

## **Historical Background on the Elwha River Dams**

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### **Introduction**

In the 1850's the Klallam Indians inhabiting the shores of the Strait of Juan de Fuca made a bargain with the United States: they gave this country the timberlands and other resources to which they held claim in exchange for promises that the white man's law would provide them a decent place to live and protect the fisheries which were essential to their way of life. They understood that the United States, which was very desirous of obtaining these new lands by peaceful means, would keep faith with its promises. More to the point, they were led to believe that the government in far away Washington, D.C. was competent to carry out its undertakings. Those beliefs have been severely tested. In the case of the Elwha Klallam, the United States, when it remembers its obligations, seems unable to carry them out. Since the treaty, Elwha Klallam history has been one of repeated dislocations coupled with the destruction of their most important economic resource. Even today, after pleas, lawsuits, administrative proceedings and patient but endless negotiation of new bureaucratic obstacles, the Elwha Tribe still has not seen the performance of the simple guarantees Governor Isaac Steven's gave on behalf of the United States more than 140 years ago.

### **A Place to Live**

To their surprise, the formal treaty approved by Washington did not provide the Klallams a homeland in their aboriginal area. Instead, they were to relocate a considerable distance away, on the Skokomish Reservation at the bottom of Hood Canal. That reservation was far from home in somewhat hostile Twana territory. And there was not enough land on the Skokomish Reservation to accommodate them.

The Klallams remained on the shores of the Strait. But the Elwhas had an especially difficult time keeping their homes. A village located on the waterfront at what is now Port Angeles was displaced as that town developed. Its inhabitants were forced to live year-round in a summer village on Ediz Hook, exposed to the full force of winter storms coming in from the Pacific. But even that was unacceptable to their white neighbors. They were ousted from the Hook by the United States when a military base was placed there.

After 1875 some Klallam families were given "public domain allotments" in the Elwha River area and they built their homes there. Most of these allotments ended up in non-Indian ownership under what are at best legally questionable circumstances or became difficult to farm because of the flood risk posed by Elwha Dam.

Another part of the Tribe lived further West, at the mouth of the Pysht River. They managed to remain there into this century but were unable to obtain title to their homes. They were tolerated until the land was needed and the logging company which had obtained title came in and bulldozed their houses.

Yet another group of Elwhas attempted to stay near what is presently the reservation. They were forcibly removed - some say at gunpoint - by non-Indian settlers. Finally, there appears to have been an attempt to create a "Port Angeles Reservation" in the late 1800's. But this, too, came to nothing.

In the 1930's, the United States re-assessed its treatment of the Indian people. As part of this process, the Elwha Klallams, essentially refugees, were discovered to be destitute. To remedy this the government purchased several acres of land on the Elwha River floodplain in the late 30's. In 1968, with the "deliberate speed" which has characterized dealings with the Klallams, this land was made the Lower Elwha Indian Reservation by presidential proclamation. It had taken 75 years to provide the Elwha Klallams with the reservation they had been promised at the treaty negotiations. But there was a hitch.

### **The Elwha River dams**

The Elwha River is one of the Olympic Peninsula's major streams. During a period perhaps more notable for reckless optimism than respect for natural resources, two hydropower dams were built on the Elwha River. These dams, which generate relatively little power by modern standards, have virtually destroyed the Elwha River's rich fish runs and completely disrupted the economic and social life of the Elwha Tribe.

Olympic Power Company began construction of the first dam, the Elwha Dam, at river mile 4.9 (about four miles above the present-day reservation) in 1910. In October 1912, the sluice gates were closed and the reservoir began to fill. On October 31 the foundation of the dam failed. Indian families living downstream were sitting down to dinner when their dogs started barking and they heard a roaring sound mixed with the sound of tree trunks breaking. There are still Tribal elders alive who remember the adults grabbing the small children and running to high ground. There was property damage but no loss of life. The Klallams received no warning, although there is some indication that non-Indian farmers in the valley were warned. No compensation appears to have been paid.

The dam had been bedded on a deep gravel deposit and water pressure blew out the foundation. Various methods of repair were attempted. It was finally decided to fill the hole with debris and seal the fill with "mattresses" made of fir boughs weighted in place with dirt and rock. Later a layer of "gunnite" (a type of concrete) was sprayed on top of the fill. What resulted, and what exists today, is a jury-rigged patchwork of trees, rocks, dirt and concrete held in place by gravity and the original concrete structure which "bridged" the blowout. That conglomeration of materials, assembled by trial-and-error to hold back a large mountain river, is the capping irony in the history of the Elwha Tribe's attempts to live in peace.

In 1925-27, under a 1926 Federal Power Commission license, Northwestern Power and Light Company constructed a second dam, Glines Canyon Dam, at river mile 13.5. That dam, like the Elwha Dam, was not equipped with fish passage facilities.

### **Loss of the salmon and steelhead runs**

The Elwha had been one of Washington's best salmon streams. The river's chinook run was famous for the size and vitality of the adults returning to spawn. After the Elwha dam was built tribal elders remember watching those big fish waiting below the dam, trying to get upstream. They remember pools below the dam full of dead salmon which had not spawned and they recall their parents protesting. But nothing was done to restore the wild runs above the dam. At the time the dam was constructed it was illegal under state law to obstruct salmon and steelhead streams. After construction, at the behest of the dam builders, the law was changed to allow stream obstruction if artificial enhancement facilities were provided to mitigate for lost wild runs. Such a hatchery was built on the Elwha but it failed and was abandoned in 1922. In the five miles between the dam and saltwater the wild salmon run was further reduced as the result of flow fluctuations, gravel starvation, and other effects of the dam. The Elwhas, when they finally obtained their reservation at the mouth of the river, came into possession of flood plain lands on a largely sterile stream. But this, it turned out, was just one installment of the price they were to pay for the Elwha Dam.

## **Dam Safety**

The Elwhas who lived along the lower river knew they were on the flood plain. Living there was not particularly unusual, since both Indian and non-Indian settlements were often placed in such areas. They had been able to accommodate natural flooding, but the Elwha Dam added a new dimension. Several tribal elders remember sitting up at night during storms, fearing that the power company would suddenly open the spillways - to prevent stressing the dam during high water - and release a sudden surge into the lower valley. Chronic flooding, aggravated by this sudden artificial peaking, made life in the rainy season difficult.

Even in recent years the opening of spillway gates appears to have contributed to increased flooding on the reservation, harassed families fishing in the river, and destroyed their nets. But this harassment was to prove minor compared to the hazard posed by the old patchwork dam. In 1968 President Nixon had placed the land purchased in the 1930's in "reservation status." This was one aspect of the resurgence of the Elwha Tribe. By the mid-1970's the Tribe was fairly well organized, had obtained access to treaty fishing rights and was beginning a program of economic development. With federal assistance, a hatchery, community center, and juvenile group home were all built on the reservation. The Tribe then began to tackle housing, its major problem. At long last the Elwhas, most of them scattered about in substandard habitation, were going to live on their land and in decent homes.

The Tribe obtained a \$1,200,000 funding commitment from the Department of Housing and Urban Development for the construction of 25 homes on the reservation. It also, with the assistance of the Corps of Engineers, began a flood control study with the goal of increasing the habitability of the reservation. The community which had been so effectively broken up was coming back together. With fishing rights, the hatchery and housing the Elwha would be able to keep their families together and establish a realistic standard of living. The Tribe became increasingly confident and effective.

At about the same time the Federal Energy Regulatory Commission required Crown Zellerbach to obtain a periodic safety report on Elwha and Glines Dams. The engineering firm retained by Crown Zellerbach studied Elwha Dam and reported that it was unsafe, subject to failure during high flood levels. Crown disagreed on the levels of flooding possible in the river and declined to undertake repairs.

In due course the Corps of Engineers became aware of the negative safety report. Because a dam had recently failed in Idaho (another was about to fail in Georgia), government agencies were extremely sensitive to dam safety issues. The Corps advised HUD of the problem and notified the Tribe that unless the dam safety issue was resolved it would lose the flood control project. Without a levee designed by the Corps, HUD would not allow housing in the floodplain. In addition, the existence of a flood hazard upstream would itself block both HUD and Corps funding under the Environmental Policy Act.

But Crown did not agree with the engineering conclusions concerning flood magnitude and dam failure. It informed all concerned that it did not intend to repair the dam. HUD and the Corps advised the Tribe that unless some agency with jurisdiction over dam safety ordered repair of the dam, they would withdraw their funding.

The Tribe's momentum had stopped. It had spent its own limited energies taking care of some else's complex engineering problem and it did not wish to delay housing until dam repairs were certified and a new flood control project could be studied and put in place. It purchased land away from the reservation and put a HUD housing project there. The fragmentation of the Tribe continued.

### **The Tribe's 1986 motion before FERC**

During the 1970's the Tribe spent a disproportionate share of its resources overcoming Crown Zellerbach's resistance to dam repairs. More recently, as the result of changes in the law governing FERC, the Tribe had asked that agency to consider a more permanent solution to dam safety, the fisheries impacts of the two Crown Zellerbach dams, and their other downstream effects. In January 1986, the Tribe filed a motion before FERC asking the Commission to implement an interim fisheries restoration plan and a long term plan for the phaseout and removal of the dams. The reasoning behind that motion is set out in the following paragraphs.

The dams trap the gravel that would otherwise wash downstream and replenish Reservation beaches. As a result, storms coming in from the Pacific are eroding the Reservation's saltwater shoreline and increasing flood risk. The dams also continue to cut off or ruin most of the river's spawning and rearing habitat for anadromous fish. The result is that some of the best salmon and steelhead runs on the Peninsula have been reduced to mere vestiges. The cost to the Tribe and the public has been enormous.

The dams do not generate enough power to justify their cost to the Tribe and the public at large. What power they do generate can be replaced from other sources. Those sources are relatively inexpensive to Crown and considerably less expensive for the Tribe, which has involuntarily subsidized Crown by carrying the costs of its dams for too long.

### **The relation of the dams to Olympic National Park**

Both dams were in place when Olympic National Park was created in 1938. The boundaries of the Park include the Glines Project, although the legislation setting up the park does not mention it. The Federal Power Act appears to "grandfather in" the dam but also seems to deny FERC jurisdiction to relicense Glines.

The Department of the Interior took the position that FERC currently lacks such jurisdiction and proposed a legislative compromise. The Sierra Club, Friends of the Earth, the Seattle Audubon Society and Olympic Park Associates also took the position that the dams must come out. FERC ruled that it had jurisdiction to relicense Glines Dam and an appeal followed. When the Elwha River Ecosystem and Fisheries Restoration Act was passed, the jurisdiction issue was before the Ninth Circuit Court of Appeals. That appeal was subsequently placed on hold because it was hoped implementation of the Act would dispose of the issue.

### **The Elwha River Ecosystem and Fisheries Restoration Act**

In October, 1992, President Bush signed Public Law Number 102-495, the Elwha River Ecosystem and Fisheries Restoration Act. That act directed the Secretary of the Interior to study and report to Congress on river restoration alternatives and authorized him to acquire and remove the dams if he found it necessary. In 1994 the Secretary reported to Congress that dam removal was necessary to restore the river to its natural, self-regulating state. In the period 1994-1996 the Secretary completed an environmental impact statement and record of decision in favor of dam removal and an environmental impact statement and record of decision choosing a preferred method of dam removal.

### **Chronology: Elway River Dams**

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| 1855: | Treaty of Point-No Point: the federal government promised local Indians fishing rights on this river.   |
| 1910: | Olympic Power Company starts construction on Elwha Dam at river mile 4.9  |
| 1911: | County game warden is alarmed that there are no fish above the damsite and that spawners are milling around in stream reach below the blockage. |

#### **American Field Guide Teacher Resources: Salmon vs. Dams**

Access this lesson plan online at: [www.pbs.org/americanfieldguide/teachers](http://www.pbs.org/americanfieldguide/teachers)

October 31, 1912:	Elwha Dam foundation blows out during filling of the reservoir.
1914:	Elwha Dam is completed by trial-and-error using fill dynamited and hauled into the breach created by the blowout. There are no fish passage facilities.
August 1914:	Olympic Power Company signs an agreement with the State under which it contributes land and \$2500 for construction of an Elwha hatchery.
1914-1919:	The fill is sealed by various means to prevent leakage.
1915:	The State Department of Fisheries commences hatchery operations.
1919:	Crown Zellerbach Company buys Elwha Dam.
1922:	Elwha hatchery abandoned because of lack of returning brood stock. Flow fluctuation may be a major cause.
1925-1927:	Northwestern Power and Light Company constructs Glines Canyon Dam at river mile 13.5, also without fish passage facilities.
June 6, 1926:	Federal Power Commission (now FERC) issues a 50-year license for Glines Project.
1936:	Crown Zellerbach purchases Glines Project.
June 1938:	Congress creates Olympic National Park, the boundaries of which encompass Glines Dam and reservoir. There is no provision in the legislation for the Glines Project.
July 22, 1968:	Crown Zellerbach applies for FPC license for Elwha Dam under a jurisdiction that is subsequently overruled.
June 1, 1973:	FPC docket application for relicensing of Glines Project.
April 1975:	Crown Zellerbach and the State Department of Fisheries reach agreement on fisheries mitigation: CZ pays 26% (\$145,000) for a spawning channel and agrees to regulate flows. The facility mitigates about 10% of the total loss and does not compensate for the river's two major runs.
March 16, 1979:	FERC affirms Administrative Law Judge's Initial Decision finding jurisdiction over Elwha Dam and orders submission of a schedule for rehabilitation and strengthening of the structure as well as emergency action procedures.
May 23, 1979:	Crown Zellerbach files amended FERC application for license for Elwha Dam.
May 12, 1980:	FERC accepts for filing updated license application for Elwha. January
1986:	The Elwha Tribe files a motion before FERC asking for an interim fish restoration plan and an order providing for phaseout and removal of the two dams.
February 13, 1986:	Department of Interior comments on licensing for Glines and Elwha Dams point out that FERC lacks jurisdiction over the Glines Project and suggest a solution, ask for fish and wildlife studies and restoration measures, and propose other action.
April 1986:	National Marine Fisheries Service intervenes before FERC and seeks resolution of fisheries issues.

- May 15, 1986: Seattle Audubon Society, Friends of the Earth, Sierra Club and Olympic Park Associates intervene in FERC proceedings and request removal of the dams.
- December 15, 1986: FERC staff visits site to review the status of information on both Elwha and Glines Canyon projects and gives agencies opportunity to comment regarding the need for additional information.
- February 17, 1987: Fisheries agencies and Tribe move that FERC ask Crown Zellerbach for additional data and consider interim relief.
- March 1987: CZ's response.
- May 1987: CZ responds to March 1987, FERC request for data.
- May 1987: FERC asks for additional data. (Pleadings are exchanged with growing frequency; not all are listed here.)
- August 1987: Western Pulp and Paper Workers intervene.
- August 17, 1987: Joint Fisheries Agencies supplemental motion for interim relief.
- September 1987: CZ's response.
- November 30, 1987: CZ changes name to James River Corporation of Nevada.
- March 25, 1988: Environmental intervenors file petition for declaratory order finding that Glines cannot be relicensed by the FERC because it does not have jurisdiction.
- May 31, 1988: James River's II (JR) initial response to May 1987, request for additional information.
- June 1, 1988: Fisheries agencies ask FERC for information on Daishowa purchase of JR.
- August 29, 1988: Fisheries agencies comments on May 31, 1988, response to request for additional information.
- October 28, 1988: Fisheries agencies Supplemental Petition Regarding Application and Information Deficiencies.
- December 1988: JR's supplemental response to May 1987, request for additional information.
- January 13, 1989: Fisheries agencies comments on supplemental response to request for additional information.
- January 26, 1989: National Marine Fisheries Services requests, for the Joint Fish and Wildlife Agencies, that the FERC begin development of EIS.
- February 1989: Tribe's comments on cultural resources portions of May and December 1988, response to May 1987, request for additional information.
- March 21, 1989: National Marine Fisheries Service files study evaluating scope of dam removal/fish restoration on both projects.
- March 24, 1989: Lower Elwha Tribal Council files comments regarding James River II's response to information request.
- April 14, 1989: Joint Fish and Wildlife Agencies provide proposed EIS outline.
- May 3, 1989: Friends of the Earth, for the Conservation Intervenors, submits comments on the Joint Fish and Wildlife Agencies March 21, 1989 filing.

- May 17, 1989: FERC staff meets in Port Angeles, Washington with the National Park Service concerning the NEPA process and Glines jurisdictional issue.
- June 1, 1989: FERC staff meets in Washington, D.C. with the staff of National Park Service concerning NEPA process and Glines jurisdictional issue.
- June 7, 1989: FERC issues notice of June 26, 1989 technical meeting in Seattle and June 27, 1989 public meetings in Sequim, Washington, on both projects.
- June 12, 1989: Representative John Dingell request General Accounting Office conduct an investigation regarding legal issues or project relicensing and dam removal.
- June 26, 1989: FERC staff conducts technical meeting in Seattle, Washington, and public meeting in Sequim, Washington, to discuss the status of projects, explore alternatives to be assessed in EIS, and define additional information requirements.
- June 27, 1989: Joint Fish and Wildlife Agencies file supplemental petition regarding remaining information deficiencies on both projects.
- July 24, 1989: Washington Department of Wildlife submits comments on alternatives review and additional study needs necessary to complete EIS.
- July 31, 1989: National Marine Fisheries Service submits comments on alternatives review and additional study needs necessary to complete EIS.
- August 24, 1989: FERC responds to Representative John Dingell.
- August 29, 1989: Representative John Dingell requests additional information regarding relicensing of Glines Dam.
- November 19, 1990: Conservation Intervenors file request for rehearing of FERC's October 19, 1990 order.
- December 4, 1990: FERC denies Department of the Interior's request for rehearing stating that the request was received one day late.
- December 17, 1990: National Marine Fisheries Service and Tribe file supplement to November 16, 1990 request for reconsideration incorporating Department of the Interior's request for reconsideration.
- December 19, 1990: FERC grants rehearing of October 19, 1990 order "for purpose of further consideration."
- February 1991: FERC releases Draft Environmental Impact Statement concluding that (1) dam removal is feasible, (2) only dam removal will result in the full restoration of the Elwha River ecosystem and anadromous fish, and (3) the cost of power produced by dam retention would equal or exceed the cost of power from the Bonneville Power Administration.
- March 27, 1991: General Accounting Office concludes that "dam removal offers the best prospects for fish restoration" and decides that the selection of an alternative is essentially a public policy decision.
- April 5, 1991: FERC issues order denying requests for rehearing and reconsideration of its October 19, 1990 order claiming jurisdiction over the Glines Canyon Project.
- April 22, 1991: Pacific Fishery Management Council commented that only dam removal would provide restoration of anadromous fish at levels that would support increased recreational and commercial fishing and requested FERC consult with the Council.

- May 31, 1991: Conservation Intervenors and Tribe file Petition for Review with Ninth Circuit for court review of FERC orders exerting licensing jurisdiction over Glines Canyon Project within Olympic National Park.
- June 4, 1991: Department of Justice, on behalf of the Department of Commerce and Department of the Interior, files Petition for Judicial Review of FERC's October 19, 1990 and April 5, 1991 orders.
- June 27, 1991: Ten additional conservation organizations file motion for intervention.
- June 28, 1991: In a letter to the Department of Justice, Department of Energy recommends that Petition filed with Ninth Circuit be dismissed citing agreement with FERC's position that it has authority to license the Glines Canyon Project.
- August 6, 1991: Pacific Fishery Management Council requested a response to its April 22, 1991 letter.
- November 13, 1991: FERC requested information from the Joint Fish and Wildlife Agencies, including fish restoration and harvest management plans and provided less than 30 days for a response.
- December 13, 1991: National Marine Fisheries Service questioned assumptions contained in FERC's November 13, 1991 request for information but agreed with the FERC assessment that much information is needed. However, National Marines Fisheries noted that FERC had not ordered the studies requested by the Joint Fish and Wildlife Agencies that would have provided that information.
- January 23, 1992: FERC claims that National Marine Fisheries Service December 13, 1991 response is "irresponsible."
- January 31, 1992: IT Rayonier, Inc filed motion for late intervention.
- February 24, 1992: Congressman Dingell requests that FERC explain the basis of a dispute over information requested by FERC from the National Marine Fisheries Service.
- March 5, 1992: City of Port Angeles filed motion for late intervention.
- March 11, 1992: National Marine Fisheries Service documented information currently available that would assist FERC in its efforts and listed studies requested by the Joint Fish and Wildlife Agencies that FERC had not ordered.
- April 7, 1992: FERC responds to Congressman Dingell's February 24, 1992, letter asking for clarification of a dispute over information requested by FERC from the National Marine Fisheries Service.
- June 2, 1992: Congressman Dingell characterizes FERC's April 7, 1992 response as inadequate.
- June 5, 1992: General Accounting Office concluded that who should pay for dam removal is undecided, although the dam owner could be required to bear the cost if the dams are unlicensed.
- August 10, 1992: FERC responds to Congressman Dingell's letter of June 2, 1992.
- October 24, 1992: President Bush signs the Elwha River Ecosystem and Fisheries Restoration Act as Public 102-495, staying the FERC licensing process.
- October 27, 1992: James River II, Inc. requests license transfer to James River Paper Company Inc.

- November 18, 1992: Conservation Intervenors file motion for FERC to stay its licensing proceedings citing Public Law 102-495.
- December 22, 1992: FERC issues order approving transfer of Glines Canyon annual license from James River II, Inc. to James River Paper Company, Inc.
- December 23, 1992: Joint Motion by Olympic Park Associates, Friends of the Earth, Seattle Audubon Society, Sierra Club, Department of Commerce, Lower Elwha Klallam Tribe, FERC and James River requesting Ninth Circuit issue stay of jurisdiction case.
- February 1, 1993: Ninth Circuit granted stay of jurisdiction case.
- August 4, 1995: First Final Environmental Impact Statement (EIS) released in favor of dam removal.
- February 26, 1996: Record of Decision (ROD) signed in favor of dam removal.
- November 22, 1996: Second Final Environmental Impact Statement (EIS) released choosing a preferred method of dam removal.
- December 23, 1996: Record of Decision (ROD) signed choosing the preferred method of dam removal.