposts indicating former glacier termini on the road to Exit Glacier offered just such an exhibit.[2]

With these visits by dignitaries, Kenai Fjords joined a short list of national parks that were being mentioned by the media in stories about the effects of global warming. Like Joshua Tree National Park with its threatened Joshua trees and Glacier National Park with its diminishing glaciers, Kenai Fjords was a place where the effects of climate change were observable and measurable. As Congress and the nation inched closer to taking steps that would seriously engage the threat of greenhouse gases building up in the atmosphere, Kenai Fjords National Park was imbued with new symbolic significance. Senator Collins described it with a well-worn but apt metaphor. The evidence from Kenai Fjords and other locations in the Far North, she said, was the "canary in the mine shaft of global warming crying out to us to pay attention."[3] Beginning in 2005, the new superintendent and his staff sought to make the most of the park's role as the proverbial canary in the coal mine through new emphases in interpretation and environmental education outreach, appropriate scientific research, modeling of "green" technologies, and conversion to "carbon neutral" operations.

Figure 36. Senate delegation visit to Exit Glacier, August 2005. L-R: Susan Collins (R-ME), Lindsey Graham (R-SC), John McCain (R-AZ), Hillary Clinton (D-NY).

Superintendent Jeff Mow

In December 2004, Kenai Fjords National Park acquired its fourth superintendent, Jeff Mow. Each of the park's first three superintendents – Dave Moore, Marvin Jensen, and Anne Castellina – had been on their first posting in Alaska. By contrast, Mow had spent most of his Park Service career up to that time in Alaska. Kenai Fjords was his seventh duty station in Alaska in 16 years. Mow not only brought the perspective of

[2] Superintendent's Annual Report for 2005, Superintendent's Files, copy provided by Jeff Mow; Mow interview. Senator McCain described the signposts on the Exit Glacier Road in "Address to Symposium on Climate Change," June 15, 2006 at http://mccain.senate.gov/public/index <August 24, 2009>.
[3] Quoted in Buncombe, "Global Warming: Will You Listen Now, America?"

having worked in numerous Alaskan settings (Glacier Bay, Skagway, Anchorage, Anaktuvuk Pass, Fairbanks, and Bettles, where he had also been mayor for three years), he was well-versed in ANILCA and Alaska's political environment. Mow was part of a growing pack of Park Service employees who had spent most or all of their careers in the Alaska parks.[4]

Originally from Los Angeles, California, Mow was introduced to the Park Service by way of the Yosemite Institute, where one of his instructors talked about her experience working as a backcountry ranger at Glacier Bay. Inspired by her example, Mow got a job as a backcountry ranger at Glacier Bay in 1987. He returned to that park in 1988, the same year, incidentally, that Superintendent Marvin Jensen transferred there from Kenai Fjords. The next year, Mow took a temporary position in the Alaska Regional Office, where he became involved in the response to the *Exxon Valdez* oil spill. For the next two years he toggled back and forth between seasonal and temporary positions at Glacier Bay and the regional office; then he secured his first permanent job at Klondike National Historical Park in Skagway. Over the next decade he worked in other Alaska parks, including a four-year stint as chief of operations at Gates of the Arctic, and a turn managing the Federal Subsistence Program for both Gates of the Arctic and Yukon-Charley Rivers.[5]

Some would say that Alaska-bitten Park Service personnel like Mow form a subculture within the service. This "subculture" is based on shared experience and even, to a degree, shared values. These are people who embrace the broad differences between Alaska parks and parks in the Lower 48: giant territories, rich resources, low visitation, strong ties to the local people, and the hardy lifestyle associated with living in the Far North. Generally these NPS people have some empathy for Alaskans' prickly mentality, the "culture of opposition," because they have adopted it as their own cultural milieu. There was once a tendency – now fading – for many of these NPS people to get stuck in Alaska even if they sought a transfer out. At one time in his career Mow thought he was at risk of being "typecast as an Alaska-only person." He passed up an invitation to apply for the chief ranger position at Denali, thinking that it would take him down that path. Instead, Mow competed successfully for the prestigious NPS Bevinetto Congressional Fellowship and went to Washington in 2001 to serve a one-year rotation in the NPS Office of Legislative and Congressional Affairs.[6] From there, Mow went to his first superintendent posting at Florissant Fossil Beds National Monument, Colorado.

When the position of superintendent at Kenai Fjords National Park became vacant in 2004, Mow knew instantly that he wanted to apply for it. Many of his friends in Alaska contended that between his extensive experience in Alaska and his recent

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[4] Mow interview.
[5] Mow interview.
[6] Mow interview. In 2009, Jim Ireland left Kenai Fjords to become the 21st fellow in the Bevinetto Congressional Fellowship program. For more on the fellowship program, see "Two Bevinetto Fellows Named" in *NPS Digest* (2009) at http://home.nps.gov/applications/digest <May 20, 2009>.

experience in Washington, there could be no stronger candidate for the job. Furthermore, it was the one post in Alaska that held sufficient appeal for his family. The park headquarters in Seward was one of the few Alaska park headquarters on the road net, the local community was friendly to the Park Service, and for all of the Mow family's previous experience in Alaska, it had never had the opportunity to explore the Kenai Peninsula.[7]

Mow entered the job with two requests from the regional director, Marcia Blaszak. One was to figure out how to move the Mary Lowell Center project forward. The other was the usual directive to take good care of the park's connections with the local community. With regard to the latter, Mow was well aware of Anne Castellina's success in building positive relationships in Seward. He knew that the task of being a good neighbor would primarily consist of maintaining bridges that she had built over the past 16 years.[8]

One of the first tests of Mow's new leadership at Kenai Fjords, and a good example of how he was able to draw upon both his Alaskan and legislative affairs experience, occurred in connection with the fee demonstration program. The legal authority for this program was due to expire at the end of 2005. Congress, recognizing that the program was very successful for NPS funding, but in certain areas of the country unpopular, passed the Federal Lands Recreation Enhancement Act in March 2005, which changed the user fee to an "amenity fee." Mow was already familiar with the Park Service's gyrations in implementing the original fee demonstration program. According to his reading of the new law, the Exit Glacier development area did not qualify as an amenity. Certain that the park no longer had the legal authority to collect fees for entering the area (especially in light of ANILCA's ban on entrance fees), he informed his superiors that he needed to terminate the program as it existed at that time. But the Washington Office initially objected. Director Fran Mainella hesitated to drop any fee demonstration areas out of the program on the basis of the new law's altered language, fearing such action would annoy Congress. So Mow asked Jim Ireland, who managed the fee program, to find a fee – any fee – that the park could legally charge under the new law so that the park could technically stay in the program. The park already had a plan afoot to provide interpretive services for Elderhostel groups who took bus trips to Moose Pass. Ireland proposed that the park implement this service and charge Elderhostel a small amenity fee to cover the cost of a seasonal ranger's time and use of a government car for getting to Moose Pass. The park introduced this interpretive service, Elderhostel paid the fee without complaint (indeed, other tour companies soon requested the service as well), and Mow informed his superiors that the Exit Glacier fee program had been "converted" to cover this other function. The "conversion" was not painless, since the two kinds of fee revenue were not at all equivalent. Whereas the fee collection at Exit

[7] Mow interview.
[8] Ibid.

Glacier had covered the salaries of a number of visitor use assistants, the fee paid by tour companies covered about one tenth of the salary of one seasonal ranger. To make up the difference, the park had to hire seasonal interpreters using base operating funds. But the advantage of the new fee, besides meeting the requirements of the law, was that it was not assessed directly on park visitors. The park was relieved to be able to shut down the fee booth, which local people as well as annual pass holders had found so objectionable. Ireland advised Mow that he could win major points with the local community if he announced the Exit Glacier fee area's demise. But Mow refrained, demurring to the Washington Office's request that the "conversion" be handled quietly.[9]

Mow's experience with Alaska conditions shaped his approach to the job in other ways. Increasingly, he took time away from day-to-day park issues to work on matters of concern for all Alaska parks, often at the request of the regional director. Mow also found opportunities for raising awareness about climate change, which had heightened significance in Alaska since global warming was generally more pronounced in the higher latitudes. In particular, Mow researched and implemented a strategy for making park operations carbon neutral. Based on that initiative and other park greening efforts, he was appointed to a Secretary of the Interior's task force to address the impacts of climate change.

The Mary Lowell Center

Perhaps the biggest item on the superintendent's plate when Mow walked into the job was the decade-old effort to develop a new visitor center. From Mow's perspective, the fact that Kenai Fjords National Park lacked an adequate visitor center presented an anomaly. Over the years he had witnessed Senator Stevens's talent for using the NPS as a vehicle for making improvements in communities.[10] In Skagway in the early 1990s, he had marveled at the sums of money run through the NPS for historic restoration projects. At Coldfoot later in the decade, he had cooperated with BLM and FWS officials on plans for a shared visitor facility. For that project, Senator Stevens had come through with a $4.5 million earmark – an amount far exceeding anyone's expectations. By 2004, even remote Alaska gateway towns like Kotzebue were getting good national park visitor centers. Yet those visitor centers served only a fraction of the number of visitors who were drawn to Seward and Kenai Fjords.

As Mow observed, if the Park Service had pushed for a single-agency visitor center either in Seward or at Exit Glacier it probably would have gotten one without much difficulty long before 2004. With the best intentions, however, Castellina had

[9] Jim Ireland interview.
[10] Mow interview. Also see "Young, Stevens stand by projects – EARMARKS: Despite outcry, they're proud to bring home the bacon," *Anchorage Daily News*, December 24, 2007.

embarked on a more circuitous route by choosing to involve partners in an interagency venture. Not only would a multi-agency facility promise to stimulate more interagency cooperation in and around Seward, its location in the town would aid Seward's economy and deflect some development and visitor use impacts away from Exit Glacier.[11]

Castellina's efforts had begun in response to an inquiry from Seward District Ranger Duane Harp when the Forest Service learned that the park had initiated a development concept plan for a new visitor center. Harp indicated that the Forest Service needed more space for visitors and administrative offices and would be interested in a shared building. Castellina wanted to partner with the Forest Service, knowing that it was much harder for the Forest Service to get funding for visitor centers and that a joint facility would help distribute recreational use between the park and the adjacent Chugach National Forest. Castellina informed City Manager Ron Garzini of the plan, and soon the City of Seward became interested in partnering, too. The city had been looking for a way to develop a small conference center and suggested that the building could contain some large meeting rooms. To sweeten the pot, the city offered to donate city property on the waterfront for the building site if the visitor center complex could hold a conference center, too. Everyone was enthusiastic, but then the project hit its first major setback: the city conducted an engineering study and found that a fault line ran through the proposed building site, making it unfit for a busy public facility. Disappointment over this finding led to a search for alternative sites. By then it was becoming apparent that the multi-agency facility would be difficult to situate in downtown Seward, as each potential site raised issues about parking space, traffic circulation, or the site's vulnerability to a tsunami.[12]

The plans entered a new phase when the University of Alaska proposed to enter the partnership. Like the City of Seward earlier, the university offered its own property for use. The university had a building with an auditorium, the K. M. Rae Building, that it used for just a few weeks each year. University administrators were "gung-ho," Castellina recalls, because they wanted the university to get more involved with agency research projects. All the interested parties entered a memorandum of understanding. Two more partners, the National Marine Fisheries Service and Alaska State Parks, signed on as well. With the MOU in place, the Park Service acquired six lots on Third Avenue for parking space. One of the terms contained in the MOU was that the Park Service and the Forest Service would own the land. The project appeared to be moving forward, but then it encountered its second major setback: a new university administrator got involved and insisted that the university retain ownership of its property, which was unacceptable to the two lead federal agencies. The university then pulled out of the agreement.[13]

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[11] Mow interview.
[12] Anne D. Castellina to Sarah Baker, February 6, 1995, File DCP for VC and EG – 1995, Central Files, KEFJ; Castellina interview.
[13] Castellina interview.

The project began to unravel. In a bid to hold it together, the Park Service and the Forest Service jointly sponsored a Seward Waterfront Study by The Portico Group, a consulting firm of architects and landscape architects based in Seattle. Among The Portico Group's design credits was the Arctic Interagency Visitor Center in Coldfoot, Alaska. The Seward Waterfront Study integrated the search for a multi-agency center building site into a broader analysis of Seward's downtown redevelopment issues. The Portico Group held a series of public meetings in Seward in May and July, 2003. A consensus formed around one of The Portico Group's three concept plans, its so-called "Town Center" concept, in which the multi-agency center would anchor a new plaza at the intersection of Fourth Avenue, Washington Street, and Railway Avenue. As part of this concept plan, The Portico Group identified a cluster of city lots, old buildings, and willing sellers.[14]

While the Seward Waterfront Study was in progress the Chugach National Forest got a new forest supervisor, who began to waffle on the Forest Service's commitment. Finally, at the end of 2003, the forest supervisor announced to Castellina that the Forest Service was pulling out of the project. Since 2001, Senator Stevens had been raining down money on the project to pay for planning and land acquisition, and Castellina had supported getting that money funneled to the Forest Service since its rules for buying town lots were not as cumbersome as the Park Service's rules, but now most of that money was in jeopardy.[15] It was at this point that Castellina, dispirited and heartily sick of the process, sought a transfer to another post. "I remember telling [Regional Director] Marcia [Blaszak] 'you've got to get somebody else in here because I'm way too close to this project,'" Castellina candidly recalls. "'I'm too frustrated and I'm becoming counterproductive where this project is concerned. It needs a fresh look. It needs a fresh face.'"[16] In the spring of 2004, Castellina transferred to the Washington Office to a new position as Alaska Desk Officer, and Peter Armato served as acting superintendent through the better part of that year until Jeff Mow was hired in December.

It was at this time that the proposed facility took the name "Mary Lowell Center," after the Alaska Native woman who had homesteaded on land that became the town of Seward. The name was first proposed by Sandy Brue, chief of interpretation, who had recently completed her master's thesis on Lowell. That summer, Peter Armato proposed the name to Mayor Vanta Shafer, Seward businessman Trevor McCabe, and Senate staffer Lisa Sutherland when the four took a boat ride together to view the site from the water. During their boat ride, the group also worked on solving the problem posed by the Forest Service's pullout. They drafted legislative language for the 2005 appropriations bill that would redirect funds for property acquisition previously appropriated to the

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[14] Castellina interview; The Portico Group, *Seward Waterfront Study*, report prepared for National Park Service and U.S. Forest Service (Seattle: The Portico Group, 2003) at http://www.nps.gov/kefj/parkmgmt/upload <May 12, 2008>.
[15] Castellina interview.
[16] Ibid.

Forest Service and make them available to the Park Service instead. When Armato returned from the boat ride, he crowed that the proposed facility was likely back on track and that it was to be known as the Mary Lowell Center.[17]

Despite all the setbacks up to this point – the discovery of a fault line through the first proposed site, the University of Alaska's about face, and then the Forest Service's pullout – there appeared to be no end to Congress's largesse for this project. Thanks to Senator Stevens, who was chairman of the Senate Appropriations Committee, the Interior Appropriations Act of 2005 (passed in December 2004) redirected the funds previously appropriated to the Forest Service and made them available to the Park Service instead. Together with an additional allotment for the Park Service, the earmarked funds now totaled $3.93 million. The act instructed the Park Service to acquire seven parcels in downtown Seward within 60 days of the law's enactment, or by February 7, 2005.[18] Hurriedly, the regional office went to work obtaining appraisals, offers to sell, and a special clearance from the NPS director (necessary because the land purchase would be made before Congress had appropriated funds for actual construction of the visitor center). While purchases of three tracts went forward, the core property, known as the Arcade Building, got hung up in negotiations. The owners of this property, who called themselves the Centennial Group, could not reach agreement with the Park Service on a sale price.[19]

Senator Stevens had written the earmark such that in the event the Park Service did not use all of the funds within the 60-day time limit then the remainder would transfer to the City of Seward for the same purpose – provided that the city abandoned a block of downtown Washington Street so that the new facility could be built across the road. When city officials learned of this provision in the law they believed they were being strong-armed by the federal government. While it was true that the city council had voted in favor of the plan to build across the road in 2003, two years later the members equivocated, responding to a groundswell of local opinion against it. Mayor Shafer went to Capitol Hill and explained the city's position to the senator. Stevens got the offending provision rescinded in that year's Interior Appropriations Act, but in doing so he also

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[17] Jim Ireland states that Armato returned from the boat ride announcing that the group had drafted the legislative language. In an in-depth story on the controversial property sale published in the *Anchorage Daily News* on February 10, 2008, writers Richard Mauer and Tom Kizzia quote Seward businessman Dale Lindsey as saying that the boat trip was taken in August 2003 and included the four named individuals. Both sources agree that the boat belonged to Lindsey and the trip was made for the purpose of viewing the waterfront property. It seems that the *Anchorage Daily News* story gives the wrong year and that the conversation occurred in 2004. See Richard Mauer and Tom Kizzia, "SeaLife was good deal for ex-aide to Stevens – SEWARD CENTER: Earmark was tailored to McCabe property sale," *Anchorage Daily News*, February 10, 2008.

[18] Regional Director to Director, January 11, 2005, File KEFJ Baranof Ventures, Inc. Legends of the Mountain Retired Deed No. 14, Lands Division Records, ARO.

[19] Director's Construction Project Approval, March 28, 2005, and Diane Wholwend to Chuck Gilbert (email), February 2, 2005, File KEFJ Baranof Ventures, Inc. Legends of the Mountain Retired Deed No. 14, Lands Division Records, ARO.

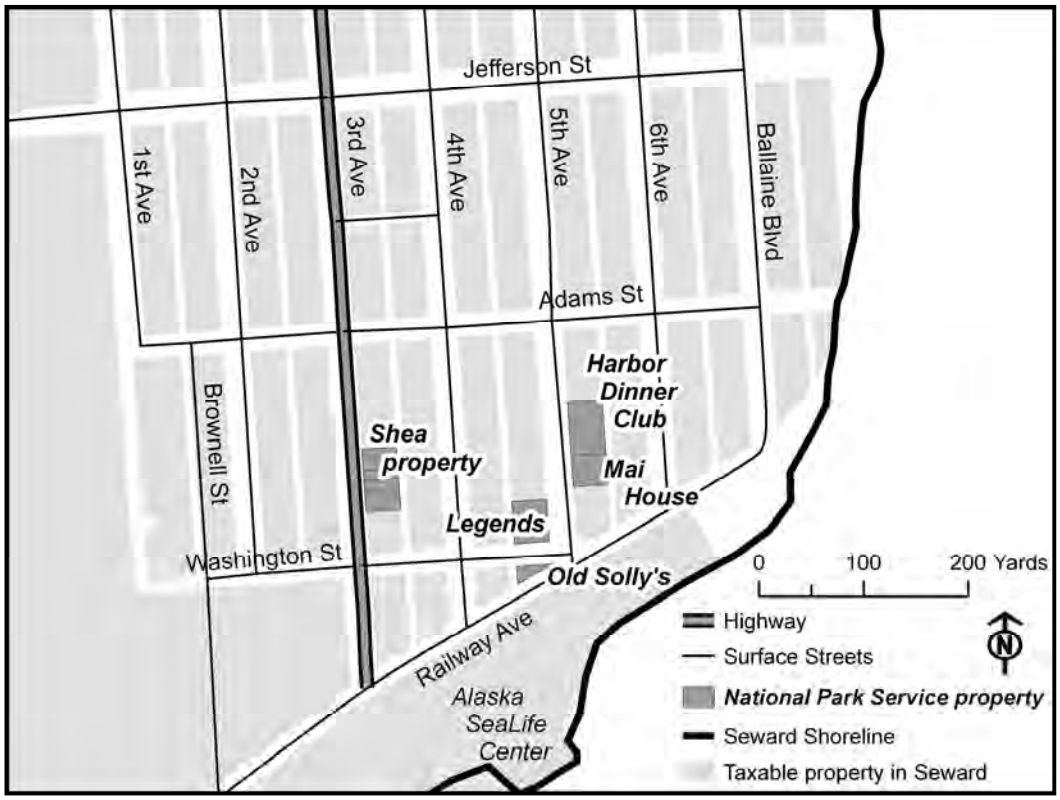

Figure 37. National Park Service properties in Seward.

transferred the remaining funds – now amounting to $1.6 million – to the Alaska SeaLife Center. A measure of Stevens' influence as chair of the appropriations committee, it was the second time since the original appropriation that Congress moved the money. While the transfer to the Alaska SeaLife Center suited the interests of the Park Service, which simply wanted the land to be bought, it was a slap in the face for city officials. Many civic leaders already believed the Alaska SeaLife Center wielded too much influence in Seward, and they were not pleased to see the center taking this prominent new role in the proposed Mary Lowell Center.[20]

In the fall of 2005, the Alaska SeaLife Center bought the Arcade property and had the old building removed. Combined with the three lots on the other side of Washington Street that the Park Service had acquired at the beginning of the year, sufficient land was now available to move ahead with the building project. The Park Service initiated a value analysis study; all the partners participated in a three-day workshop at the regional office in Anchorage in January 2006, and three alternatives were put forward, which

[20] Tom Kizzia, "Land deal opens SeaLife Center, Seward rift – LOBBYIST: Unused visitor center funds used to purchase ex-Stevens aide's property," *Anchorage Daily News*, April 23, 2006.

ranged in cost from $12.5 million to $14.5 million. The Forest Service was once again on board.[21]

But when the final concept plan was released in the spring of 2006, opposition to the street abandonment rose to a level where it could no longer be ignored. Opponents of the street abandonment styled themselves "Washington's Army," raised a "war chest," and sued to get the action by the city council overturned. Their arguments against the street abandonment coalesced around three main points. First, they thought the street closure and proposed complex would change the character of the downtown and create intolerable traffic jams on Railway Ave. Second, they thought the political process had been abused – that the city council had overstepped its authority in supporting the street abandonment and that the federal government had improperly exploited the city council's action. Third, they believed that with the Alaska SeaLife Center now involved in the Mary Lowell Center, the plan was being subverted to create a vibrant new shopping district immediately around the Alaska SeaLife Center, which would cause other shop owners to suffer. Although the Washington's Army people finally lost in court, they did succeed in turning the city council, which passed a resolution (February 11, 2008) requesting the Park Service to consider options that would allow the street to remain open. Meanwhile, with the lawsuit holding up the project, the Forest Service pulled out again. With the Forest Service out and the City of Seward now looking for something different, the Park Service conducted a second, smaller, values analysis to assess options for locating a scaled down multi-agency complex on one or both sides of Washington Street.[22]

By 2007, Mow and other Park Service officials began to lose confidence in Senator Stevens's ability to get further appropriations that would allow the project to advance to the construction phase. The senator's problems began after the federal government launched a series of investigations into the extraordinary level of pork barrel spending in Alaska, as symbolized by the Gravina Island Bridge project in Ketchikan, the notorious "bridge to nowhere," which was the first such project to draw national media attention. Amidst mounting federal probes, a grand jury was called to investigate whether Senator Stevens had improperly received gifts from VECO Corporation, an Alaska-based oil pipeline construction and services company. The investigation focused primarily on a remodel of the senator's home in Girdwood, Alaska, which VECO had

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[21] National Park Service, U.S. Forest Service, and City of Seward, "Value Analysis Study, January 17-19, 2006, Kenai Fjords National Park, Seward, Alaska," report prepared by Kirk Associates, LLC, January 31, 2006, at http://www.nps.gov/kefj/parkmgmt <May 12, 2008>.

[22] Don Cripps interview by Theodore Catton, August 13, 2008; Mow interview; Amy Ireland interview; "Citizens sue to get a vote on proposed location of visitor center," *Anchorage Daily News*, April 23, 2006; "Center's location would mar Seward's value – COMPASS: Points of view from the community," *Anchorage Daily News*, May 4, 2006; "Seward in street fight for building – VISITOR CENTER: Judge rules down location challenge, Kenai focus," *Anchorage Daily News*, May 30, 2006; National Park Service, "Kenai Fjords National Park, Mary Lowell Center," (August 2008), at http://www.nps.gov/kefj/parkmgmt/mary-lowell-center.htm <August 25, 2009>.

overseen. At the same time, investigators with the Department of the Interior's Office of Inspector General (OIG) were interested to learn how tens of millions of dollars appropriated for the Alaska SeaLife Center since 1998 had been used. Of particular interest was the $1.6 million that had been transferred from the Park Service to the Alaska SeaLife Center, and the $558,000 of that amount that had been used to purchase the Arcade property. Investigators learned that one of the three owners of the property, Trevor McCabe, was a former aide to Stevens and a business partner of the senator's son, State Senator Ben Stevens. McCabe and his partners had bought the Arcade property in 2003, after The Portico Group identified it for use for the multiple-agency facility. It created the appearance that McCabe had taken advantage of his relationship with Senator Stevens to buy and sell the property for profit at the public's expense.[23]

In the course of that investigation, OIG officials interviewed a handful of Park Service employees at the park and in the regional office. It was noted that McCabe's partner in the property deal, Seward businessman Dale Lindsey, had offered his boat for the waterfront tour in which Armato, McCabe, Shafer, and Sutherland developed the language that went into the appropriations act redirecting funds from the Forest Service to the Park Service for property acquisition. The fact that the acting superintendent, the property owner, the mayor, and the senator's aide were talking about how the government could acquire the property was irregular, to say the least, but OIG did not pursue the matter. Significantly, McCabe and Lindsey already owned the property by the time of Armato's involvement and it was McCabe's influence with Senator Stevens, not any Park Service connection, that was at issue.[24] As for Mow, he had arrived on the scene in the same month that the appropriations act was passed. He was able to tell the OIG that the Park Service's acquisition of three Seward lots in the spring of 2005, which had occurred early on his watch, was "clean" and a matter of public record. It was the Alaska SeaLife Center, not the Park Service, that made the controversial purchase of the Arcade property. Still, the grand jury probe of Stevens's dealings with VECO, together with the suspicions aroused by the unusual money transfers for federal land purchases in downtown Seward, seriously damaged the prospects for getting a large congressional appropriation for the Mary Lowell Center. Those prospects only grew dimmer in the following year as Stevens's legal troubles deepened and he went down to defeat in his re-election bid.[25]

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[23] Paul Kane and Dan Eggen, "FBI Probes Stevens's Earmark; $1.6 Million Appropriation Went to Alaska Marine Life Center," *The Washington Post*, August 1, 2007; Richard Mauer and Tom Kizzia, "SeaLife was good deal for ex-aide to Stevens – SEWARD CENTER: Earmark was tailored to McCabe property sale," *Anchorage Daily News*, February 10, 2008. Dale Lindsay, another one of the three partners who bought the Arcade property, later told a reporter that he lost money on the deal but it was unclear whether he was including legal fees in that assessment. Under Alaska law, the amount of the purchase did not have to be disclosed and remains confidential despite the federal government's subsequent interest in the property.
[24] Mauer and Kizzia, "SeaLife was good deal for ex-aide to Stevens."
[25] Mow interview.

By the spring of 2009, the park had devised a new plan for the visitor center. After years of unfruitful interagency cooperation, the Park Service was poised to build a combination visitor center and headquarters facility that would be solely a Park Service building. The new facility was included as a line item construction project for 2010. If the project went forward as planned, there would be no conference center, no further move to close a block of Washington Street, and the scaled-down building would probably occupy either the Legends property or the Harbor Dinner Club property. Design specifications would be aimed toward LEED certification, meaning that it would be state-of-the-art in terms of energy efficiency. Funding proposals no longer referred to the future building as the Mary Lowell Center, although a new name was still in the offing.[26]

The Maintenance Operation

The Park Service's new properties in downtown Seward needed upkeep. Together with the new Exit Glacier nature center, which opened in May 2004, they contributed to a modest expansion of the park's assets, and therefore, an expansion of the maintenance operation in the years from 2004 to 2009. These changes notwithstanding, Kenai Fjords National Park continued to have a small physical plant and therefore a small maintenance operation compared to most national parks in the Lower 48.

The park's most valuable property asset was the support vessel, *M/V Serac*. Performing maintenance on the *Serac* was the single most labor-intensive element of the maintenance operation. Each year, the *Serac* was hauled out of the water using a boatlift and put in dry dock for one or two weeks of maintenance work. Each year, the hull was given a pressure wash and a new zinc treatment. Every other year the hull was repainted.[27] The superintendent's annual report for 2005 stated that the *Serac* was at sea for 77 days that summer, including a two-week voyage off the Katmai coast, and that the vessel continued to be "a reliable platform for research, inventory, maintenance, and monitoring of park resources and visitors."[28]

Besides the *Serac*, the park maintained a fleet of smaller watercraft and a fleet of land vehicles. There were about ten small boats in the park's fleet of watercraft, most equipped with outboard motors. Land vehicles included a backhoe, a dump truck, several pickups, and several cars, including two compact hybrids. All maintenance on the small boats and land vehicles was performed in the auto shop, which took up a major portion of the park's 5000-square-foot maintenance facility located on the Exit Glacier Road.[29]

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[26] Hall interview (2009).
[27] Bill Cook, interview by Diane Krahe, August 13, 2008.
[28] Superintendent's Annual Report, 2005, copy provided by Jeff Mow from Superintendent's Files, KEFJ.
[29] Cook interview.

The maintenance facility was built in 1993 under the supervision of maintenance worker Bo Bohanan. The facility was located a short distance out Old Exit Glacier Road on land acquired by the Park Service. The structure originally included a welding shop, carpentry shop, machine shop, and auto shop. The latter section consisted of two bays and two garage doors. In 1999, a 26 x 52-foot addition was built onto it under the supervision of maintenance mechanic foreman Bill Cook for the purpose of providing space for washing vehicles since they would pick up fine glacial silt on the unpaved portion of the Exit Glacier Road.

Figure 38. Visitors at Exit Glacier. (Photo by Jim Pfeiffenberger, Digital Files, KEFJ.)

In 2005, a second, metal building was erected at this site. Completed over budget and outside of compliance with the environmental assessment for the project, it rankled many staff members who remembered that the original design intent had been for a pole barn or similar structure that would be used primarily for winter storage of vehicles. By the time it was built, the park's vehicle and boat fleet had grown to fill this space many times over. Instead it was used for storage of bulky equipment such as tires and absorbent pads in case of an oil spill. Two Conex storage containers were also brought to the site to augment storage capacity. Finding space for equipment was a constant challenge, took up considerable management time, and necessitated the hiring of a seasonal logistics coordinator whose job was to handle equipment storage as well as the transportation of equipment and people.[30]

The public use cabins required routine maintenance from year to year. Normally maintenance was performed on each cabin twice per year – once in the spring when they were opened for the season and inspected for winter damage, and once at the end of summer when they were buttoned up for winter. Occasionally a cabin received unusual damage, such as from a bear, and needed special attention. The cabins were also on a rotation for more thorough maintenance such as repainting. About once every seven years each cabin was taken out of service for a couple weeks to allow this work to be done.[31]

When the nature center opened in 2004, it boasted a fuel cell unit that was the first of its kind in the national park system. Park managers supported the use of this experimental technology, which was made possible through several grants. Produced by Accumetrics of Boston, Massachusetts, the fuel cell had the potential to provide clean

[30] Ibid.
[31] Ibid.

energy at a relatively remote location. The first fuel cell was damaged in shipment and did not work properly. It was replaced by another, which had been previously installed at the University of Alaska Fairbanks and had already proven itself with several thousand hours of reliable service. But in its new location, this second fuel cell kept failing and requiring repairs. It was replaced by yet another, which ran flawlessly for 1100 hours through its first summer of 2006. Park maintenance staff assisted in trying to make the fuel cell a success by installing propane generator pumps for running the water system, leaving the fuel cell to run just the heating and lighting systems. The fuel cell failed once more during the summer of 2008 and it was finally discontinued after the park decided that it did not work well enough to justify the maintenance costs.[32]

The maintenance operation also involved upkeep of the visitor center and headquarters building located by the small boat harbor, as well as the Park Service's other properties in Seward, which were all purchased with the Mary Lowell Center in view but required some kind of upkeep in the meantime. The first downtown property that the Park Service acquired was known as the Shea property. The property featured an empty building and a metal shed. The latter was a handy place to store the small boats in winter. The park then acquired the property known as Old Solly's, which featured an old, vacant, office and apartment building. The park had no plans for this property other than to include it as part of the footprint of the Mary Lowell Center, and nothing was done with the building except to remove hazardous materials and lock it up. The last three properties acquired were the Harbor Dinner Club, the Legends of the Mountain Restaurant, and the Mai House. The Harbor Dinner Club was likewise mothballed. The Legends building was turned into a makeshift conference center. It had one of the largest meeting rooms in Seward, which the park sometimes made available to other parties. Meanwhile, the maintenance crew performed basic janitorial service for the facility. The Mai House was turned into seasonal employee housing, pending another use of the property.[33]

The IT Revolution and Security

The park's growing commitment to partnerships was paralleled by its increasing connectedness to the outside world through the internet, computerization, and other kinds of information technology (IT). Indeed, the IT revolution underlay many of the park's new partnering ventures, such as the Ocean Alaska Science and Learning Center's education outreach programs. The IT revolution also brought significant changes to the

[32] "Alternate Fuel Source Tapped at Kenai Fjords," 12-13; Superintendent's Annual Report, 2006, copy provided by Jeff Mow from Superintendent's Files, KEFJ; Cook interview.
[33] Cook interview; Cripps interview.

workplace involving everything from natural resource data collection to building security.

Cutting-edge IT allowed new modes of communication, such as video-conferencing. The Alaska Region instituted monthly video-conferencing among all of the superintendents. No such forum had existed before. The monthly meetings allowed superintendents to look at issues together in a way that had not been possible previously. Ease of communication also enhanced the efforts of the Alaska Leadership Council, a body that had existed for several years but could now respond to issues in a more immediate way. The council was made up of senior NPS officials in the Alaska Region, with one of the superintendents always serving as chair. In the fall of 2006, Mow began a one-year tour as council chair. The council chair could call a meeting with or without the regional director's prompting, and the regional director sometimes participated in the proceedings but not always. Video-conferencing at the park began in the superintendent's office, and the new technology was later expanded to the basement of the Ray Building.[34]

The internet offered an opportunity for the park to reach visitors (and prospective visitors) before, during, and after their visits. Amy Ireland upgraded the park's website in about 2004 and updated and added to it in subsequent winters. A few years later, the Park Service sought to standardize web-page content and graphic design throughout the national park system with a "content management system." Besides standardization, another benefit of the content management system was that it allowed various staff to contribute pieces to the website, enriching its content. One helpful feature of the internet was that the park could track how many people visited its website. Based on those numbers, park staff soon judged that the internet was a more effective medium for dispensing information to the public than the park newspaper, which was discontinued after 2006.[35]

The park soon began using the internet for education outreach as well as visitor contact. The Alaska Region developed a website called ParkWise, aimed at informing students about national parks in Alaska. The website provided educational material for teachers and homework help for students. Kenai Fjords National Park posted an educational unit on Exit Glacier and glaciology. By 2007, the park had plans to expand and upgrade its content and link to the Park Service's website called "Exploring the Real Thing." Still in development in 2009, the park's webpage was to feature such things as e-lessons, e-field trips, podcasts, and webcams, as well as a platform for students to post blogs, images, and video clips about their own national park experiences. Park staff

[34] Mow interview; Amy Ireland interview.
[35] Amy Ireland interview.

envisioned that the enhanced presence on the Web would attract more educators and encourage "peer-to-peer social marketing" among young people.[36]

With the spread of computer technology, the park had other new IT requirements. By the late 1990s, virtually all park employees performed at least some of their work on personal computers. Computer technology specialist Cherie Heitmeyer joined the park staff in 1999, providing technical support to the park's growing list of personal computer users. All personal computers were networked so that information could be more effectively communicated and stored. Maintaining the network was no simple task since staff offices were spread through three separate buildings (including the maintenance facility) and all personal computers needed to be linked to the Park Service's intranet as well. The network required two servers. IT specialists in the regional office assisted Heitmeyer in keeping the two servers running smoothly.[37]

Ironically, as computer technology and the internet broke down the park's isolation, they also rendered the park vulnerable to IT security threats. As part of its heightened concern over security from terrorist attack, the federal government launched a nationwide effort to improve IT security. While the computer network at Kenai Fjords National Park did not appear to be a likely target for computer hackers or a high risk for an internal security breach, the park nevertheless had to conform with the federal government's overall commitment to improve IT security. This new emphasis on security added another layer of complexity to the park's IT platform. In 2005, a second, computer technician, James Heitmeyer, joined the park staff as Cherie Heitmeyer's part-time assistant. Reflecting the shift in emphasis to IT security, Cherie Heitmeyer's job title changed to information technology specialist.[38]

IT security concerns were not confined to the computer network. In 2008, the park was moving toward use of "smart cards" to allow better control over who entered park offices. Despite their low risk, federal buildings in rural Alaska were starting to acquire some of the security systems installed in federal buildings across the nation over the previous decade and a half. In some ways, the park's relative isolation and small staff made those security systems more onerous than they were in other settings where IT security threats were a more practical concern and there was a more favorable economy of scale. For example, if park employees had to get fingerprinted in order to be issued a smart card, they would have to travel all the way to Anchorage to be fingerprinted. Those inconveniences aside, the IT revolution was a strong force contributing to greater homogenization of the workplace throughout the national park system.[39]

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[36] National Park Service, "First Annual Centennial Strategy for Kenai Fjords National Park," (August 2007) at http://www.nps.gov/kefj/parkmgmt <May 12, 2008>.
[37] Anthony interview.
[38] Ibid.
[39] Ibid.

Recent Developments in Budget and Administration

In 2005, the park received an increase in base funding of $390,000, bringing the ONPS budget to $3.1 million. The increase came with the condition that it would not be used to fund new permanent positions and that it would be used primarily for visitor services and maintenance needs related to visitor services. Mow directed most of the additional funds to the visitor services program at Exit Glacier and used a portion to restore a seasonal ranger position for the coastal operations. Despite admonitions that the increase might be a temporary one, the park's operating budget stabilized at around $3.2 million over the next two years.[40]

Meanwhile, the park saw a significant increase in reimbursable income. Most of this money came from the tour boat companies for interpretive services and was used to pay a portion of labor costs for the seasonal interpretive staff. Starting at $93,000 in 2004, it rose to $160,569 in 2007. About the same time, Centennial funding provided a further assist in meeting rising labor costs.[41]

The administrative division grew to a total of four permanent and three seasonal positions in 2008. Besides an administrative officer in charge of the division, there was an administrative assistant, an IT specialist, and a human resource specialist, plus an assistant to the IT specialist, a budget analyst, and a receptionist in the summer. A major focus of human resources was to manage the coming and going of so many temporary park staff. In 2007, the park had 58 seasonal employees on the payroll, including Youth Conservation Corps (YCC) and Student Conservation Association (SCA) enrollees. Whereas the park had once waited until February or March to begin hiring people for the summer, it now began the process much earlier in December. In part, this was a function of numbers; in part, it was because the hiring process had become more encumbered by background security checks and new hires were required to go through more training. As a result, the hiring process began almost as soon as the budget planning process had ended, leaving scant time for preparation of end-of-year reports.[42]

Employee safety received increasing emphasis. In 2005, the park's safety committee was reorganized and came to consist of the superintendent, one of the division chiefs, and a representative from each staff division other than the division chief. The division chief on the committee was designated as the park safety officer. Although "park safety officer" was considered a collateral duty, it was potentially very demanding with much training involved. The safety committee met regularly to oversee compliance with the Alaska Region's safety plan. Considering all the dangers associated with the

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[40] Superintendent's Annual Report, 2005, copy provided by Jeff Mow from Superintendent's Files, KEFJ; "Baseline Budget Cost Projection – January 2006," copy provided by Connie Anthony, Administrative Division Files, KEFJ.

[41] "Baseline Budget Cost Projection – January 2006," copy provided by Connie Anthony, Administrative Division Files, KEFJ; Anthony interview.

[42] Anthony interview.

park's harsh climate, rugged terrain, and frigid waters, the park staff continued to accrue a respectable safety record. As one example of the park's safety efforts, all employees were required to get certified in basic sea kayak skills and self-rescue before using the park's kayaks for work or recreation. Most minor accidents that did befall park employees occurred in the Exit Glacier area and on the Harding Icefield Trail.[43]

One retirement and a handful of transfers of key people in 2009 pointed to that year being another year of transition for the park staff. Bill Cook, chief of maintenance since 2000, retired on January 1, 2009. Jim and Amy Ireland left for Washington, D.C., where Jim was to be the 22nd recipient of the Bevinetto Congressional Fellowship. Janette Chiron and Sean Brennan, two park rangers who had been in the park for several years each, transferred out, leaving just one permanent law enforcement ranger remaining on staff. And in the resources management division, one permanent staff member, Meg Hahr, ecologist, took a transfer as well.

Under the circumstances, Mow asked the regional office to conduct a management review. He requested that the management review look at four issues in particular: which division should be responsible for the *Serac* operations, how should the maintenance division be reorganized, how should the division of interpretation and visitor services be reorganized (it was anticipated that these would once again be split into two divisions), and how could the park staff better utilize its clerical support. It appeared likely that the park would acquire no fewer than three new division chiefs in the coming year.[44]

Recent Developments in Visitor Use

In 2004, annual visitation stood at 244,232. It climbed by about six percent in 2005, dipped slightly in 2006, jumped by thirteen percent in 2007, and dipped slightly again in 2008, registering at 272,190. It dropped substantially in 2009. Mow described the park visitation as tracking fairly closely with Alaska's statewide tourism figures. More than ever, the park was recognized as an engine of the local tourism economy. Annual visitation appeared to be nearly impervious to such factors as the nationwide slump in travel in 2002 that followed the 9-11 terrorist attacks or the decision by Princess Cruises in 2005 to change its port of embarkation from Seward to Whittier, although the latest figures suggested that the economic recession was having an impact.[45]

The results of a visitor survey in 2005 indicated strong visitor satisfaction with the park experience. Based on surveys returned, 99 percent of respondents expressed

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[43] Superintendent's Annual Report, 2005, copy provided by Jeff Mow from Superintendent's Files, KEFJ; Kenai Fjords National Park Kayak Policy, July 2006, Digital Files, KEFJ; Armato interview.
[44] Hall interview (2009).
[45] Mow interview; Superintendent's Annual Report, 2005, copy provided by Jeff Mow from Superintendent's Files, KEFJ.

satisfaction with the park (the highest rate ever recorded for the park), while 100 percent of respondents expressed satisfaction with park employees.[46]

The outstanding trend in visitor use in these years was a steady increase in the number of people who visited the fjords. Visitation to the fjords fell into two broad categories: people on tour boats, and everyone else (many of whom arrived by water taxi and were equipped with kayaks). The tour boat companies increased the number and variety of trips offered, especially to Aialik Bay, where trips were staggered over the course of the day to minimize doubling-up of tour boats in front of the Aialik and Holgate glaciers. Kayakers and other backcountry users became much more numerous. Faster boats delivered kayakers to Aialik Bay in just a few hours, making it possible to have a five- or six-hour paddle and return to Seward in the same day. Between the intermittent sound of tour boats and the loss of solitude, the once-remote Aialik Bay began to acquire the character of a day-use area. This constituted a significant change in the visitor experience, and yet Superintendent Mow was sanguine about it, noting that the change was a product of deeper forces in society that were altering people's tastes for outdoor leisure. Wilderness guides and outfitters might be creating the opportunities for day trips to Aialik Bay, but they were not shaping visitor preferences. Rather, they were reacting to changes in market demand. "It used to be more expeditionary," Mow says, referring to the public's desire for an Alaska wilderness experience. "Now it's soft travel….The seven-day kayak trips in the pouring rain out at Kenai Fjords just don't sell anymore."[47]

Figure 39. Water taxi and backcountry users in Aialik Bay, 2008. (Photo by Theodore Catton.)

With that same air of acceptance of what was beyond the Park Service's control, Mow prepared for the opening of a wilderness lodge on Port Graham Village Corporation land at Pedersen Lagoon in June 2009. The facility consisted of the main lodge building, 16 guest cabins, and employee housing on a 10-acre lease bordering a 1700-acre private wildlife sanctuary, all comprised of Native-owned land. Since the land belonged to the Native corporation, the Park Service had no jurisdiction. (It had tried and failed, three years earlier, to negotiate a conservation easement with the Port Graham Village Corporation, but could not obtain funding.) Still, the Park Service was highly motivated to have a positive, constructive relationship with the lodge company, Alaska Wildland

[46] Superintendent's Annual Report, 2005, copy provided by Jeff Mow from Superintendent's Files, KEFJ.
[47] Mow interview.

Figure 40. Pedersen Lodge Tour, August 2008. Construction materials for the wilderness lodge are visible in the background. (Digital Files, KEFJ.)

Adventures, and Mow was confident that it would. He based his confidence on the company's past performance in Denali and throughout the state. The company had a proven ability to develop low-impact facilities and to make them a commercial success, which was no small achievement in Alaska's harsh climate and austere environment. The company president, Kirk Hoessle, had won several awards for ecotourism from the state. Mow's position was that if there was to be a lodge in Aialik Bay, much better that it succeed than fail. A failed enterprise would leave a footprint without any lasting benefit for the enjoyment of park visitors. Acknowledging that many people were skeptical or downright hostile toward the wilderness lodge development, Mow says there is another way to look at it: "It's developing access to the park in a way that can be appropriate with minimum impact." Opposition to the lodge came mostly from local wilderness advocates. National environmental organizations like the NPCA and The Wilderness Society stayed mum – probably because they recognized Hoessle's good reputation.[48]

Alaska Wildland Adventures built the facility to "Ecolodge" guidelines, which included keeping the project relatively small scale, building the facility with a light footprint on the land, utilizing energy conservation methods, providing an authentic Alaskan ambiance with a Native cultural component, restricting activities to small groups with guides, and providing a high quality, interactive and educational experience for guests.[49]

In response to Alaska Wildland Adventures announcement that it would open for business on schedule in June 2009, Mow proposed a meeting with Hoessle to discuss various issues of mutual interest. Among these, Mow hoped the company would assist park rangers in ongoing efforts to inventory dead birds along the shore, and that it would cooperate with the park in the installation of a weather station on site.[50]

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[48] Ibid.
[49] "Fact Sheet on Kenai Fjords Glacier Lodge," undated, copy provided by Shelley Hall, Office Files, KEFJ.
[50] Hall interview (2009).

Recent Developments in Resource Management

In the early to mid 2000s there was a complete turnover of the resource management staff. Jeff Troutman, chief of the division since 1993, transferred out in December 2002, ecologist Ian Martin resigned in 2005, and resource management specialist Mike Tetreau resigned in 2006. (Tetreau returned as a temporary in subsequent years.) The new chief of the division was Shelley Hall. Like Troutman, Hall had come through the Park Service's 18-month natural resource management trainee program; in fact, she had been in the same class with Troutman in 1991-92. Transferring in from Olympic National Park in 2004, Hall made Kenai Fjords her ninth national park unit and her first tour of duty in Alaska. Rounding out the division's year-round or nearly year-round staff were ecologist Meg Hahr, natural resource specialist Fritz Klasner, cultural resource specialist Shannon Kovac, and biologist Christina Kriedeman.[51]

Hall and her team built upon the new foundations laid during the preceding few years. Under the influence of the Natural Resource Challenge, the I&M Program and the SWAN Vital Signs were now in full swing. The park's budget, including both ONPS and project funding, had grown appreciably over the past decade, while the resources management staff in the Alaska Regional Office had recovered somewhat since being hollowed out by the Park Service's restructuring plan in the mid 1990s. The OASLC, still headed by Peter Armato, was in its fifth year of existence and provided another source of support through grant-funded research projects. These circumstances allowed for an expansion of park science and resource management.

Exotic Plant Management

Invasive plant species were a concern to resource managers because they threatened the genetic integrity of native flora through hybridization, could out-compete native plant species for limited resources, and threatened to degrade fish and wildlife habitat and change the structure and function of ecosystems through alterations in geochemical and geophysical processes. Although the Park Service had initiated an Invasive Pest Management program in the 1980s, it was modestly funded and few units in the national park system actively took part in it prior to 2000. Under the Natural Resource Challenge, the Park Service revamped the program by establishing Exotic Plant Management Teams (EPMTs), which were mobile, specialized crews that were deployed from park to park.[52] The Alaska Region took a somewhat different course. Although it had an EPMT, the team took more of a cost-share approach and functioned more like a

[51] Hall interview (2008).
[52] Penny Bauder and Jeff Heys, "Invasive Plant Manual Control Analysis, Kenai Fjords National Park," RINS 23-02-100, RM File 142, KEFJ; Linda Drees, "A Retrospective on NPS invasive species policy and management," *Park Science* 22, no. 2 (Fall 2004): 24-25.

project leader than a mobile work crew.[53] In 2001, the team began to conduct baseline surveys for non-native plant species in each park. For the most part, surveys were conducted opportunistically using park staff. The survey served as the first source of data for preparing long-term management plans for weed control in each park. Although the Alaska Region had far fewer weed infestations than other regions in the national park system, managers were interested in confronting the problem at an early stage. Within Alaska, the units with the most exotic plants were Denali, Wrangell-St. Elias, Glacier Bay, Sitka, and Klondike Goldrush. Units with relatively low numbers of exotic plants included Kenai Fjords, Katmai, Lake Clark, and Gates of the Arctic.[54]

At Kenai Fjords, the survey consisted of a targeted sampling that focused on the Exit Glacier development area and other areas of high visitor use as reported by park staff. The survey was conducted on foot, with each surveyor being equipped with a highly accurate Trimble GeoXT GPS unit. The survey recorded the size, diversity and severity of each invasive plant infestation, providing sufficient detail so that repeat surveys the following year could detect the amount of spread or the effectiveness of control measures. Some 15 exotic plant species were identified, with dandelions being the most common. The method of control was hand pulling; no pesticides were used. Each treated area was revisited year after year. The effort was enhanced through an annual weed pulling day that drew numbers of volunteers. Christina Kriedeman coordinated the program in conjunction with Penny Bauder and Jeff Heys, exotic plant management team biologists in the regional office.[55]

Depending on location and how the exotics arrived in the area, control measures varied in their effectiveness. Infestations of dandelions were most extensive and troublesome along the Exit Glacier Road, around the edges of the parking area, and in the campground and weed control efforts focused on these areas. Managers posited that the seed source for infestations in these roadside areas arrived primarily on vehicle tires. Dandelions were also found in a nearby blow-down area nicknamed the Nike Stripe, a naturally disturbed swath located about 800 yards north of the Exit Glacier Road. Seeds had most likely been brought into this area on the boots of researchers who were studying the site. Since the seed source for the Nike Stripe infestation was relatively limited and the site disturbance was natural and non-recurring, dandelion control efforts were more effective there than elsewhere. Trailside dandelion infestations, while not as large, posed a problem for control because they were highly dispersed. As these infestations tended to

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[53] Kenai Fjords National Park received $5,000 per year toward salary for an exotic plant control seasonal position.

[54] Exotic Plant Management Plan EA Internal Scoping Meeting Notes, May 14, 2006, File Programmatic Exotics EA, Office Files, KEFJ; Kriedeman interview.

[55] Penny Bauder and Jeff Heys, "Invasive Plant Manual Control Analysis, Kenai Fjords National Park," undated, RINS 23-02-100, RM 142, RM Files, KEFJ; Hall interview; Heather Wetherbee, "Invasive Plant Management in Kenai Fjords National Park, Seward, Alaska, Summer 2007 Field Season Report" (August 2007) at http://www.nps.gov/akso/NatRes/EPMT <June 5, 2009>.

occur at scenic overlooks, it was evident that the seeds hitch-hiked to the area on people's clothing or gear. Since the seed source was renewed year after year, managers faced a daunting task in preventing their recurrence. The Park Service tried to educate visitors about the problem so that they would be more careful not to inadvertently bring seeds or soil into the area.[56]

In 2006, the Alaska Region began to prepare an exotic plant management plan and environmental assessment. The Park Service wanted to refrain from use of chemical and biological controls, since these treatments would require a great deal of study to prevent collateral damage to ecosystems. At the same time, it wanted the latitude to take aggressive measures in those few areas where exotic plants were establishing strongholds. After much deliberation, the Alaska Region decided to provide for extremely limited herbicide use when other control methods were not effective. It released the draft plan and environmental assessment for public review in September 2008.[57]

Bear Management

In 2005, the park adopted a bear management plan. The plan was a joint effort by Ian Martin, Shelley Hall, and Jim Ireland on the park staff and Terry DeBruyn of the natural resource management staff in the regional office, who had a background in bear biology and management. The goals of the plan were to provide for visitor and staff safety by minimizing bear-human conflicts, to minimize the effects of visitation on natural bear populations, and to ensure opportunities for visitors to enjoy the presence of natural bear populations as part of an intact ecosystem. A key to maintaining natural bear populations in this park, as elsewhere, was to discourage bear-human interactions by educating people about what to do in the presence of bears so that bears would treat humans as a neutral stimulus. An important component of the educational process was educating people how to handle and store food in bear country so as to prevent bears from becoming "food conditioned." [58]

After the bear management plan was adopted park staff put a lot of continuing effort into bear management. While much of the effort was directed toward public education, resource managers also emphasized the need for staff training. All employees were required to have a two-hour basic bear biology orientation. All employees were trained in how to use bear spray, and they were required to carry it at all times in the

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[56] Penny Bauder and Jeff Heys, "Invasive Plant Manual Control Analysis, Kenai Fjords National Park," undated, RINS 23-02-100, RM 142, RM Files, KEFJ; Christina Kriedeman comments on draft report; Whitney Rapp, "Alaska's national parks combat invasive plants," *Juneau Empire*, September 10, 2008.
[57] Exotic Plant Management Plan EA Internal Scoping Meeting Notes, May 14, 2006, File Programmatic Exotics EA, Office Files, KEFJ; Whitney Rapp, "Alaska's national parks combat invasive plants," *Juneau Empire*, September 10, 2008.
[58] Terry D. DeBruyn, Ian D. Martin, Jim Ireland, and Shelley Hall, "Bear Management Plan, Kenai Fjords National Park," June 20, 2005, Digital Files, KEFJ; Hall interview (2008).

field. Selected employees received more in-depth training in bear biology and safety. A bear response team was trained in how to administer aversive conditioning once the team got into a situation.[59]

The park staff closely monitored and catalogued bear-human interaction events. Managers temporarily closed areas when necessary. In the summer of 2005, bear-human interactions led to temporary closures of a portion of the Exit Glacier developed area and the Holgate Public Use Cabin as well as the adjacent camping beach.[60] In the latter case, at least six bears were in the area, and most of these bears appeared to be exhibiting a normal degree of wariness toward humans and human structures and equipment. Still, park rangers were sent to stake out the site and monitor bear behavior, with instructions to administer aversive conditioning if a bear approached too near to the rangers' tent, the cabin, the outhouse, or the food locker. Shelley Hall and Jim Ireland prescribed a set of aversive conditioning guidelines specific to this situation. "The goal is NOT to discourage bears from using the entire area," they emphasized. "Appropriate natural bear behavior in the area is acceptable."[61] Ideally, bears would become habituated to the presence of humans and would be neither attracted to them (for the food they carried with them) nor driven away from the bears' preferred habitat areas. For its work in connection with the bear management plan, the park received the Andrew Hecht Public Safety Award in 2008.

The park continued to conduct and support research on black bears. The next phase of research on black bears involved DNA hair snare sampling and analysis to obtain information about the size and genetics of the coast population in relation to the black bear population on the rest of the Kenai Peninsula. As black bears on the rest of the Kenai Peninsula came under increasing stress from land development, resource extraction, habitat fragmentation, and hunting, managers wondered how much connectivity existed between the population on the narrow coastal strip and populations elsewhere. To answer these questions, researchers collected hair samples of black bears and performed two types of DNA analysis to estimate the number of bears using park resources, the population structure, and the genetic relationships between black bears on the Kenai coast and in surrounding areas. The results of the study showed that black bears on the Kenai Peninsula were currently genetically distinct from black bears on the mainland, but the separation was not absolute. The genetic structure of the Kenai Peninsula black bear population pointed to a high degree of migration and interbreeding within the limits of the peninsula, including the fjords area. However, the study detected some "genetic patches" within the peninsula that apparently stemmed from landscape barriers such as major highways. Therefore, resource managers would have to stay alert

[59] Hall interview (2008).
[60] Resource Management Annual Report, 2005, Digital Files, KEFJ.
[61] Chief of Resource Management and Chief of Interpretation and Visitor Services to Field Personnel, July 22, 2005, Digital Files, KEFJ.

to the "potential for black bear populations to become increasingly subdivided if barriers become more severe." The study provided a measurement of baseline genetic diversity levels and population connectivity of black bears in the region.[62]

While the black bear DNA study was under way, the park moved closer toward adopting an interagency plan to obtain a population estimate of brown bears on the Kenai Peninsula. As with the black bear, increasing habitat fragmentation and other factors were thought to be stressing the brown bear; however, managers lacked a close population estimate for the species. Rather, managers had to rely on crude population estimates that were based on estimates of the amount of suitable habitat on the Kenai Peninsula multiplied by average brown bear densities found across the animal's range. One indication that the Kenai brown bear population was stressed was the rise in reported brown bear kills in defense of life and property. Although the Alaska Board of Game authorized fall and spring hunts, the ADF&G did not implement those regulated hunts year after year because of the large number of kills in defense of life and property.[63]

Since the mid 1980s, the ADF&G, the FWS, the Forest Service, and the Park Service had coordinated their efforts through an Interagency Brown Bear Study Team (IBBST). In 1998, the governor requested that the IBBST develop a comprehensive conservation strategy for the Kenai brown bear. Over the years, conservation efforts pointed increasingly toward the need for a sound population estimate. In 2009, the three federal agencies were nearing an agreement to implement an interagency brown bear population study.[64]

Inventory and Monitoring Program

Under the I&M Program, a series of more specialized studies followed on the heels of the small mammal and vascular plant inventories. In 2005, the SWAN conducted an inventory of vascular plants on nunataks. Nunatak plant communities had been identified as one of the network's vital signs because they were expected to be highly sensitive to climate change. Enhanced knowledge about the plant communities on nunataks had the potential to improve scientific understanding of species diversity across the landscape. Scientists debated whether nunataks had functioned as refugia during periods of glacial maximums. According to the nunatak hypothesis, nunataks served as important parent sources for plant dispersal and recolonization of deglaciated lands during interglacial periods. Proponents of this theory supposed that nunataks would be genetically rich. Plant specimens collected during the inventory could later be analyzed

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[62] Stacie J. Robinson, Lisette P. Waits, and Ian D. Martin, "Evaluation of Genetic Structure Among Black Bears (*Ursus americanus*) in Kenai Fjords National Park and the Kenai Peninsula, Alaska," January 10, 2007, copy of scientific paper available at Alaska Resources Library and Information Service, Anchorage, Alaska.

[63] John W. Schoen, "The Brown Bears of Kenai: A Population at Risk – Alaska," *Endangered Species Bulletin* (March 1999), at http://findarticles.com/p/articles <August 27, 2009>.

[64] Hall interview (2008).

at the molecular level, yielding clues about the extent and length of time that plant populations had been isolated from one another.[65]

The nunatak inventory was also directed toward monitoring changes in the ice mass of the Harding Icefield. Based on aerial photographs, the Harding Icefield was thought to have diminished in surface area by about five percent between 1950 and 1985. Surface elevation readings of the ice field taken from the air in the mid 1990s suggested that it had lost as much as 21 vertical meters of ice since 1950. To get a closer reading on changes in the ice mass, seven different nunataks were selected as platforms from which to take repeat measurements of the surrounding ice.[66]

Inventory and monitoring of "vital signs" continued to be an expanding and lengthening effort. Working with her counterparts in the other units in the SWAN, Hall reviewed and revised the network's vital signs according to what was effective and what was feasible. Wolverines, for example, dropped out of the mix because the wolverine survey technique – which requires surveillance by air in wintertime – was found to be infeasible on the Kenai Peninsula.[67] In other instances, the NPS was opportunistic. In 2004, for example, the park teamed with two biologists from the University of Wyoming and the Alaska Department of Fish and Game who proposed to study river otter abundance in the SWAN parks. The two-year study began in June 2004 with a survey of the Kenai coast using the *M/V Serac*. The two outside biologists wanted to study river otters because they were thought to be a keystone species for the nearshore ecosystem and a sentinel species for monitoring levels of environmental contamination. An interesting feature of their study was that it used DNA analysis of fecal samples to determine population. Since river otters mark their territories with feces, urine, and anal gland excretions at specific locations along the shoreline, the survey crew focused on identifying and sampling otter "latrine sites" rather than live-trapping the animals. With DNA fingerprinting of the fecal samples, they were able to estimate the number of river otters present in the park. As with all I&M studies in the park, the NPS insisted on including at least one park biologist on the science team to ensure that the project would support park management objectives.[68]

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[65] "Trip Report – Reconnaissance of vascular plants on Weather Station Ridge, Harding Icefield, KEFJ," September 7-8, 2004, SWAN Reports, RM Library, KEFJ; Amy Miller, Page Spencer, Matthew L. Carlson, and Rob Lipkin, *Vascular Plant Inventory & Baseline Monitoring of Nunatak Communities, Lake Clark National Park and Preserve, Kenai Fjords National Park, 2005* (Anchorage: National Park Service, Alaska Region, Inventory & Monitoring Program, 2006), 8-9.

[66] Miller, et al., *Vascular Plant Inventory & Baseline Monitoring of Nunatak Communities*, 9. Another study of the Harding Icefield in the early 2000s compared radar topographic images taken from the space shuttle with digital elevation models based on USGS maps from the early 1950s to calculate thinning of the ice field and its outflowing glaciers. It found that the rate of diminishment had accelerated since the mid 1990s. (J. Van Looy, R. Forster, and A. Ford, "Accelerating thinning of Kenai Peninsula glaciers, Alaska," *Geophysical Research Letters* 33, L21307 (2006). Available at RINS 28-05-100, RM File 136, KEFJ.)

[67] Hall interview (2008).

[68] Merav Ben-David and Howard Golden, "River Otters in Kenai Fjords, Katmai and Lake Clark National Parks: Distribution, Relative Abundance, and Minimum Population Size Based on Coastal Latrine Site

In March 2008, Hall and other biologists conducted a biological survey aboard the chartered *M/V Kittiwake* for the purpose of monitoring a variety of marine nearshore vital signs. Getting out on the coast in March gave the biologists a glimpse of the biological community at that time of year for the first time since the inventories made after the *Exxon Valdez* disaster. The team was lucky to find a weather window so early in the spring. The plan was to follow this survey with a similar trip along the Katmai coast, but the return of stormy weather prevented it. Still, in spite of the problematic spring climate, it was decided that an annual March survey would be part of the I&M marine nearshore sampling protocol for the SWAN, with the survey alternating between Kenai Fjords and Katmai each year.[69]

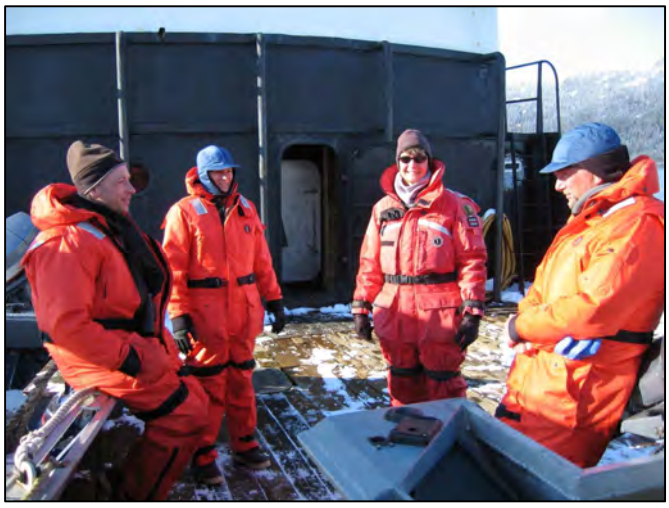

Figure 41. L-R: John Reed, USGS; Heather Coletti, USGS; Shelley Hall, chief of resource management; Jim Botkin, USGS, on marine bird and mammal survey, March 2008. (Digital Files, KEFJ.)

Other Inventory and Monitoring Efforts

The resource management staff conducted other inventory and monitoring efforts which tended to be more targeted and intensive than those conducted under the national I&M Program. Starting in the summer of 2006, the park began making frequent dead bird counts along sections of the coast. The program combined opportunistic surveys with a discrete number of beach surveys that were performed using a protocol established by the Coastal Observation and Seabird Survey Team (COASST). The latter committed the park to dead bird counts at six locations along the coast.[70] Should the park be hit by another oil spill, it would have data on the number and species of birds that normally wash up on the park's beaches. As it happened, this program got an assist from a wave of concern in the preceding year over a potential worldwide bird flu epidemic. As Alaska's southern coast seemed to be the most likely pathway for spread of the avian influenza

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Surveys," May 15, 2006, report prepared for National Park Service, Southwest Alaska Network, Inventory and Monitoring Program, Digital Files, KEFJ; Hall interview (2008).

[69] Hall interview (2008).

[70] COASST is a citizen-science program established at the University of Washington for monitoring marine bird mortality events along the outer coast of Washington. The program has expanded throughout coastal Oregon, Alaska and Hawaii. The six beaches selected for monitoring at Kenai Fjords National Park are Bulldog Cove, Verdant Cove, Pederson, Northwestern Spit, James Lagoon, and Yalik Glacier Beach. Under the COASST protocol, the surveys would ideally occur each month, but given the remote nature of the park's coastline the park committed to making surveys whenever possible. Most were surveyed once or twice per year (Shelley Hall comments on draft report).

from Asia to North America, Kenai Fjords National Park was given a role in implementing a surveillance program to identify unusual mortality events in wild bird populations. As a result, the Alaska Region received a budget of $350,000 for avian influenza surveillance, and one new biological technician position at Kenai Fjords was funded under this program.[71]

In July 2007, resource managers conducted a seabird colony survey from the *M/V Serac*. The team included Hall, ecologist Meg Hahr, and biologist Leslie Slater of the Alaska Maritime National Wildlife Refuge. The survey accomplished two aims: to revisit 14 mainland seabird colonies that had not been surveyed since the 1976 survey by Ed Bailey, and to familiarize park biologists with the Fish and Wildlife Service's protocols for monitoring colonial nesting seabirds. Funded entirely by the park, the trip was repeated annually thereafter in cooperation with the Alaska Maritime National Wildlife Refuge.[72]

Cultural Resource Management

After 2005, the park made several important strides in cultural resource management. That year, Shannon Kovac was hired as a museum technician, becoming the first cultural resource specialist to serve on the park staff. Kovac's first priority was to organize park collections. The natural history collections were in good shape. All voucher specimens collected by the small mammal and vascular plant I&M surveys in 2004 were sent to the University of Alaska Fairbanks under an agreement with the SWAN, while the park received only a relatively small number of duplicate specimens from those surveys. What needed attention were the history collections. No one previous to Kovac had accessioned the park's retired central files or the large collection of inactive resource management files. Boxes of material had been stowed away for years in the Conex storage units at the maintenance facility. Kovac brought this material into a stable environment and began the process of accessioning it into a park archive.[73]

After two seasons with the park, Kovac was hired as a cultural resource specialist and began to work in other areas of cultural resource management. Accompanied by coast rangers, she began to conduct site condition assessments for all known cultural sites in the park. The goal of this effort was to get current information on each site and to establish a monitoring program. Each site was evaluated for threats by erosion, encroachment from campsites, evidence of looting, and other miscellaneous influences. (In a few cases, bears had been digging in the area.)[74]

Regional mining historian Logan Hovis accompanied the Kenai Fjords team on a trip to Nuka Bay in June 2007 to perform cultural site assessments for six mining sites.

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[71] "Kenai Fjords National Park Avian Influenza Plan," May 2007, File 2007 AI, Office Files, KEFJ.
[72] Meg Hahr, "Seabird Colony Survey, Trip Report 2007, Kenai Fjords National Park," May 2008, Digital Files, KEFJ.
[73] Kovac interview.
[74] Ibid.

These visits were a step in advance of mining site cleanup performed the following year. The crew's task was to locate hazardous mine shafts and adits and to identify hazardous materials for removal or on-site elimination. Hovis, the Alaska Region's appointed blasting officer, disposed of explosives. One year later, a crew of eight people was deployed in the area for cleanup. Many 55-gallon fuel drums were transported by helicopter to Homer. One adit was gated, and one shaft was sealed by foam. These plugs had to be designed to allow for flow of water and for movement of bats and other small mammals.[75]

With grant assistance secured through the OASLC, Aron Crowell, director of the Arctic Studies Center, Smithsonian Institution, began another stint of archeological survey in the park. This time, he and his crews focused on Nuka Bay and lower McCarty Fjord. This was the first archeological reconnaissance of the park's southern coastal sector since the year of the *Exxon Valdez* oil spill. The latter survey "allowed for a systematic study in a non-emergency setting," according to one project summary. Crowell's team added six pre-contact occupation sites to the fifteen historic and pre-contact sites previously known in the study area.[76]

Recent Developments in Interpretation

Starting in the early 2000s, interpretive rangers took on the controversial subject of climate change. With scientists' predictions of global warming grabbing news headlines and glacial retreat featuring so prominently in the natural landscape of Kenai Fjords, visitors began asking if there was a connection. Was climate change causing the glaciers to recede? And then the big one: were human actions responsible for climate change?

Sandy Brue, chief of interpretation from 2001 to 2004, says that at the start of her tenure there was a sense among the interpretive staff that the topic of climate change was off-limits. The Bush administration's position on global warming was that it was a hypothesis, not a fact, and that any human agency involved in climate change was yet to be scientifically proven. But as visitors' curiosity on the subject grew more insistent, interpreters began researching and developing pertinent information so they could respond appropriately to visitors' questions. Carefully, they collected all their information from U.S. government websites, especially the USGS website, so they could not be accused of going to radical organizations for their information. By 2003, learning about climate change became a part of each seasonal interpreter's training.[77]

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[75] Shannon Kovac, "Nuka Bay Mine Site Condition Assessment Trip," 2007, copy provided to author by Shannon Kovac, Office Files, KEFJ; Hovis interview.
[76] Shannon Kovac, "Archeological Survey of the Nuka Bay Area, Kenai Fjords National Park," March 17, 2008, Digital Files, KEFJ.
[77] Brue interview.

When Mow arrived, he found the interpreters still struggling over whether they could actually initiate public conversations about climate change. Was the topic so politically charged as to be out of bounds? "I sat down with the staff and went through this and we decided no, no, we can't avoid this, we really should be talking about it," Mow says. Although Mow saw this issue as strictly an internal park matter, and did not seek guidance from a higher level, he was not unaware of the potential political fallout if park interpreters spoke out on climate change. At the time, the FWS in Alaska was taking heat from the Bush administration for saying too much on the subject.[78] Over the next two years, as evidence accumulated that polar sea ice was melting more rapidly than previously thought, and as the endangered polar bear began to look like perhaps the first animal species facing extinction as a consequence of global warming, tensions within the FWS rose. In March 2007, the FWS Alaska Region issued an internal memo to its scientists stating that anyone traveling to the Arctic needed to understand "the administration's position on climate change, polar bears, and sea ice and will not be speaking on or responding to these issues."[79] The memo was leaked to the media and was cited as another example of what critics described as a pattern of climate change "censorship" by the Bush administration. Undaunted, Mow urged the interpretive staff to develop a program on climate change for the coming summer. The park even posted a podcast about climate change on iTunes. Despite what was happening in the Park Service's sister agency, the park's efforts to discuss climate change with the public did not get shut down. As with Mow's demolition of the fee collection at Exit Glacier two years earlier, the superintendent figured out how to make fire without smoke. "We had to do a little dance because you don't want to spend all your time defending this thing," he explains.[80]

In a way, the superintendent's hand was forced. Starting with the Senate delegation's visit to Kenai Fjords in 2005, the park began to host one group of dignitaries after another who were interested in looking at the effects of climate change. Some of these dignitary visits brought national media attention. As the park became a favorite destination on the climate change tour, it was only natural that the topic of climate change should start to figure prominently in the park's interpretive program. If talking about climate change appeared to come very close to advocating for environmental legislation, it was not the first time that interpreters had been placed in such a position. The Park Service has long striven to cultivate environmental values as a central part of its educational mission.[81]

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[78] Mow interview.
[79] George Monbiot, "There is climate change censorship – and it's the deniers who dish it out," *The Guardian*, April 10, 2007.
[80] Mow interview. On the podcast, see "Kenai Fjords National Park Uses RECs/Carbon Offsets to Go Climate Neutral," undated, copy provided by Jeff Mow from Superintendent's Files, KEFJ.
[81] Mow interview; Superintendent's Annual Report, 2005, copy provided by Jeff Mow from Superintendent's Files, KEFJ.

The Park Goes Carbon Neutral

The skeptical attitude of the Bush administration notwithstanding, the Park Service was already using its bully pulpit and the modest tools at its disposal to educate the public about climate change. Partnering with EPA, it formed the Climate Friendly Parks program. This volunteer program aimed to provide participating parks with technical support in mitigating carbon emissions caused by park operations and educating the public about those efforts.[82]

The basic thrust of EPA's plan for mitigating carbon emissions was to obtain its energy needs from "clean" energy sources such as hydro, solar, and wind, rather than from coal- and natural gas-fired power plants. Mow realized that Kenai Fjords National Park would have to do something different, since the park was not located in an area where it could acquire electricity exclusively from renewable energy sources. That led Mow to research the new industry of carbon offsets and Renewable Energy Certificates (RECs). He learned that these came in all shapes and sizes (for example, one vendor might invest the money in wind farm technological development, another in a specific bio fuel experimental farm, and so on), but with a little care a park manager could select legitimate and appropriate vendors. Mow's next exercise was to determine the park's total annual non-renewable energy consumption and carbon emissions. After researching how to translate fuel use into tons of CO2, he was able to generate these numbers with little more than back-of-the-envelope calculations. Finally, Mow had to determine how to purchase the RECs and carbon offsets. The cost was manageable: about $5,500, or about .17 percent of the park's annual budget of about $3 million, which could be easily covered by end-of-year moneys. Mow found the legal authority for the purchases in Executive Order 14323, which requires that at least 15 percent of all electricity purchased by the federal government come from renewable sources. Mow stretched this mandate to cover the purchase of RECs and carbon offsets for all of the park's use of heating oil, propane, marine gas and diesel, gas for vehicles, and miles of air travel, as well as electricity.[83]

Mow implemented the plan for the first time in Fiscal Year 2006. In his annual report for that year, the superintendent asserted that the offsets allowed the park to claim that 100 percent of its electricity now came from green energy sources and that all of its major carbon producing activities were now offset 100 percent. In short, park operations were now "carbon neutral." This had educational and inspirational value beyond the face value of neutralizing the park operation's carbon output. Interpreters used it to

[82] Jeff Rennicke, "A Climate of Change," *National Parks* 81, no. 4 (Fall 2007): 30-31.
[83] "Kenai Fjords National Park Uses RECs/Carbon Offsets to Go Climate Neutral," undated, copy provided by Jeff Mow from Superintendent's Files, KEFJ.

underscore the park's environmental message to the public. Some of the park staff began to investigate how they might replicate this action on an individual household level.[84]

In 2007, Mow proposed to the tour boat companies that they develop a carbon offset for the tens of thousands of people who visited Kenai Fjords by tour boat each year. The tour boat companies were receptive, and in collaboration with the Renewable Energy Alaska Project and the Bonneville Environmental Foundation they devised the "Tour Green" program. For two dollars, a passenger could purchase a green tag or voucher. The two dollars paid for a carbon offset for that passenger's share of the fuel burned on the trip. Each two dollars reportedly covered the amount of fuel consumed by a car being driven 150 miles. By 2008, all three tour boat companies in Seward had adopted the Tour Green program together with Prince William Sound Glacier Cruises and Alaska Wildland Adventures (operating in Denali).[85]

Having dabbled in the carbon offsets market, Mow gained a reputation as one of the superintendents in the lead on these matters. He offered advice to other superintendents, and indeed, through his participation on the Secretary of the Interior's task force, he provided guidance for all of Interior. In his view, it was only a matter of time until the U.S. converted to a carbon-based (or carbon trading) economy; therefore, it was natural and appropriate that the Park Service should get involved in the early stages of the process. Mow wrote, "RECs, carbon offsets, and the industry that is built around marketing them is unregulated and as such deserves some scrutiny." In the short term, EPA provided limited oversight through its website, Greenpower Network, and its Green-e certification process, which prevented certified companies from fraudulently selling the same carbon offsets to multiple buyers. But this was only a stopgap. "Once the U.S. chooses how to regulate CO2 and carbon emissions have a monetary value," Mow predicted, "the marketplace will demand higher levels of accountability for RECs."[86]

The park's efforts to mitigate its effect on climate change did not end with going carbon neutral. It purchased an electric vehicle, continued the experiment with hydrogen fuel cell technology, encouraged use of the shuttle van service to Exit Glacier (besides providing mass transit, the van itself was powered by waste vegetable oil), and worked with the local government on improvement of bicycle paths. In 2008, the park initiated efforts to get certified by the EPA-sponsored Climate Friendly Parks program.[87]

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[84] Superintendent's Annual Report, 2006, copy provided by Jeff Mow from Superintendent's Files, KEFJ.
[85] Untitled two-page memo that begins, "Since 2004, Kenai Fjords National Park has taken a very active role with regards to climate change," undated, copy provided by Jeff Mow from Superintendent's Files, KEFJ. Also see "Tour Green" (2009) at http://www.princewilliamsound.com/pws-green.html <May 29, 2009>.
[86] Mow interview; "Kenai Fjords National Park Uses RECs/Carbon Offsets to Go Climate Neutral," undated, copy provided by Jeff Mow from Superintendent's Files, KEFJ.
[87] Untitled two-page memo that begins, "Since 2004, Kenai Fjords National Park has taken a very active role with regards to climate change," undated, copy provided by Jeff Mow from Superintendent's Files, KEFJ.

Conclusion

A quick perusal of the issues involved in the administration of Kenai Fjords National Park in recent years might persuade anyone familiar with national park management that Kenai Fjords has developed along the same lines as any natural-area unit of the national park system in the Lower 48. It is awaiting a new visitor center and administration building – its third – to accommodate large numbers of summertime visitors and the park's now sizable staff. It has a science and learning center that is nearly a decade old. Interpretive rangers do environmental education outreach. Managers deal with the familiar categories of frontcountry and backcountry, or developed areas and natural areas, and they recently availed themselves of the Park Service's state-of-the-art planning process, VERP, to address problems of crowding and resource threats in the Exit Glacier area. When visitor use of the Exit Glacier area reached a level to create an incipient "bear problem," the park produced a bear management plan to regulate human-bear interactions. Since 2000, the park has engaged in biological inventory and monitoring and other elements of the Natural Resource Challenge.

Yet in spite of all these outward signs that the administration of Kenai Fjords National Park has become much like that of any other big park in the Lower 48, the Alaska context continues to be a dominating influence. Alaska parks *are* different. What makes the administration of Alaska parks distinctive is not just these areas' vast size and relatively remote, primitive, and pristine character, but also the legal framework of ANILCA (and ANCSA) and the ways in which the park interacts with local communities and state politicians.

In the 30-odd years following its establishment, Kenai Fjords National Park occasionally made news under three major subject headings: the park's relationship with Seward, the disposition of Native lands within the park, and the vulnerability of park

resources. Each of these three major storylines manifests the importance of the park's Alaska setting and offers a lesson for the future.

The Glory Park

Perhaps the most frequently told story about Kenai Fjords National Park is the story of how the Seward City Council, at one time vociferously opposed to the park, made an about-turn and proclaimed the Park Service "a good neighbor." (The story even turns up in the Ken Burns documentary on the history of the U.S. national parks.) In the mid 1970s, the City Council went on record against the creation of a national park or monument, preferring to see a national recreation area established under multiple-use principles and administered by the Forest Service. Only a decade later, the City Council took back those statements and declared that the creation of the park had been a good thing for the town, providing a boon for the local economy. Indeed, the relationship between the city government and the park stood at the center of a larger narrative of how Seward re-invented itself following the devastating earthquake of 1964 and the gradual decline of its shipping, fishing, and lumbering industries. To national park proponents, the city government's action in the mid 1980s betokened a change of values that was apt to occur in any setting where tourism took the place of extractive industries. Seward's improving relationship with Kenai Fjords National Park appeared to be another significant step in Alaska's transition from "last frontier" to "last wilderness."

But despite Seward's avid support for park initiatives such as a new visitor center and improvements at Exit Glacier, most Alaskans continued to favor a permissive form of wilderness protection compared to what prevailed in the Lower 48. There was no statewide sea change of attitude toward ANILCA like that which occurred in Seward's town hall. While ANILCA directed the Park Service "to maintain unimpaired" the area within Kenai Fjords National Park, most Alaskans wanted to circumscribe that preservationist ideal as narrowly as possible. Park managers were challenged by state officials eager to pursue every conceivable option for exploiting natural resources in or adjacent to the park. These resource challenges involved mining operations in Nuka Bay, water rights to a portion of the runoff from Nuka Glacier for hydroelectric power, aquaculture projects to enhance salmon stocks, and ice harvesting in Aialik Bay, among others. Moreover, when the NPS Alaska Region prepared wilderness recommendations as required by ANILCA, NPS officials tacitly acknowledged that the recommendations were probably dead on arrival in the nation's capital owing to the state's strident opposition to any more wilderness on top of the 32 million acres already designated for inclusion in the national wilderness preservation system under ANILCA. The state's opposition to further wilderness designation had particular significance for Kenai Fjords, where none of the park area had been designated as wilderness in the first place. Without the wilderness classification, park managers had to defend wilderness values on the basis of other laws and regulations. Wilderness values were not the only point of contention;

park managers encountered strong local opposition to the fee demonstration program, snowmobile use restrictions, and visitor carrying capacities at Exit Glacier.

Furthermore, Seward's support of Kenai Fjords National Park came at a price. Insofar as Seward endorsed the Park Service's preservationist mission, the Park Service reciprocated by boosting Seward's tourism economy. While this sort of relationship exists between all national parks and nearby communities, Kenai Fjords National Park quickly gained the reputation within the Alaska Region as the park that would do more than its share to stimulate tourism (and absorb public use), thereby allowing other Alaska parks to maintain a higher level of wilderness protection. As one of just three national parks on Alaska's main highway network and the nearest one to Anchorage, it was only to be expected that Kenai Fjords would become the first ANILCA park to acquire a frontcountry. With the installation of a footbridge across the Resurrection River – the first improvement in any of ANILCA's natural-area units – Kenai Fjords earned its nickname "the Glory Park." The nickname not only conveyed outstanding achievement, it also suggested sacrifice. Each measure of development in Kenai Fjords National Park gave most other Alaska parks a measure of political cover to remain maximally undeveloped. (Denali still faced immense development pressures.) The park persisted in this role with the erection of public use cabins in the early 1990s, the paving of the Exit Glacier Road near the end of the decade, and most recently, a marketing effort by the NPS and the Alaska Tourism Association to promote travel to all of Alaska's parks other than Denali. Superintendent Mow has no illusions about what that marketing campaign could mean for Kenai Fjords, since it is "the only park that has capacity to receive another 50,000 [annual] visitors," he says.[1]

It would be an exaggeration to describe Kenai Fjords as a sacrifice area for the other parks in Alaska, since its 669,000 acres are enjoyed by less than 300,000 people each year – an extraordinary spaciousness by any standard in the Lower 48. Still, the park now faces visitor-use pressures that are surprisingly akin to what park managers normally experience in the Lower 48. Hiker impacts on the Harding Icefield Trail, crowding around Exit Glacier, a rise in human-bear incidents, and noise pollution in Aialik Bay are perhaps the most important stressors on a quality visitor experience that park managers have identified in recent years.

The Native Inheritance

The second park feature that sometimes made news was the complicated status of Native lands inside the park. Like the park's relationship with Seward, the park's relationship with the nearby Native communities of Nanwalek and Port Graham is distinctively Alaskan.

[1] Mow interview.

The relationship is both historical and legal, as it is embedded in ANCSA and ANILCA. When Kenai Fjords was established under ANILCA, the park area overlaid several thousand acres of Native land selections that had been previously claimed under ANCSA. Native selected lands remained in federal ownership until such time as BLM completed preparations so that they could be conveyed to Native ownership. There were provisions in ANILCA dealing with the peculiar status of these lands; essentially lawmakers hoped that those lands would eventually be exchanged for other lands outside the park. Although ANILCA did not provide for subsistence use on federally-owned lands inside Kenai Fjords National Park, as it did in all other natural-area additions to the national park system in Alaska, the mere fact that Native land selections blanketed the Kenai coast meant that the Native communities would be vital partners in making the park a success.

The history of these lands took several unexpected turns. In the first place, the process of conveyance took much longer than anyone had anticipated and was still not complete in 2009. By the time actual conveyance was imminent in the 1990s, Alaska's general population had only a hazy understanding of ANCSA and ANILCA. The prospect that such a large part of the park could shortly pass into Native ownership surprised many people. Another unexpected development was the billion-dollar settlement with Exxon Corporation, which provided cash for land purchase at a time when buying the land with public funds appeared to be out of the question. The decision by Port Graham Corporation to retain ownership came as yet another surprise. Park planners in the 1970s had assumed that the Native village corporations would want to sell or exchange the lands. But Port Graham Corporation eventually saw the potential for ecotourism development. As a result of all these twists and turns, park managers often made decisions with a different scenario in mind than the one that actually emerged. Thus, for example, public use cabins were placed in locations where the Park Service eventually lost control over them. Even today, as Port Graham Corporation commences its experiment with ecotourism in its wilderness lodge development at Pedersen Lagoon, it is useful to consider how different the park might be if land ownership had unfolded in a different way.

The current land status is a complicated matrix of federally-owned, Native-owned, and federally-owned with Native reserved rights. One complicated situation involves the ownership of cultural artifacts on lands purchased from English Bay Corporation by the United States. English Bay Corporation retains rights to cultural artifacts; however, Chugach Alaska Corporation holds subsurface rights to these same lands. Whether the latter's rights pertain exclusively to subsurface minerals is not clear. For archeologists doing survey, it begs the question: which Native corporation owns

artifacts that are partially buried or buried just below the forest duff? Park managers have not yet broached the issue with either Native corporation.[2]

Some English Bay Corporation land selections still await conveyance from the United States to the corporation and then back to the United States. These final conveyances are supposed to occur in the near future. At that time, according to the original land sale agreement, $500,000 of the proceeds will be put toward the establishment of an archeological foundation with its primary purpose being to identify, preserve, and interpret the history of the people of Nanwalek. The foundation will create new opportunities for partnering between the park and the Native community. The partnership could involve employment for community youth in archeological field work and interpretation. Improving the park's relations with Native communities will take a concerted effort, but the park's ties to these communities are perhaps more important today than ever before.

Fragile Ecosystems

The *Exxon Valdez* oil spill was a central event in the park's history because it brought national attention to the area and highlighted the fragility of its ecosystems. It revealed that Kenai Fjords National Park was vulnerable to human degradations even though it was predominantly a rock-and-ice park and in spite of its large land area and remote Alaskan location. Since it was vulnerable, it needed to be actively managed. While this point came as no surprise to people in the Park Service, the oil spill acted like a catalyst in getting the American public and Congress more interested in protecting Alaska wilderness.

The oil spill response highlighted other unusual features of the Alaska setting. The cold and stormy seas made containment of the spill far more difficult. The coastal zone was biologically rich, yet much of the marine life was highly seasonal, migrating south in winter. This made wildlife surveys more difficult, since faunal assemblages were constantly changing as seasons progressed. Another unusual feature of the Alaska setting was that the physical platform on which the fauna and flora exist is itself dynamic – more so, in some respects, than is typical of parks in the Lower 48. Glaciers are retreating. Shorelines are dropping.

As the effects of climate change entered more heavily into natural resource management, the Alaska setting became important in other ways. Change was happening more quickly in the higher latitudes. Scientists observed that the Harding Icefield was thinning over large expanses. Glacier monitoring assumed greater importance as some scientists predicted that the melting of Alaska's glaciers would have a measurable effect on sea level rise (contributing as much as nine percent of total imminent sea level rise, by some estimates). While the total picture of glacier advance and retreat was mixed,

[2] Kovac interview. The issue is not unique to Kenai Fjords. Lake Clark National Park and Preserve has requested solicitor's opinions to resolve similar ambiguities and the questions remain very much alive.

numerous glaciers exhibited rapid melting. Kenai Fjords National Park began to attract politicians and opinion leaders who were interested in learning about and addressing climate change. Superintendent Mow recognized that the park had a responsibility to interpret climate change and use the park setting for public education. He also saw the symbolic value in making park operations "carbon neutral."

It remains to be seen whether the effects of climate change will bring about a new paradigm in Park Service natural resource management policy or whether the NPS Inventory and Monitoring Program, now nearly 20 years in the making, will be up to the task. Many scientists both inside and outside the agency now predict that profound perturbations will occur in many biotic communities over the coming decades – particularly in the higher latitudes. As NPS policymakers wrestle with how the agency will respond to the effects of climate change on natural ecosystems in national parks, it is clear that resource managers at Kenai Fjords will be in the front lines of whatever new resource management initiatives might emerge.

Appendix A. Key Personnel

Superintendents

Dave Moore	1981-1986
Marvin Jensen	1987
Anne Castellina	1988-2004
Jeff Mow	2004-

Assistant Superintendents

Peter Fitzmaurice	2001
Smith, Robby	2003

Chief Rangers

Bruce M. Kaye	1982-1987
Peter Fitzmaurice	1988-2001
Jim Ireland	2002-2004

Chiefs of Interpretation

Karen Gustin	1989-1991
Maria Gillett	1991-1996
Amy Ireland	1998-2001
Sandy Brue	2001-2004

Chief of Interpretation and Visitor Services

Jim Ireland	2005-2008

Facility Managers/Chiefs of Maintenance

Bill Stevens	1985-1992
Bo Bohanan	1993
John Chekan	1995-1998
Robin Leatherman	1999
Bill Cook	2001-2008

Chiefs of Resource Management

Bud Rice	1991
Jeff Troutman	1992-2002
Shelley Hall	2004-

Director, Ocean Alaska Science and Learning Center

Peter Armato	2000-

Chiefs of Administration/Administrative Officer

Beth Lowthian	1995-2005
Caroline Maldanado	2005-2007
Connie Anthony	2008-

Appendix B. Park Employees*

Adams, Seth (laborer, 2008); **Aderholt**, Lynn (park ranger, 2001-2004, lead park ranger 2005-); **Aigeldinger**, Jason (visitor use assistant, 2000); **Alley**, Joan M. (administrative technician, 1981-1983, 1987); **Anderman**, Matt (biological technician, 2001); **Anderson**, Janessa (laborer, 2008); **Anderson**, Todd (park ranger, 1994); **Andrews**, George (cook/deckhand, 1998); **Andrews**, Jon (carpenter, 1985); **Anthony**, Connie (budget analyst, 2006-2007, administrative officer, 2008-); **Aper**, Dick (park ranger, 1997); **Apperson**, Heather (information assistant, 2006); **Armato**, Peter (coastal ecologist, 1995-1996, coastal resources specialist, 1997-1999, OASLC director, 2000-); **Arpin**, Fred (park ranger, 1999); **Atchinson-Adams**, Chad (laborer, 2005-2007); **Auguston**, Dale (maintenance worker, 1994-1998, cook/deckhand, 1999); **Bailey**, Chris (laborer, 2007); **Barker**, Alan (laborer, 2001-2007, visitor use assistant, 2004); **Baston**, John (park ranger, 1999); **Bates**, Erica (park ranger, 2008); **Beckett**, Carrie (biological technician, 1997); **Berklund**, Owen (information assistant, 2001); **Beck**, Kristin (park ranger, 2008); **Bianchi**, Bobbi (administrative technician, 1985-1987); **Bium**, Meyoung (janitor, 1999); **Blackwell**, Jen (visitor use assistant, 2000, trail crew, 2001); **Blackwell**, Kristin (janitor, 2001-2001); **Bohanan**, Bo (project supervisor, 1993); **Boling**, Wally (laborer, 1985); **Booth**, Chris (laborer, 1998); **Brennan**, Sean (biological technician, 1995-1997, park ranger, 1998-2009); **Brown**, Chuck (maintenance worker, 1995-2000); **Brue,** Sandy (park ranger, 2001, chief of interpretation, 2001-2004); **Brummer**, Jeff (maintenance worker, 1994-1995); **Bryden**, Wendy (park ranger, 1995, logistics coordinator, 1998-2001, biologist, 2002); **Bunn**, April (laborer, 2007-); **Bunney**, Keith (park ranger, 2006, 2009); **Burch**, Marilyn (administrative assistant, 2004-); **Burnard**, Ryan (maintenance worker, 2001-2004); **Cabaniss**, Lola (administrative technician, 1987-1989); **Calhoon**, Sherrel (maintenance clerk, 1997-2000, administrative assistant, 2001-2004, human resources assistant, 2005-2006); **Calhoun**, Charisty (information assistant, 2008); **Capra**, Doug (park ranger, 1997-2008, supervisory park ranger, 2005); **Carlstrom**, Jeff (park ranger, 1987-1988); **Carroll**, Ed (park ranger, 1995); **Cassity**, Kris (park ranger, 1998); **Castellina**, Anne (superintendent, 1988-2003); **Chapin**, Tony (cook/deckhand, 1993-1995, boat captain, 1997-2000); **Chapman**, Jennifer (park ranger, 1994); **Charleston**, Ben (visitor use assistant, 2001); **Chase**, Mark (laborer, 2008); **Chekan**, John (facility manager, 1995-1998); **Chiron**, Janette (park ranger, 2002-2009); **Chodoroski**, Derek (park ranger, 2000); **Clarke**, Lisa (YCC work leader, 1985); **Cline**, Cheryl (park ranger, 1985); **Cline**, Matt (maintenance worker, 1997, automotive worker, 1998-2001); **Cloward**, Alex (laborer, 2008); **Coghill**, Kathy (biological technician, 1984); **Cook**, Bill (maintenance supervisor, 1999-2000, chief of maintenance, 2001-2008); **Cook**, Cathleen (park technician, 1982); **Copeland**, Tina (park ranger, 1998); **Corbin**, Linda (park ranger 2006); **Cotsonas**, Diane (laborer, 1984); **Cowell**, Sarah (park

* The names and dates contained in this appendix were assembled from superintendent's annual reports and annual lists of employee radio call signals through 2007. The listing is not entirely complete, nor are dates of service entirely accurate.

ranger, 2007); **Crapanzano**, Joe (biological technician, 2006); **Crews**, Chris (bear study project technician, 2001); **Cunningham**, Mary (resource management clerk, 2001-2003, budget analyst, 2004-2005); **Davidson**, Ben (laborer, 2004); **Davies**, Brian (maintenance worker, 1983); **Davis**, Jeremy (Exit Glacier winter caretaker, 2002); **DesErmia**, Kirk (maintenance worker, 1997, logistics coordinator, 2003-2004, maintenance work leader, 2005-); **Dillewaard**, Elsie (administrative technician, 1990-1994, interpretive supervisor, 1995, park ranger 1996-1999, cook/deckhand, 2000-2001, park ranger, 2002-2003, deckhand, 2007, administrative technician, 2008-); **Dockham**, Cinnamon (park ranger, 2006, 2008); **Doderer**, Darren (park ranger, 2004); **Duguay**, Chris (park ranger, 1994); **Duncan**, Tim (park ranger, 1992-1993); **Duston**, Reed (park ranger, 1988-1989); **Dyer**, Karmyn (park ranger, 1988); **Dykstra**, Al (carpenter, 1985); **Earhart**, David (janitor, 2004, laborer, 2005-2006, maintenance worker, 2007); **Eckley**, Eddie (park ranger, 1991); **Epping**, Missy (park ranger, 1998); **Erickson**, Jessica (park ranger, 1999); **Fairchild**, Lucretia (biological technician, 2003-2005); **Faust**, Matt (visitor use assistant, 1999-2000); **Federer**, Rebekka (visitor use assistant, 2003-2004); **Fejes**, Serena (information assistant, 2006); **Fernandez**, Maria (park technician, 1983); **Finch**, Kimberly (laborer, 1998, park ranger, 2004); **Fitzmaurice**, Peter (chief ranger, 1988-2001); **Flowers**, Jacob (laborer, 2008); **Folda**, Lisa (visitor use assistant, 1998); **Foster**, Rick (park ranger, 1995); **Fredrickson**, Jim (park ranger, 2008-); **French**, Blaire (bear study project leader, 2001); **Friedrichsen**, David (maintenance worker, 2001-2003); **Furlong**, Sherry (administrative assistant, 2005-); **Gage**, Tom (park ranger, 1998); **Gale**, James M. (park technician, 1982); **Garding**, Louis (biological technician, 1999-2003); **Gaule**, Ryan (visitor use assistant, 2003); **Gease**, Ricky (park ranger, 1992-1997); **George**, Greg (park ranger, 2004); **Gerhard**, Bob (acting chief ranger, 1987-1988); **Gibson**, Isaac (park ranger, 1997); **Gill**, Scott (park ranger, 1991); **Gillett,** Maria (chief of interpretation, 1991-1996); **Gilley**, Kathy (maintenance worker, 1993-1994); **Golden**, Kevin (biological technician, 1997); **Goodglick**, Susan (park ranger, 1998); **Graham**, Shaun (visitor use assistant, 1998-2001); **Graves**, Robert (maintenance worker, 2000-); **Gray**, Matt (biological technician, 2001-2006); **Greffinius**, Laura (park ranger, 1989, biological technician, 1990); **Griswold**, Carol (park ranger, 1998-2001); **Gropp**, Jim (visitor use assistant, 1999-2002, park ranger, 2003-2005); **Groth**, Eric (biological technician, 2003); **Gustin**, Karen (chief of interpretation, 1989-1991); **Hahr**, Meg (ecologist, 2006-2009); **Hakenan**, Robert S. (park technician, 1983); **Hall**, Shelley (chief of resource management, 2004-); **Hampton**, Garryck (park ranger, 2005); **Handley**, Steve (maintenance intake, 1993); **Hart**, Glenn (park ranger, 1992-1993, interpretive specialist, 1994-1995, park ranger, 1997-1998); **Harvey**, Joe (biological technician, 2005); **Haskins**, Ian (park ranger, 2008); **Heimerl**, Michelle (park ranger, 2000); **Heiser**, John T. (park technician, 1983-1984); **Heitmeyer**, Cherie (computer specialist, 1999-2002, information technology specialist, 2003-); **Heitmeyer**, James (information technology assistant, 2005-2007); **Henderson**, Aaron (laborer, 2008); **Henrikson**, Burr (park ranger, 1988); **Hernandez**, Evilia (park ranger, 2007); **Hettinger**, Andrew (logistics coordinator, 2005); **Hettwer**, Jessica (deckhand, 2006-); **Hettwer**, Paul (laborer, 2005-2006, maintenance worker, 2007-); **Higgins**, Sue (park ranger, 1991); **Hippchen**, Susan (park ranger, 1998); **Holehouse**, Mark (park ranger, 2000-2001); **Holland**, Dustin (maintenance worker, 1997, janitor, 2001); **Holland**, Marilyn (secretary, 1991, administrative assistant, 1992-2000, FMSS clerk, 2004-); **Howarth**, Gina

(secretary, 1989); **Howell**, Emilie (deckhand, 2003-2004); **Hunt**, Doug (park ranger, 1985); **Iannelli**, Nick (park ranger, 2008); **Ingle**, Becky (interpretive ranger activities clerk, 2001-2003); **Ireland**, Amy (chief of interpretation, 1998-2002, interpretive specialist, 2003-2009); **Ireland**, Jim (lead park ranger, 1998-2001, chief ranger, 2002-2004, chief of interpretation and visitor services, 2005-2009); **Jackson**, Ron (laborer, 1985); **James**, Joe (logistics coordinator, 1994); **Jensen**, Marvin (superintendent, 1987); **Jezierski**, Caroline (biological technician, 2008-); **Johnson**, Eldon (plumber, 1985); **Johnson**, Larry (electrician, 1985); **Johnson**, Melissa (information assistant, 2005); **Jordan**, Richard (maintenance worker, 1989); **Joy**, Phil (bear study project technician, 2000); **Kania**, Kristin (janitor, 2004-2006); **Kansteiner**, Mark (logistics coordinator, 2006-); **Karraker**, Jeff (park ranger, 1979); **Kasischke**, Nalani (visitor use assistant, 2003); **Kaye**, Bruce M. (chief ranger, 1982-1987); **Kelly**, Colleen (park ranger, 2006-); **Keltner**, David (visitor use assistant, 1999); **Kienzle**, Sharon (park ranger, 1988); **Killian**, Don (park ranger, 1990); **Klasner**, Fritz (natural resource specialist, 2007-); **Klasner**, Joy (administrative assistant, 2008-); **Knaff**, Larry (supervisor, visitor use assistants, 2001); **Kosnor**, Alicia (park ranger, 2004); **Kovac**, Shannon (museum technician, 2005-2006, cultural resource specialist, 2007-); **Kriedeman**, Christina (laborer, 1998-1999, maintenance worker, 2000-2001, maintenance/resource management, 2003, biological technician, 2004-2005, biologist, 2006-); **Kurtz**, Deb (biological technician, 2008-); **LaDuke**, Allison (park ranger, 2007); **LaFrance**, Terry (park ranger, 2005); **Laidlaw**, Nancy (park ranger, 2001); **Lawrence**, Bill (laborer, 2005); **Lazaurus**, Louis (automotive worker, 2001-); **Leatherman**, Nick (janitor, 2003, laborer, 2004); **Leatherman**, Robin (facility manager, 1999); **Lester**, Ardith (park ranger, 1989); **Lindsay**, Chuck (physical science technician, 2007-); **Liska**, Kathy (administrative technician, 1984); **Lowthian**, Beth (chief of administration, 1995-2003); **Lowthian**, Doug (biological technician, 1997, park ranger, 1998-2003); **Luttrell**, Mark (trail crew, 1991-1992); **Mackle**, Melinda (park ranger, 1992); **Maddox**, Ryan (information assistant, 1998, visitor use assistant, 1999); **Maldonado**, Karolyn (chief of administration, 2005-2007); **Martin**, Eveline (biological technician, 1997, VERP team leader, 2003-2004); **Martin**, Ian (biological technician, 1997, ecologist, 2002-2005); **Matlock**, Lisa (park ranger, 2001, education coordinator, 2002); **McFarland**, Brooke (biological technician, 2008); **McKnight**, Stan (park ranger, 1999-2001, 2003, 2005, 2007, 2009); **Meehan**, Joe (park ranger, 1989-1990, 1992); **Mellerstig**, Jason (park ranger, 1999); **Menning**, Kurt (park ranger, 1994); **Meschwitz**, Melanie (park ranger, 2003); **Messenger**, Andrew (park ranger, 1997-2001); **Millsap**, Richard (park ranger, 2003-2004); **Moore**, Bonnie (information assistant, 2000, visitor use assistant, 2004); **Moore**, David E. (superintendent, 1981-1986); **Moore**, Demietrice (visitor use assistant, 2000); **Moreland**, Stephanie (park ranger, 2006-2007); **Morgan**, David (biological technician, 1999); **Morris**, John (park technician, 1981, 1984); **Mow**, Jeff (superintendent, 2005-); **Mujica**, Laura (biological technician, 2006); **Murdock**, Ida (park technician, 1983-1984, park ranger, 1985-1988, administrative assistant, 1989-1995, administrative technician, 1997-2002, budget assistant, 2003); **Murphy**, Kevin (boat captain, 2003-2004); **Naranjo**, Chuck (laborer, 1998-1999, maintenance worker, 2000); **Nattrass**, Michael (visitor use assistant, 2003); **Neklason**, Claudia (maintenance clerk, 2001-2002); **Nicholas**, Sue (park ranger, 1991); **Nolan**, Jean (budget technician, 2003); **Norman**, Marlene (Port Graham ranger, 1997-1998); **O'Brien**, Mike (trail

coordinator, 1998-1999); **O'Leary**, Meghan (information assistant, 2008); **Ollig**, Paul (lead park ranger, 2005-2006); **Olsen**, Hillary (park ranger, 2006); **Orlando**, Bob (maintenance worker, 1998-2000, trail crew, 2001); **Orr**, Dawn (park ranger, 1995); **Osborne**, Tom (park ranger, 2004-); **Osenga**, Dorothy (park ranger, 1985, 1987-1988); **Paez**, Carlos (biological technician, 1998); **Painter**, Kacy (park ranger, 1992); **Painter**, Kevin (park ranger, 1991-1992); **Payne**, Dan (park ranger, 2007, 2009); **Peck**, Katie (park ranger, 2007-); **Pena**, Cosme (logistics coordinator, 1992); **Pfeiffenberger**, Jim (park ranger, 1991-1993, interpretive supervisor, 1994, environmental education specialist, 1995, education coordinator, 2003-); **Pfeiffenberger**, Sue (park ranger, 1991-1993); **Phillis**, Marybeth (park ranger, 2008); **Piasecki**, Barb (YCC group leader, 1985); **Pichotta**, Christina (lead visitor use assistant, 2003-2004); **Pinnix**, Julia (park ranger, 2006, lead park ranger, 2007); **Proctor**, Rich (maintenance supervisor, 2003, maintenance work leader, 2004-); **Prys**, Andrew (park ranger, 2006); **Pyle**, Suzie (park ranger, 2003-2006); **Rea**, CJ (park ranger, 1995-2005, education specialist, 2006-); **Regan**, Jim (park ranger, 1989); **Renkert**, Jim (park ranger, 1989); **Rice**, William D. "Bud" (park technician, 1983-1984, resources management specialist, 1985-1990, chief of resources management, 1991); **Robertson**, Morgan (visitor use assistant, 2000); **Rohrbach**, Rayne (park ranger, 2007); **Romano**, Marc (biological technician, 2000); **Romero**, Jonas (information assistant, 2007); **Romes**, Daniel (park ranger, 2008); **Ronek**, Heather (boat captain, 2006); **Ronne**, Rose (visitor use assistant, 1998); **Salzmann**, Pam (biological technician, 1995); **Sanders**, April (lead visitor use assistant, 1998); **Sarka**, Aaron (information assistant, 2007, park ranger, 2008-); **Satin**, Bob (park ranger, 1997-2001); **Schock**, Heather (visitor use assistant, 2001); **Schrock**, Carl (park ranger, 1989); **Schultz**, Dan (biological technician, 2007); **Sela**, Jenny (janitor, 2005-2006, laborer, 2008); **Sela** Kathleen (laborer, 2006); **Sela**, Kyle (maintenance worker, 1997, laborer, 1998, janitor, 1999-2000); **Sela**, Mick (lead park ranger, 1988, maintenance worker, 1991-1993, 1998, 2003-2004, laborer, 2005-2006, maintenance worker, 2007, park ranger/deckhand, 2008-); **Seville**, Kevin (laborer, 1998-1999); **Sheldon**, Sean (biological technician, 2000-2001); **Sheridan**, John (park ranger, 2005); **Sherman**, Cathy R. (park technician, 1983); **Sholley**, Kristy (supervisory park ranger, 2006-); **Skaaren**, April (supervisor, visitor use assistant, 1999-2000); **Skibeness**, Shannon (park ranger, 1991, EGCC Team Leader, 1999-2001); **Smeriglio**, Richard (park ranger, 1992, maintenance worker, 1993-1995); **Smith**, Albert (park ranger, 1994, 2003); **Smith**, Geoff (park ranger, 1989); **Smith**, Robby (assistant superintendent, 2003); **Snowden**, Shannon (deckhand, 2005); **St. Amand**, Ray (maintenance worker, 1993-1995); **Steeves**, Ralph (park ranger, 2008); **Steidel**, Tim (intake park ranger, 2001, park ranger, 2002-2003); **Steinbrecher**, Roger (park ranger, 2006-2008); **Stern**, Jessica (visitor use assistant, 1999-2001, park ranger, 2002-2004); **Stevens**, Bill (maintenance worker, 1985-1989, chief of maintenance, 1990-1992, boat captain, 1993-1995): **Stevenson**, Bob (park ranger, 1993): **Stoll**, Peter (trail crew leader, 1997); **Strommer**, Laurie (park ranger, 1993); **Struble**, Bill (park ranger, 1999-2000); **Sturdevant**, Debra J. (park technician, 1981); **Swan**, Cindy (park ranger, 2005-); **Swanson**, Marc (park ranger, 2005-2007); **Tarpey**, Rick (trail coordinator, 2000, laborer, 2001); **Tavegia**, Wes (park ranger, 2007); **Tetreau**, Mike (park ranger, 1988-1989, biological technician, 1990-1992, 2008-2009, resource management specialist, 1994-2006); **Thomas**, Diana (park ranger, 1985, 1988-1989); **Thomas**, Heather (park ranger, 2008); **Thompson**, Mark (park

ranger, 2008); **Thorn**, Larry (trail crew, 1991); **Tomon**, Amy (park ranger, 1999); **Toth**, Brianne (janitor, 2005); **Toth-Stauble**, Katy (environmental education specialist, 1991); **Townsend,** Tim (administrative intake, 1999-2000); **Troutman**, Debbie (park ranger, 1993, 1998); **Troutman**, Jeff (chief of resource management, 1993-2002); **Turco**, Kathy (biological technician, 1984); **Uriarte**, John (laborer, 2005, maintenance worker, 2006-); **Vadala**, Carin (park ranger, 2004-2006); **Vaira**, Allen (park ranger, 2006); **Ventura**, Peggy (park ranger, 2005-2008); **Villepique**, Jeff (bear study project leader, 2000); **Voelzow**, Gene (visitor use assistant, 2001); **Walker**, Madelyn (park ranger, 1992, environmental education specialist, 1993-1994); **Wells**, Alfred (boat captain, 2007-); **Wells**, Juan (park ranger, 1994, logistics coordinator, 1995); **Wentz**, Josh (park ranger, 2008); **Wetherbee**, Heather (biological technician, 2006-2007); **Whitmore-Painter**, Ann (park ranger, 2006-); **Whitney**, Trudy (park ranger, 1995); **Williams**, Heather (park ranger, 2007); **Williams**, Janece (visitor use assistant, 2001); **Williams**, Lena (visitor use assistant, 2001); **Wisley**, Diane (acting chief ranger, 1993); **Wolf**, Eileen (park ranger, 1998); **Wolfe**, Dave (park ranger, 1990); **Wright**, Ami (biological technician, 2000-); **Young**, Anna (cook/deckhand, 1997); **Young**, Loreen (Port Graham ranger, 1998); **Zwinger**, Susan (park ranger, 1989).

Appendix C. Annual Visitation

1982	16,118
1983	24,048
1984	30,703
1985	35,758
1986	54,296
1987	60,428
1988	59,017
1989	75,557
1990	66,115
1991	107,041
1992	108,130
1993	189,172
1994	209,516
1995	230,657
1996	274,034
1997	306,164
1998	263,948
1999	290,673
2000	254,790
2001	262,353
2002	251,799
2003	243,719
2004	244,232
2005	258,297
2006	251,630
2007	284,604
2008	272,190
2009 (through September)	215,213

Appendix D. Land Status*

NPS fee acres	595,771.07
NPS or federal less-than-fee acres	6,068.13
Other federal fee acres	0
Subtotal acres	601,839.20
Other public acres	19,302.00
Private acres	48,841.79
Subtotal acres	68,143.79
Gross area acres	669,982.99

* Source: Land Resource Division, Washington, D.C. NPS listing as of 9/30/2008.

Appendix E. Key Management Documents

1972 Recommendations Regarding Alaska Native Claims Settlement Act 17(d)(2) Withdrawals

1975 Final Environmental Statement, Proposed Harding Icefield-Kenai Fjords National Monument, Alaska

1977 Preliminary Report, Subsistence Resource Use, Proposed Harding Icefield-Kenai Fjords National Monument

1978 Draft Statement for Management, Kenai Fjords National Park, Alaska

1981 Draft Environmental Assessment of Bridge Installation, Road Improvement and Placement of Temporary Facilities in the Exit Glacier Area, Kenai Fjords National Park, Alaska

1981 Evaluation of the Population Status of Harbor Seals in Aialik Bay, Kenai Fjords National Park

1982 Statement for Management, Kenai Fjords National Park

1982 Kenai Fjords, Exit Glacier Area, Development Concept Plan

1984 General Management Plan, Kenai Fjords National Park, Alaska

1988 Environmental Assessment, Harding Icefield Tours Concession Permit, Kenai Fjords National Park, Alaska

1988 Final Environmental Impact Statement, Wilderness Recommendation, Kenai Fjords National Park, Alaska

1988 Kenai Fjords National Park Land Protection Plan

1988 Programmatic Agreement Among National Park Service, Alaska Region, Alaska State Historic Preservation Officer, Advisory Council on Historic Preservation, Regarding Mining Operations in Alaska National Parks

1989 Kenai Fjords National Park, Preliminary Observations and Recommendations, Collections Management Plan

1990 A Plan for the Interpretation of Kenai Fjords National Park, Alaska

1990 Kenai Fjords National Park Trail Plan

1992 Environmental Assessment, A Proposed Public Use Cabin, Aialik Bay, Kenai Fjords National Park, Alaska

1992 Environmental Assessment, Construction of a Public Use Cabin Exit Glacier, Kenai Fjords National Park, Alaska

1992 Environmental Assessment, Construction of a Public Use Shelter, Harding Icefield Trail, Kenai Fjords National Park, Alaska

1994 Resource Management Plan, Kenai Fjords National Park

1995 Kenai Fjords National Park Collection Management Plan

1996 Final Frontcountry Development Concept Plan, Kenai Fjords National Park, Alaska

1998 A Stern and Rock-Bound Coast: Kenai Fjords National Park Historic Resources Study

1999 Resource Management Plan

2000 Kenai Fjords National Park Strategic Plan

2001 Long Range Interpretive Plan, Kenai Fjords National Park, Alaska

2004 Final Exit Glacier Area Plan, General Management Plan Amendment, Kenai Fjords National Park

2004 Nuka Bay Historic District, Kenai Fjords National Park

2004 Backcountry Campsite Surveys in Aialik Bay, Resurrection Bay and Northwestern Fjord – Kenai Fjords National Park, Alaska

2005 Interim Bear Management Plan, Kenai Fjords National Park

2005 Invasive Plant Manual Control Analysis, Kenai Fjords National Park

2006 Finding of No Significant Impact, Improvement to Trails and Overlooks in the Exit Glacier Area

2006 Mary Lowell Center Value Analysis Final Report

2007 City of Seward, Mary Lowell Center Conference Center Feasibility Assessment

2007 First Annual Centennial Strategy for Kenai Fjords National Park

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  - Accession KEFJ-00204
  - Accession KEFJ-00205, Alaska Task Force Collection.
  - Administrative History Files.
- Central Files.
- Digital Files.
- OASLC Files.
- Office Files.
- RM Files.
- Superintendent's Files.

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- Record Group 79, Records of the National Park Service.
  - Alaska Region Administrative Subject Files, 1964-84.
  - Alaska Regional Office – Alaska Task Force General Files 1972-78.

National Park Service, Alaska Regional Office.
- Alaska Region Curatorial Center.
  - Accession 00395, Alaska Support Office Administrative Files.
- Lands Division Records.

National Park Service, Harpers Ferry Center.
- Archives.
  - Accession 84-39, DSC Alaska – Bailey Breedlove Papers.
  - Accession 85-42, DSC Alaska – Alaska [ANILCA] Administrative History.

National Park Service, Washington Office.
- Planning Division.
  - Administrative Files.

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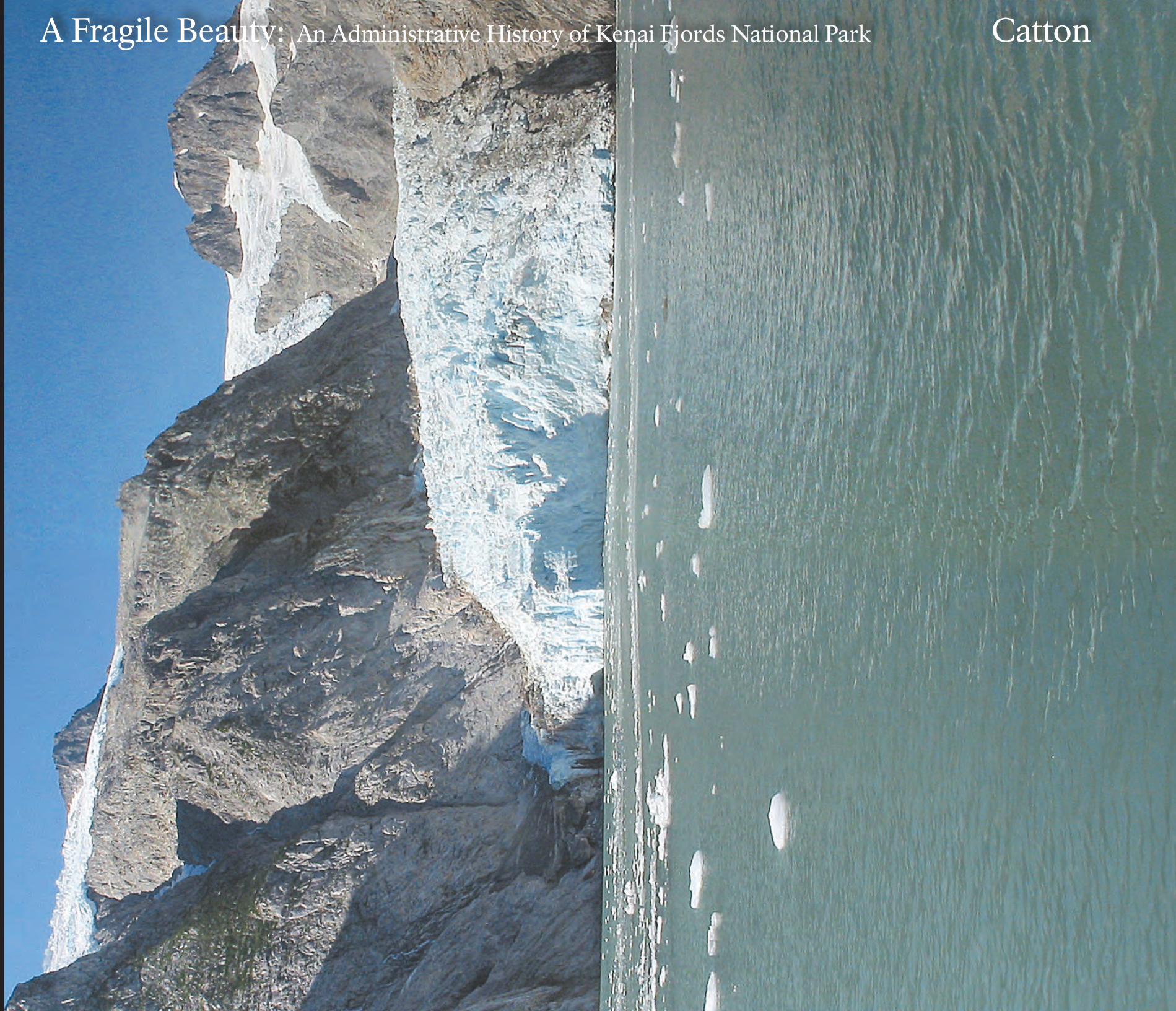
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