Exhibit 2

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

RECORD OF DECISION

FINAL ENVIRONMENTAL IMPACT STATEMENT
ELWHA RIVER ECOSYSTEM RESTORATION IMPLEMENTATION

Olympic National Park
Washington

The Department of the Interior, National Park Service, has prepared this Record of Decision on the final Environmental Impact Statement (final EIS) for Elwha River Ecosystem Restoration Implementation in Olympic National Park and Clallam County, Washington. This Record of Decision is a statement of the decision made, the background of the project, other alternatives considered, the basis for the decision, measures to minimize environmental harm, and public involvement in the decision making process.

DECISION (SELECTED ACTION)

The decision to fully restore the Elwha River ecosystem by removing the Elwha and Glines Canyon Dams and associated facilities on the Elwha River has already been made based in part on the first of a two-phased EIS (referred to as the programmatic EIS, finalized in June, 1995 by the Department of the Interior). This Record of Decision is based on the second-phase, *Implementation* EIS, which examined alternative methods of executing Interior's chosen policy. The final *Implementation* EIS is comprised of two documents: (1) the draft *Implementation* EIS dated April 1996 and (2) the final *Implementation* EIS (which is comprised of errata sheets and responses to public comments) dated November 1996.

The selected action (the River Erosion alternative) is to initiate river restoration by removing both dams over a two-year period and implementing fish restoration and revegetation for longer periods.

Lake Mills would initially be drawn down with Glines Canyon Dam in place to reduce flood peaks downstream until a river diversion channel could be constructed through the north spillway of Elwha Dam. Lake Aldwell would then be lowered enough to build a temporary cofferdam and excavate the river diversion channel. Following diversion of the river through the river diversion channel, fill material, which now serves to control seepage through the foundation of Elwha Dam, would be excavated. Elwha Dam would be demolished in sections by controlled blasting. Rubble would be trucked to one or more of nine disposal sites under consideration within a 32-mile radius, although some project features may be buried under material used to backfill the river diversion channel. During the low flow period of the second year, the temporary cofferdam would be removed, allowing the Elwha River to flow through the restored, historic river channel. All remaining structures would be removed and the site revegetated.

Removal of Glines Canyon Dam would not begin until the river diversion channel at Elwha Dam was completed. Demolition of the arch dam section would be accomplished using a combination of controlled blasting and diamond-wire sawcutting. The arch dam portion above the lowered reservoir waterline would be

removed first. Notches for streamflow passage would then be excavated from the arch dam section in 7.5-foot increments about once every two weeks. The arch dam portion left after lowering Lake Mills 7.5 feet would be removed before the next notch would be excavated. Concrete rubble and other waste would be hauled to the disposal sites described above.

The majority of sediment accumulation lies upstream of Glines Canyon Dam. The natural erosion power of the Elwha River would be used to erode this sediment, although, since some of it lies outside the historic floodplain, a portion would remain. The remaining sediment would be manually and naturally revegetated, but some would erode during storms in subsequent years. The reservoir and river channel would be intensively monitored during dam removal, and the results used to help optimize the rate of removal.

A variety of measures would be used to help restore the Elwha's salmon and anadromous trout and char. Some of these measures include: use of hatcheries to develop and maintain broodstock; outplanting eggs, fry and smolts by tank truck, helicopters and other means; use of river acclimation ponds; and harvest management (i.e., fishing restrictions). Because the Lower Elwha Tribal Fish Hatchery is needed to accommodate the restoration effort, as well as to protect broodstock during dam removal, it would be fitted with a larger capacity infiltration gallery and new wells located near the river.

Other ecosystem restoration measures would include revegetation of both dam sites, where structures are removed, and the drained reservoirs. Revegetation of the lake beds would involve natural recolonization and a moderately intensive program of planting native species. Planting seeds, cuttings and trees of different ages would help create a more natural, structurally diverse forest ecosystem in a shorter period of time, and keep exotic vegetation from invading. This, in turn, would create wildlife habitat and habitat usable by species of special concern. The return of salmon and steelhead throughout the river would also provide a fundamental link in restoring Elwha River aquatic and terrestrial ecosystems.

BACKGROUND OF THE PROJECT

This Record of Decision is the second of two decisions in a complex planning process concerning full restoration of the Elwha River ecosystem and native anadromous fisheries, including removal of the Elwha and Glines Canyon Dams. It documents a decision made in part on the basis of information presented in the second of two EISs which, in combination, study how to fully restore the river's dam-altered ecosystem and native anadromous fisheries in a safe, environmentally sound and cost-effective manner.

The action proposed and analyzed in this second, or *Implementation* EIS, is the removal of two hydroelectric dams and implementation of fisheries restoration and revegetation. The dams were installed without fish passage facilities on the Elwha River, on the Olympic Peninsula in Washington State. Elwha Dam was built from 1919-1914 about 4.9 miles above the river mouth. Glines Canyon Dam was completed 8.5 miles further upstream in 1927. Both impound reservoirs: the Elwha Dam forms the Lake Aldwell reservoir, and Glines Canyon Dam forms the Lake Mills reservoir.

In 1991, the Federal Energy Regulatory Commission (FERC) issued a draft EIS on licensing the dams. Public comment was received and incorporated into the document, although it was not released as a final EIS because Public Law 102-495, the Elwha River Ecosystem and Fisheries Restoration Act (Elwha Restoration Act), was enacted in October 1992. The Elwha Restoration Act suspended FERC's authority to issue long-term licenses for the Elwha and Glines Canyon Projects. FERC later modified its draft EIS, renamed it the Draft Staff Report, and provided it to Interior in 1993. The Elwha Restoration Act also required the Secretary of the

Interior to develop a report evaluating alternatives to achieve the full restoration of the Elwha River ecosystem and native anadromous fisheries, including a "definite plan" for the removal of the two dams if that was necessary. The resultant study -- *The Elwha Report* -- which incorporated most of the information in the Draft Staff Report, was released for public comment, was modified based on comments received, and was submitted to the Congress in 1994. *The Elwha Report* determined that the removal of both dams was both feasible and necessary to restore the fisheries and ecosystem.

Interior began a two-phase EIS process in 1994 to further explore and refine restoration alternatives, taking advantage of years of groundwork and planning already completed and documented in the FERC Draft Staff Report and *The Elwha Report*. The first phase evaluated five alternatives for ecosystem restoration in a programmatic EIS. The decision to fully restore the Elwha ecosystem and its native anadromous fisheries through dam removal was made in February 1996. The second, *Implementation* EIS, was prepared and released for a 60-day public review period which closed June 27, 1996. Three public workshops were held in Seattle and Port Angeles May 20-21, 1996. Substantive comments received both at the workshops and in writing during the review period were responded to in the final *Implementation* EIS, released November 22, 1996.

OTHER ALTERNATIVES CONSIDERED

In addition to the proposed action, two other alternatives were examined (dam retention alternatives were analyzed in the *Programmatic* EIS). They include taking no action and removing a large portion of the accumulated fine sediment through a suction dredge and slurry pipeline.

The **No Action** alternative would retain the dams, powerhouses, reservoirs and auxiliary structures as they are now, without fish passage or other mitigation.

The **Dredge and Slurry** alternative would follow the same dam removal scenario as for the proposed River Erosion alternative. However, the natural erosive power of the river would be used primarily to transport coarse sediments (e.g., sand and larger-sized material) trapped within the reservoirs. Most (75%) of the approximately 9.2 million cubic yards of fine-grained sediments (i.e., silt and clay) trapped within Lake Mills would be suctioned via barge-mounted dredges in the reservoirs and slurried with water in a pipeline. The pipeline would end about one mile offshore in the Strait of Juan de Fuca, in an area of stronger currents and less abundant marine life than in the nearshore marine environment off the mouth of the Elwha River.

The EIS team found the Dredge and Slurry alternative to be marginally environmentally preferred, as it would produce less turbid water during removal and smaller peak turbidities in the 2-4 year period following dam removal (see tables 28 and 31 (revised) pp. 195 and 205 of the draft EIS). As a result, anadromous fisheries restoration could take slightly less time. However, the environmental advantages of the Dredge and Slurry alternative did not outweigh the cost advantages of the River Erosion alternative. This is because peak turbidities would still be high enough under the Dredge and Slurry alternative that they would cause the same relative degree of impact, and nearly identical water quality and fish restoration measures as for the preferred alternative of River Erosion. Additional adverse impacts would also occur from use of dredges and the pipeline (see Basis for Decision, below).

BASIS FOR DECISION

The River Erosion Alternative was selected as preferred over either No Action or Dredge and Slurry for environmental and cost reasons. No Action was rejected in the Record of Decision on Interior's programmatic EIS since it does not fulfill the intended purpose of taking action, that is to fully restore the Elwha River ecosystem and native anadromous fisheries. The dams and hydropower projects have had and continue to have a significant adverse impact on fisheries, wildlife, the river's sediment transport processes and natural flow regime, and the cultural and socioeconomic resources of the Lower Elwha Klallam Tribe. Interior chose to fully restore these resources through removal of the hydropower projects in the Record of Decision following the finalization of its programmatic Elwha River Ecosystem Restoration EIS.

The River Erosion Alternative would cost $113.1 million[1], and the Dredge and Slurry option, $130.1 million. Yet, the environmental impacts and long-term benefits of each would not be significantly different. The Dredge and Slurry option would remove 75% of the fine-grained sediment within each reservoir. Although this is a large amount of sediment, it is not all of the fine-grained material. Some silt- and clay-sized material is trapped in the delta sediment of each reservoir, and some lies between logs and stumps on the lakebeds and so is inaccessible to the dredges. Consequently, between 1.2 and 1.4 million cubic yards of fine-grained sediment would still wash into the Elwha River during dam removal under the Dredge and Slurry alternative (as opposed to 4.9 to 5.6 million cubic yards under the River Erosion option). This is enough that all fisheries protection measures identified as required for the River Erosion alternative would be needed for Dredge and Slurry as well, although fisheries recovery may proceed slightly quicker under the Dredge and Slurry option.

Water quality protection is required by the Elwha Restoration Act to protect municipal and industrial users from adverse impacts directly resulting from dam removal. Some mitigation measures would not be required if the Dredge and Slurry alternative were implemented, such as a filtration plant for Port Angeles and the Dry Creek Water Association. However, under either action alternative, peak turbidities during dam removal would be very high, and treatment must be designed to provide the same quality water as users presently enjoy. Although there may be lower peak turbidities if the Dredge and Slurry option were chosen, this does not translate into overall cost savings. Water quality treatment costs are about $5 million greater for River Erosion ($32 million) than Dredge and Slurry ($27 million), but overall costs for the Dredge and Slurry option are about $17 million higher because of dredging and pipeline costs. Yet, the pipeline does not confer enough water quality or fisheries benefits to make it preferable. The EIS team found the Dredge and Slurry alternative was slightly environmentally preferred over River Erosion because of its benefits to water quality and fisheries, but also noted it would result in adverse impacts of the pipeline and pumping stations, including temporary impacts to traffic, land use, recreationists, air quality, and wildlife from the noise of installing and operating the pipeline.

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[1] On October 21, 1996, the Rayonier Corporation announced the permanent closure of the Rayonier pulp mill in Port Angeles, Washington by the summer of 1997. As a result, *short-term* water mitigation measures proposed in the final Implementation EIS and this Record of Decision to protect the Rayonier mill from adverse impacts of dam removal may not be needed. No adverse impacts would result from elimination of these modifications, while costs would be substantially reduced.

MEASURES TO MINIMIZE ENVIRONMENTAL HARM (MITIGATION)

Short-term adverse impacts from removing both dams would result from the release of sediment now trapped in the reservoirs. The finer grained particles would temporarily but significantly impact fish and other aquatic organisms. Impacts on water quality, flooding, living marine resources, wildlife, air quality, cultural resources, land use, recreation, traffic, and public health and safety might also occur. Mitigation measures for these resource impacts are summarized in Table 1 and further explained below.

These measures are all of those the EIS team examined and determined were practicable means to avoid or minimize environmental harm from the preferred alternative.

Table 1. *Summary of Mitigation Measures for Proposed Action*

Fluvial Processes and Sediment Transport
Long-term sediment monitoring (cross-sections, air photos, stream gauging)
Flooding
Raise and strengthen federal levee to maintain existing 200-year flood protection
Adjust rate of Glines Canyon Dam removal to control release rate of coarse sediment
Raise individual houses, wells or structures to provide existing level of protection
Raise 4 sections of Olympic Hot Springs Road
Install debris deflectors at in-water piers
Raise and reinforce non-federal west side levee to provide existing level of protection
Water Quality
Construct infiltration gallery, modify diversion, enlarge open channel, pre-treatment for industrial users
Construct new Ranney collector, flood proof existing collector for new 100-year flood level, temporary iron treatment / filtration for municipal water use
Replace hatchery infiltration gallery, drill and floodproof supplemental wells for Lower Elwha Klallam Reservation
Connect Dry Creek Water Association to Ranney system and provide a replacement disinfection system
Modify wellheads, flood-proof pump house, install temporary in-line water treatment system for Elwha Place Homeowners' Association
Construct mounded septic system with lift stations for Lower Elwha Klallam Reservation and other affected residents

Raise and modify wellheads up to 100-year floodplain, install temporary in-line filters, construct temporary storage tanks, provide bottled water, deepen existing wells, drill new wells, provide contingency fund for private well users not yet identified

Fisheries
Gradual/intermittent release of sediment from reservoir

Prior to dam removal, outplant eggs or fry in upper river

Maintain minimum riverflows

Stop deconstruction during high flows to protect fish (November and May to June)

Develop broodstocks, outplant juveniles, and evaluate adult return during and after dam removal

Expand Lower Elwha Klallam Tribal Fish Hatchery; dredge outlet, create new bypass

Close WDFW fish rearing channel during dam removal; move production to another facility

Provide long-term wellhead protection at WDFW fish rearing channel

Vegetation
Collect native plant materials from the Elwha Valley, seed both reservoirs with native grasses and forbs, plant trees of different ages and eradicate non-native vegetation.

Literature search, controlled planting, on-site cultivation, and biotechnical slope stabilization

Wildlife
Trumpeter Swan mitigation

Species of Special Concern
Stop construction during critical marine feeding periods for marbled murrelets (November and May to June)

Air Quality and Noise
Periodic spraying of roads with water

Cultural Resources
HABS/HAER documentation of dams

Leave parts of Glines Canyon Dam in-place (thrust block, powerhouse, spillway, penstock, and gatehouse)

Inventory and evaluation of project impacts

Mitigation of affected resources (monitor, survey, stabilize riverbank, data recovery, and avoidance)

Public Health and Safety
Cofferdams, progressive reservoir lowering and other measures to prevent foundation washout under Elwha Dam

Stop construction during high flows to protect dam workers (November and May to June)

Remove transformer oils, asbestos, and chemicals from the dam sites (hazardous materials)

Traffic
Flaggers at congested intersections if needed

Recreation
Provide or otherwise allow for shuttle service for park visitors to Elwha subdistrict during dam removal

Provide interpretive facilities

Educate users on nearby recreational opportunities

Provide long-term public access to river corridor

Land Use
Leave bottom lands and lands along river corridor undeveloped

Fluvial Processes and Sediment Transport:

Long term monitoring of sediment transport through stream cross-sections, air photos and stream gauging would provide Interior information on aggradation of sand and gravel and its relative impacts. This information would be used to identify unforeseen flood control issues and needed mitigation.

Flooding:

Changes to levees, wells or existing structures were designed to provide existing levels of protection following dam removal. As the riverbed aggrades with sediment to pre-dam levels in localized areas, the surface of the river will also rise. The river is also expected to migrate more frequently and expose existing flood protection structures to the higher velocity flow of the main channel. Additional information on the mitigation measures described below is available on pages 211-215 of the draft *Implementation EIS*.

Raising federal levee. The federal levee currently provides the Reservation and Lower Elwha valley residents on the eastern side of the Elwha River mouth with 200 year flood protection. It would be rip-rapped and raised to provide this same level of protection.

Adjust rate of Glines Canyon Dam removal. The majority of trapped sediment is located within Lake Mills. The rate of aggradation downstream of Glines Canyon Dam from release of this material would be monitored

during removal. If sediment was not washing down as planned, or was accumulating too quickly (e.g., threatening flood control measures), removal of the next piece of the dam would be slowed to allow sediment to wash down river. This is considered an integral part of the proposed action.

Raise individual houses, structures or wells. Mitigation measures that would provide existing levels of flood protection following dam removal for individual residents at River Mile 0.0-0.2 (10 separate residences), 1.4, 3.5 (4 structures-- 3 on the west bank and 1 on the east bank), 8.4 (3 structures) and 9.5 are listed on page 215 of the draft EIS, although non-structural measures (e.g., flood insurance, purchase) are also possible. Wells which may experience greater flooding following dam removal also need to be protected. Private wells requiring elevation or flood protection are located at RM 1.4, 3.5 (4 wells), 7.9, and 9.5. Two Olympic National Park campgrounds, Elwha campground at RM 11 and Altaire campground at RM 12.5 would be flooded at high flows, as would their wells. Mitigation for this impact to recreation users may include relocation of either or both campgrounds; however, costs of such relocation are not included as part of this project. If money for relocation is not available, both will be shut down during high flows.

The existing Port Angeles Ranney collector, Dry Creek Water Association and Elwha Place Homeowners Association wells are expected to experience impacts from increases in flood stage. Mitigation for these impacts is included in the discussion of water quality below. Impacts to the Lower Elwha Klallam Fish Hatchery and State Fish Rearing Channel from flooding are discussed in the fisheries section below.

Olympic Hot Springs Road. Four sections of Olympic Hot Springs Road (Elwha Valley Road) would be flooded during the new 100-year flood. These areas total about 1.7 miles, and would probably be raised and rip-rapped, although less environmentally damaging alternatives are under consideration. Also, a dike at RM 8.5 which currently redirects river flows away from Olympic Hot Springs Road would be raised and armored to continue to provide this same protection for the road.

Debris deflectors. To keep floating logs and branches away at higher flood stages, debris deflectors would be added to the in-water piers of the Highway 101 and Altaire Campground bridges.

Raise and modify west-side levee. A 900-foot levee extending from the mouth of the river to the bluff on its west bank protects residents west of the levee for 25- to 50-year frequency floods. This levee would be raised one foot and armored with two feet of graded riprap to provide this same level of protection during and following dam removal.

Water Quality:

Industrial users. Two paper/pulp mills currently filter a surface source of river water. Current quality for these users would be protected by changing the surface diversion to an infiltration gallery buried in the river bed to initially filter and collect water. The infiltration gallery would remain in-place during and following dam removal. It would be supplemented during dam removal with an open channel pre-treatment system which tests turbidity and automatically dispenses an appropriate amount of an approved flocculent. The treated water is sent to a settling basin and on to the mills, where it would be further filtered on site (as it is now). Sediment collected would be discharged to the river.

Port Angeles/Dry Creek Water Association. The city of Port Angeles draws its municipal supply from a Ranney collector on the east side of the river at RM 2.8. The river is migrating away from this collector now, and is expected to migrate more frequently and/or further when natural sediment transport conditions are

restored. The proposed mitigation is to construct an additional Ranney collector on the opposite and upstream shore, so yield is protected.

Although the new collector would be built either outside the 100-year floodplain or its collector caisson floodproofed, the existing Ranney collector is in the 100-year floodplain. Mitigation to prevent overtopping during the 100-year flood protecting these structures with a levee.

Manganese and iron may be mobilized from stored lakebed sediments and infiltrate the Ranney collector in a dissolved state, causing mineral staining of fixtures and clothing. A temporary filtration plant in effect during removal would eliminate this impact.

Dry Creek Water Association operates four wells which are expected to experience increased turbidity, iron and manganese levels during dam removal and increased turbidity and flooding following removal. An access road to the wells would also experience greater flooding as a result of the proposed action. These problems would all be solved by connecting the Association to the new Ranney collector and temporary filtration plant. Dry Creek Water Association would also require a small, separate disinfection facility.

Elwha Place Homeowners Association. EPHA operates two water supply wells which may experience increases in dissolved iron and manganese and flooding during dam removal, and in flooding frequency following dam removal. Temporary in-line filtration would mitigate the quality problem, including any unexpected impacts from increased turbidity. Wellhead modification and flood-proofing of the wellhouse to withstand the 100-year flood is also anticipated.

Lower Elwha Klallam Reservation. At least 10 residents of the reservation, as well as other residents in the Lower Elwha Valley, could experience increases in groundwater levels which would make existing septic systems ineffective. Mitigation for this impact would be to create a mounded septic system and lift stations as needed.

Individual wells. In addition to flooding problems described above, individual wells could experience increases in turbidity, iron or manganese, or drops in groundwater levels as a result of dam removal. Mitigation varies, depending on the problem. However, temporary in-line filters would protect users from longer term water quality problems, and water storage tanks or bottled water from short-term increases in turbidity or dissolved metals. Drops in existing groundwater levels would be alleviated by drilling deeper wells, or new wells if needed. A contingency fund would be set aside to mitigate impacts unforeseen at this time to individual users.

Fisheries:

Gradual sediment release. The dams will be removed over a two-year period to effectively "meter" out trapped sediment, thereby limiting short-term, unstable accumulations that could adversely affect fish spawning and rearing.

Outplant eggs and fry. Steelhead rear for two years in freshwater before emigrating to the ocean, while coho salmon rear for one year. Steelhead eggs or fry will be outplanted in the river above the dams up to two years prior to completion of dam removal, and coho salmon eggs or fry will be outplanted one year prior to dam removal. These actions will accelerate fish restoration for these species.

Maintain minimum riverflows. To protect existing instream resources, a minimum instream flow (the one in ten year low flow or natural flow, whichever is less) will be passed at all times. Dam removal activities will cease as necessary to insure the minimum flow is maintained.

Stop deconstruction to protect fish. Dam removal will result in turbidity levels that could cause returning anadromous fish to avoid entering the Elwha River during the two year removal period. Dam removal activities will cease in November and from May to June to allow turbidity levels to decrease, thereby allowing chum and coho salmon and wild steelhead to return to the river. Reduced turbidity levels will also assist broodstock collection efforts during these times.

Develop broodstocks, outplant juveniles, evaluate adult returns. Broodstock sources will be developed and fish outplanted consistent with the fish restoration plan in Appendix 2 of the DEIS. Adult returns will be evaluated to provide information that will be used to alter outplanting locations and sizes and for harvest management considerations.

Expand tribal fish hatchery, dredge outlet and create new bypass. The Lower Elwha Klallam Tribe fish hatchery will be modified (i.e., increase in water delivery, incubation and early rearing improvements) to produce broodstock and fish for outplanting. The outlet channel will be dredged, as needed, during the two year dam removal period to maintain fish egress and ingress to the hatchery. A new bypass will be created, if necessary, to avoid long-term fish egress and ingress problems.

Close WDFW rearing channel and move production to another facility. The rearing channel will be closed during the two year dam removal period and chinook salmon production moved to another facility to maintain Elwha chinook salmon production.

Provide long-term wellhead protection at WDFW rearing channel. Wellheads at the rearing channel will be protected from flooding to maintain high quality groundwater capabilities at the rearing channel.

Vegetation:

Collect native plants, revegetate reservoirs. Native plants and seeds will be collected from within the Elwha valley to maintain genetic integrity in revegetation efforts. Native grasses and forbs will be used as necessary to provide vegetative groundcover. Trees of different ages will be planted to provide a closer approximation to numerous successional stages. Non-native vegetation will be eradicated to allow native plants to succeed.

Literature search, controlled planting, on-site cultivation, and biotechnical slope stabilization. A literature search has been conducted and will be updated to assist revegetation effort. Controlled planting, on-site cultivation and biotechnical slope stabilization techniques will be used to stabilize sediments in exposed reservoir areas.

Wildlife:

Trumpeter swans will be adversely affected from the loss of overwintering habitat in Lake Aldwell and Lake Mills. Mitigation, probably in the form of conservation easement(s), will be provided to mitigate for this loss.

Species of Special Concern:

Construction will be stopped during November and May to June to allow marine waters to clean-up, benefitting marbled murrelets during critical feeding periods.

Air Quality and Noise:

Construction equipment routes will be sprayed periodically with water to reduce dust levels.

Cultural Resources:

HABS/HAER documentation of dams. Both dams have been documented to HABS/HAER standards and drawings submitted to the Library of Congress.

Leave parts of Glines Canyon Dam in place. The thrust blocks, powerhouse, spillway and gatehouse will be retained to allow better interpretation of the former facilities. Interpretation will include signing and production of a public document on the history of the hydroelectric projects.

Inventory and evaluation of project impacts. Specific project impacts will be reviewed to assure that potentially impacted locations have been inventoried for cultural resources and any resources found have been evaluated for significance and for effect.

Mitigation of affected resource(s). Affected resources will be documented. River erosion will be monitored and the river surveyed to identify resources that may become uncovered. Data from such sites will be recovered. Where necessary, the riverbank will be stabilized to protect important resources and construction activities will avoid critical areas.

Public Health and Safety:

Prevent foundation failure. During filling of Lake Aldwell in 1912, the foundation of the dam failed, flooding downstream areas. Cofferdams, progressive reservoir lowering, and other measures will be employed to prevent another failure during dam removal.

Stop construction during high flows to protect workers. High flows can cause unsafe working conditions. Work will be halted at the dam sites as necessary to protect workers during high discharges.

Remove hazardous wastes. Transformer oils, asbestos, and chemicals will be removed and disposed of at approved disposal sites.

Traffic:

Flaggers will be provided at congested intersections, if needed, to maintain safe driving conditions and to maintain traffic flow.

Recreation:

Provide or otherwise allow for shuttle service. The Elwha Subdistrict of Olympic National Park will be

closed during the two year deconstruction period. Shuttle service will be provided to allow hikers access to trailheads and Olympic hot springs and river rafters and boaters access to the river.

Provide interpretive facilities. Interpretive facilities (e.g., signage, self-guided hikes) will be provided to describe the history of the sites and the restoration process.

Educate users on nearby recreational opportunities. During the two year closure of the Elwha Subdistrict, visitors to Olympic National Park will be told about alternative recreational opportunities in the area. Following removal of the dams, visitors seeking slack water recreational pursuits will be directed to other water bodies.

Land Use:

The bottom lands previously inundated by the reservoirs and lands along the river corridor will remain undeveloped to protect ecosystem restoration.

PUBLIC INVOLVEMENT

Overall, public comment has been requested, considered and incorporated into the planning process multiple times since FERC initiated its EIS in 1989. Initial public scoping meetings were held, and then public comments on FERC's 1991 EIS were incorporated and responded to in their Draft Staff Report. Public comment was again requested on the Elwha Report before it was submitted to Congress. Written comments were accepted for one month and an open house was held in Port Angeles in 1993.

In the Elwha River Ecosystem Restoration EIS proceedings, about 1,000 draft (programmatic) EISs were distributed, public meetings were held in Port Angeles and Seattle. About 400 people attended the meetings, and over 600 letters were received during the 60-day written comment period. All substantive comments were addressed by either providing clarification of information, modifying the text, or directly responding in the final EIS.

For the current EIS (Elwha River Ecosystem Restoration Implementation), about 1,150 of the draft EISs were distributed, three public meetings were held in Port Angeles and Seattle May 21-22, 1996. About 150 people attended the meetings, and about 380 written comments were accepted during the 60-day comment period. The number of separate comments in these letters and those taken at the three meetings totalled nearly 500. All substantive comments were addressed by either providing clarification of information, modifying the text, or directly responding in the final EIS.

Four Interior bureaus have been extensively involved in the completion of the EIS -- the National Park Service, the Bureau of Reclamation, the Fish and Wildlife Service, and the Bureau of Indian Affairs, as well as the Lower Elwha Klallam Tribe. Many other federal agencies have been consulted, including the Army Corps of Engineers, Environmental Protection Agency, U.S. Geological Survey, and the Advisory Council on Historic Preservation.

Recommended: _____ **Effective Date:** 12/23/96
David K. Morris, Superintendent
Olympic National Park

Concur: _____ **Effective Date:** 12/23/96
William C. Walters, Deputy Field Director
Pacific West Field Area

Approved: _____ **Effective Date:** 12/23/96
Stanley T. Albright, Field Director
Pacific West Field Area