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GLACIER: BELEAGUERED PARK OF 1975

(By Gene Albert)

The backpackers can't believe their eyes as they stand on the ice of Kintla Glacier in the remote northwest section of Montana's Glacier National Park. This has always been a great vantage point in the most primitive section of the park; and although they have noticed what seems to be an unnatural haze, they are surrounded by majestic mountain peaks, vast fir and pine forests, and lush foliage—until they look west of the national park to Flathead National Forest land. Oil wells! How do oil wells and all those roads, pipelines, storage tanks, towers, and clearcuts fit into the otherwise scenic panorama, the angry visitors demand of a park ranger?

"Well," he begins without hesitation, "it seems that in 1975 the government was pushing for development of energy resources at any cost. An administration and a Congress that had been dragging their feet for years on development of alternative energy sources panicked, and no location was held sacred. The people were apathetic and simply permitted the development of oil and gas next to this park." Pointing to the North Fork of the Flathead River, which forms the western boundary of the park, he adds regretfully, "It was once a good trout stream, but now it's sterile for all practical purposes because of pollution from the oil and gas development and from a huge Canadian coal mine just north of the border. And that's not all. Those developments have driven away many grizzlies and elk, the wolves and caribou that once passed through here, and even our few remaining bald eagles."

This hypothetical scenario may seem exaggerated, but it could become reality.

Our national policy of energy development at any price could indeed take its toll in Montana's beautiful Flathead Valley. In the Flathead region lies not only part of Glacier National Park, but three forks of the Flathead River proposed for wild and scenic designation, part of the second largest wilderness in the contiguous United States (the Bob Marshall), nearly one-half million acres of wilderness study areas, three ranges of the Rockies (Mission, Swan, Flathead), and Flathead Lake, the largest natural freshwater lake west of the Mississippi. Flathead Lake and the North Fork, South Fork, and Middle Fork of the Flathead River are spawning grounds or passageways to spawning grounds for Dolly Varden trout, West Slope cutthroat trout, Kokanee salmon, and whitefish. Collectively they constitute a great fishery.

However, nature's endowment also includes fossil fuels—which may prove a curse.

At present at least a two-pronged attack on the Flathead ecosystem is being made. One major threat comes from a proposed massive Canadian coal development just north of the border; another from possible oil and gas development in the North Fork and South Fork drainages of the Flathead.

Just eight miles north of Glacier National Park in the Flathead Valley lies Cabin Creek, a Canadian tributary flowing into Howell Creek, which flows into the North Fork of the Flathead river. The Cabin Creek area is Crown land (owned by the Canadian government) and contains a high-quality metallurgical bituminous coal. It was originally estimated that 63 million tons of this coking grade coal underlie two mountains on either side of Cabin Creek. Unconfirmed reports claim that deeper exploration has revealed that there may be as much as 150 to 180 million tons of this coal in the Cabin Creek site. Cabin Creek is part of the Crows Nest Region, a region that contains probable recoverable coal reserves estimated at 5 billion tons, some of which is located in less environmentally critical areas.

Rio Algom Mines Ltd., one of the United Kingdom's largest industrial complexes, or one of its subsidiaries plans to undertake development of Cabin Creek coal. Rio Algom, a consortium of Canadian and U.S. firms, is expected to market the coal in Japan. Operation of the mine would commence in three or four years.

It is indisputable that this coal development and related activities would have adverse impacts on the North Fork and Glacier park. These impacts would stem from many sources including mining, road and railroad development, and community development.

In order to extract the coal, Rio Algom would blast away at the overburden (the hundreds of tons of soil and rock above the coal) to level the mountains. Natural vegetation prevents erosion during spring run-off, but mining operations

would leave no vegetation to stabilize hillsides and mined areas. As a result, coal dust and other residues would wash into the Flathead system. Containment of run-off waters and handling 300-foot layers of clay overlying some coal seams would seem to be among the major environmental problems the firm faces.

The massive scope of the mining development is revealed in a confidential document prepared for Rio Algom by the British Columbia environmental consulting firm of B. R. Hinton.

The developers are planning two or three open-pit coal mines, each more than a mile wide and at least 2,400 feet deep. The report estimates coal production at 148 million long tons and estimates that the mine will produce nearly two billion cubic yards of waste rock. During the twenty-two-year life of the development, mining would produce an additional 40 million cubic yards of plant reject tailings, which would be disposed of as solid land fill. A whopping 43 percent of the coal produced would fuel a new coal-fired thermal plant used to generate power needed on-site. Waste water would be discharged into the Flathead River after treatment or disposed of by groundwater discharge. The company has publicly committed itself to zero pollution.

Dr. Mark Weber, Assistant Professor of Hydrology and Environmental Geology at the University of Montana, warns that "coal in the Cabin Creek deposit dips twenty to thirty degrees with respect to the horizontal and therefore a very large open inclined pit would be created. As with any hillside [strip] mining, serious problems exist with site erosion and stream siltation as well as possible leachate production and the resultant pollution of surface and ground waters. The weak nature of the British Columbia strip mine reclamation law ensures that any adverse impacts which do arise from the proposed Cabin Creek mining will be long-lived."

Furthermore, Dr. Weber says, the coal is highly fractured and contains coal dust that, when spread by the wind, might well provide a significant source of organic pollution to the North Fork and eventually to Flathead Lake itself. As an example of what could occur at Cabin Creek, the Kaiser Coal Mine at nearby Sparwood, British Columbia, causes Michel Creek to practically "run black" at times with finely powdered coal like that found at Cabin Creek.

Rio Algom has informed U.S. Representative Max Baucus of Montana that it would install dams to catch the siltation. However, a British Columbia Fish and Wildlife Branch biologist states that Canadian officials have records of dams of this type washing out, flooding rivers with pollutants; and water carrying suspended particulates such as clay regularly spills over such dams.

Glacier park superintendent Phil Iversen worries about other effects of the dams as well. By regulating the flow of water in the Flathead River, Iversen explains, the dams will upset the process of periodic flooding that maintains the flood plain ecosystem so important to wildlife. (He notes that at a recent inspection of the Cabin Creek site by himself, other officials, and a citizens' group [the Flathead Coalition], Rio Algom made repeated assurances of environmental good will but offered no concrete details.)

In addition to the siltation problem, nitrates, sulphur, acids, salts, phosphates, arsenic, and other minerals, if present and leaching into Cabin Creek and Howell Creek, could further degrade the water quality of the Flathead system and thus, through the food chain, the western portion of Glacier National Park. This load of mineral and organic substances would result in rapid eutrophication of Flathead Lake, presently a pure mountain lake.

The dirt road and bridge network in the Cabin Creek area is quite primitive and not presently capable of handling an operation of this magnitude. A fifty-mile railroad would have to be built to facilitate the transportation of coal to west coast ports and thence to Japan. Railroad and road construction in this area are considered major sources of watershed disruption.

A community of 3,000 to 7,000 people was expected to be established in the area to operate the mine and provide community services. At present only one or two families reside year-round in the Canadian portion of the Flathead Valley. Sewage, clearing, and construction would affect water quality and generally disrupt untouched wilderness habitat in the region. The company recently announced a possible change in those plans. Workers and their families may be housed in existing communities such as Sparwood, British Columbia.

The Cabin Creek mine was first realized as a potentially serious problem in June 1974 by Bill Schneider and Otis Robbins of the Montana Fish and Game Department. Several community business and conservation leaders were concerned about the problem and joined to form the Flathead Coalition, a citizens'

group dedicated to the preservation of the excellent water quality of the Flathead River and Flathead Lake.

The group represents a broad cross section of the community, including such diverse interests as chambers of commerce, the Lion's Club, the League of Women Voters, and law students' groups, as well as several local and national conservation groups (including NPCA). Tourism is the number one industry in the Flathead, and the area businessmen recognize the economic benefits of a quality environment.

The coalition has been much heartened by support from Canadians, because the Cabin Creek problem, of course, requires international negotiation in that a mine in Canada would be polluting U.S. waters. The British Columbia Wildlife Federation opposes the project because of its environmental effects in both nations and says that they are having similar problems with the British Columbia Bureau of Mines and Petroleum Resources a Cabin Creek, Elk River, and other coal mining sites. (Canadian experts question the ability of the Bureau of Mines to control erosion, water pollution, and wildlife disturbance resulting from the Cabin Creek project.) The 14,000-member British Columbia Wildlife Federation has become a member organization of the Flathead Coalition.

The coalition has been experiencing difficulty in having the Cabin Creek problem presented before the International Joint Commission (IJC), which is charged with considering cases involving pollution of water crossing the border in conjunction with the U.S.-Canadian Boundary Waters Treaty of 1909. Representative Baucus has approached the State Department, but it is reluctant to act. The State Department asserts that before the matter can be referred to the IJC, Rio Algom must file a mining development plan with the government of British Columbia. Meanwhile, Rio Algom is investing heavily in exploration and planning, making a reversal of their intentions even more unlikely in the future. The coalition, however, through its congressional members, is asking the State Department to immediately set up multilateral talks in recognition of Glacier's unique international status and of the fact that once Rio Algom obtains a "development" permit, it will be free to mine (and thus to pollute) during the sometimes lengthy time it takes to apply for and receive a "pollution" permit. They cite the Souris River-Garrison Diversion Unit in North Dakota, which would pollute waters flowing into Canada, as establishing procedure for IJC action *before* pollution of a river.

Other ominous threats to Glacier National Park originate within our own borders and could be solved by changing our own national policies.

In the North Fork and South Fork areas of the Flathead watershed the Texas Pacific Oil Company and at least two individuals have applied for oil and gas leases on 236,000 acres. The leases are for lands normally administered by the U.S. Forest Service (FS); but because the outmoded mining law of 1892 is still in effect, the Bureau of Land Management (BLM) assumes responsibility for mineral leasing and acts under the recommendations of the Forest Service.

In its draft environmental impact statement (DEIS), the FS recommended the following: "The denial of leases on 53,323 acres; the granting of leases with surface occupancy on 111,954 acres; the granting of leases without surface occupancy on 53,727 acres; and the holding of leases in suspense on 16,996 acres."

At first one might assume from the denials and stipulations that the FS is making some major environmental concessions. However, they are recommending the *granting* of leases on a total of 165,681 acres, most of which are wilderness or roadless areas adjacent to Glacier National Park. Although the DEIS recognizes the natural resources involved, it states, "we have a national objective to become self-sufficient in energy. This objective is a major consideration in deciding to lease or not to lease these lands."

The exact environmental impacts of the leasing program depend on the quantities and locations of gas and oil discovered. Certain assumptions, however, can be made about development that would ensue following sufficient discoveries, such as construction or improvement of roads and/or bridges, drilling rigs, wells in large clearings, pipelines, storage tanks, and perhaps a liquid gasification plant and refineries. The DEIS points out the danger of oil spills and poisonous gases.

Even exploration could have adverse effects. Drilling could alter an underground aquifer and cause surface waters to disappear. Salt is sometimes present in fossil fuel formations, which could result in pollution of pristine waters.

One thing is certain: oil and gas development would directly impinge on the North Fork of the Flathead River and thus on an important part of Glacier National Park.

Furthermore, in 1973 the Forest Service wrote an excellent proposal to include all three forks of the Flathead River in the National Wild and Scenic Rivers System, a plan not yet released from the Forest Service shelves. The new DEIS proposal by the same agency to lease areas in proximity to the river for oil and gas development conflicts with preservation of the pristine quality of the Flathead as a wild and scenic river and recreational resource; but unless the Forest Service releases its wild and scenic river plan for the Flathead, this conflict will pass virtually unnoticed.

Because the South Fork area is adjacent to and overlaps the Bob Marshall Wilderness and the proposed Great Bear Wilderness, the wildlife habitats that these areas protect are threatened by the action proposed by the Forest Service. The DEIS specifies that 500 acres of the 378,000-acre area proposed by Senators Mike Mansfield and Lee Metcalf (S 392) as the Great Bear Wilderness Area is overlain by the oil and gas lease applications. In this area, the Forest Service is recommending slant drilling from the outside.

One problem not adequately discussed in the DEIS is that the air quality on the western side of Glacier National Park would be degraded by winds from the west bringing pollutants from the leasing area. Glacier superintendent Iversen, in comparing another leasing operation to the possibilities in the Flathead Valley, says, "Oil and gas operations north of Glacier in Canada have had impact on the wilderness atmosphere in the Belly River Valley. The 'burning off' of gas emissions from towers produces an unnatural glow over the valley, as well as unnatural odors at times. We suspect that there could be additional alteration of the ecosystem as a result of chemical effects of the gas emissions."

Unless the BLM demonstrates a sensitivity to environmental protection heretofore rarely observed, the wilderness of Flathead National Forest and our magnificent Glacier National Park will suffer under the serious threat of inappropriate industrial development.

The effects of energy development on the Flathead region—and especially on the fish and wildlife it supports—are subjects of special concern, however, to the Glacier National Park administration and the Montana Fish and Game Department. Increasing encroachment by humans, water quality impairment, and other effects of proposed coal development at Cabin Creek and of oil and gas leasing in the Flathead region can threaten habitat or range of many species of wildlife, including several endangered or threatened species. Park research biologist Cliff Martinka says, "The North Fork flood plains are an essential element of the ecosystem occupied by a number of species of wildlife. The North Fork is a vital area to grizzlies, elk, wolf, wolverine, moose, otter, raptors, and other species. Some of these animals winter on islands in the North Fork. The river and flood plain provide important winter travel routes and food habitats where snow depths are less restrictive."

The South Fork area, which is even more remote than the North Fork area and presently less inhabited by humans, is valuable to wildlife as a buffer zone due to its proximity to wilderness areas and other large roadless areas.

Both areas under oil and gas lease application are inhabited or used by endangered and threatened species, including the Northern Rocky Mountain timber wolf and the peregrine falcon—both endangered—and the grizzly bear, which was recently designated as a threatened species. (See page 11.)

The North and South Fork drainages are two of the last areas remaining in the lower forty-eight states that support grizzly bear populations, and energy development could spell disaster for the grizzly. Superintendent Iversen is especially concerned that because park grizzlies extend into adjacent Forest Service lands, a corridor of human development could inhibit normal grizzly bear movements and reproduction—an impact having far more serious implications on the grizzly population than the local disruption of habitat—as well as result in increased mortalities in "situations of conflict or prejudice."

Such development would also threaten the timber wolf in a similar way, he says, as revealed by a park survey on the status of wolves. In addition, park biologist Francis Singer found that the proposed Cabin Creek open-pit mines and town site would destroy the area where the only known wolf activity center and den were discovered in 1975. Pointing to proposed coal, oil, and gas developments, Singer thinks that preservation of a sustaining population of timber wolves within Waterton-Glacier International Peace Park would be impossible, considering the relatively small size of the parks and the fact that most major winter ranges for the wolf are located along the periphery of the parks.

At the Montana Fish and Game Department, game biologist Jim Cross and information officer Otis Robbins state, "We [the Department] didn't feel that

exploration or development would be that damaging in itself, but do feel that increased human activity—social and recreational activity, employment, and subdivision development in conjunction with the mining activity—would displace animals and alter normal use patterns, particularly of grizzly and elk.”

Martinka summarizes, “We might find that oil/gas/coal development is totally unacceptable. The North Fork is one of the areas where changes may be totally irreversible.”

It is distressing that these threats are not the only ones that Glacier National Park faces. In addition, there is clearcutting to the west of the park in the Flathead National Forest, and local aluminum smelters have caused fluoride contamination in parts of the park. A potential problem is that some Blackfeet Indians are seeking limited hunting, timbering, and grazing rights in the park.

Fortune magazine, May 1975, listed the largest 500 corporations in the United States. Five of the top seven were oil companies; they alone have assets of \$6 billion dollars. In terms of percent increase in sales, *all* of the top ten were oil or mining firms. Part of the problem is that these firms are dedicated to the protection of their *conventional* energy investments and that they presently control or have interest in most of the known energy sources. With their assets and monopoly in the energy field, they have a political clout that is unmatched in our economic and political picture.

To rely on finite resources such as fossil fuels at the expense of research and development of other resources, and to expand development of those finite resources at the expense of future generations is not in the best public interest. In considering the proposed oil and gas leases, nowhere in the Bill of Rights is it written that “those U.S. citizens being born between the year 1900 and 2000 shall have the exclusive right to deplete the country’s resources at a rate they deem necessary to maintain the economic growth and standard of living to which they have become accustomed.” Indeed, in view of the Cabin Creek situation, U.S. citizens are not the only ones who seem to claim such a right. But *we* could set the example in this case.

Given that our fossil fuel resources are finite, some areas in the world are better left undeveloped—even for energy supplies—in recognition of the nonrenewable wilderness resources there that have a value to our society certainly equal to the brief flame that turns our wheels. Myopic mining of fossil fuels to the exclusion of all other resource values—in this case wilderness rivers, endangered wildlife, and a national park—is as pointless as killing the last whale for the sake of its blubber. It merely postpones the inevitable day of reckoning and destroys the resource for all time. Some areas should be preserved for all time. The North Fork and the South Fork of the Flathead River are two of those areas.

STATEMENT OF WILLIAM L. RUSSELL, OAK RIDGE, TENN.

For the Committee’s consideration, I should like to submit the following comments as an individual, but in a dual capacity: first, as a landowner of extensive riverside property, and, second, as a strong and active supporter of preservation of the Obed and its tributaries, Daddys Creek and Clear Creek, as part of the national Wild and Scenic Rivers System.

I own two narrow strips of land that include approximately two miles of river frontage. There are no dwellings on this land, and since all of the frontage lies within the boundary of the proposed acquisition in Morgan County, I would lose most of my acreage, and certainly the most valuable part of it.

In its deliberations on legislation similar to that under consideration today, I presume the Subcommittee often finds that landowners who will lose their property are against the project. Therefore, I should like to place special emphasis on the fact that I am not opposed to inclusion of the Obed and tributaries in the Wild and Scenic Rivers System. On the contrary, I have worked actively for such inclusion, first to get the river included in the study category, then to help the federal and state agencies involved in the study, and now to support my Senators, Bill Brock and Howard Baker, in their efforts to move the river from the study category into the national river system. We are deeply grateful for their foresight in introducing this legislation, S. 3613.

I hope you will find it refreshing that a landowner believes so strongly in the value of this legislation that he is promoting the loss of his own property. When my wife and I first saw the Obed River, we were amazed that its beautiful sandstone gorge could have remained so little known and, therefore, so unspoiled.