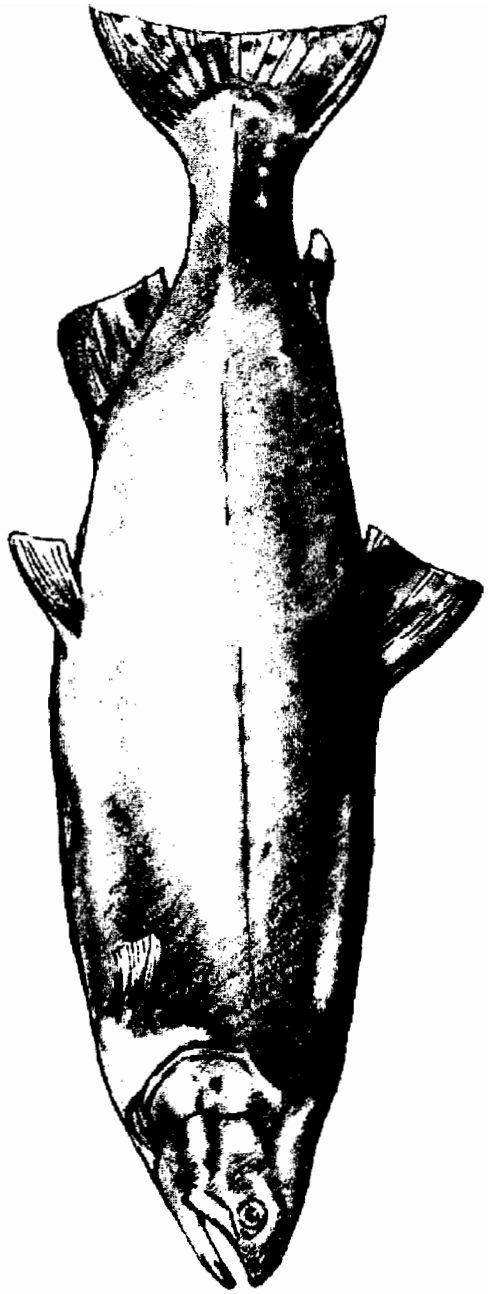


Chapter VII—Consultation and Coordination

PUBLIC INVOLVEMENT

Participation by the public and by State, Federal, County, and local entities was an integral part of plan formulation and evaluation for the JCWMIS. This participation reflects the high level of interest in the Rogue River and its uses. The public involvement program was designed to address requirements of Federal planning regulations and NEPA.

In early 1987, various departments of Josephine County and the County Commissioners appealed to the Commissioner of Reclamation to initiate a water management study for the County. In 1988, Reclamation initiated the JCWMIS in cooperation with Josephine County and the GPID. A wide range of local and environmental groups including the city of Grants Pass, the Izaak Walton League, WaterWatch of Oregon, and others showed support for the study. Further support was sought in 1990, at which time the NMFS and the American Fisheries Society agreed to participate in the study.

Public involvement activities were somewhat complicated by two events in 1990—issuance of a temporary water right permit to GPID and a significant reduction in participation by Josephine County because of budget restrictions. A draft of the temporary water right permit, made available in 1989, showed that the permit would be conditional on several factors. These included formation of a Permit Oversight Committee (POC), conducting studies of water conservation and other potentials, and annual progress reports to the Oregon Water Resources Commission. As a result of these changes, GPID and the POC became the central focus for public involvement activities for the JCWMIS.

The general public and cooperating agencies took part in the initial scoping phase, and a public involvement program was developed early and revised as needed. Some public involvement activities focused exclusively on fish passage and some focused exclusively on water conservation and facilities management. Most public involvement activities, however, involved an intermix of interests and concerns. GPID developed a public involvement program early in the study and, along with the POC, has carried out much of the public involvement since 1990. POC meetings were open to the public.

POC Members

The POC included the representatives of the following:

- GPID
- A non-voting member of the GPID
- City of Grants Pass
- Josephine County
- ODFW
- OWRD
- Bureau of Reclamation
- Natural Resources Conservation Service
- WaterWatch of Oregon

Agencies

The principal agencies that provided information or participated in the study were:

Federal: Reclamation, Bureau of Land Management (BLM), USFWS, NMFS, NRCS, and Forest Service
State: ODFW and OWRD
Local: GPID, city of Grants Pass, Jackson County, and Josephine County

Other Entities

Several environmental or other specific interest groups were actively involved in study activities or provided information. These include the following: American Fisheries Society, Izaak Walton League, Rogue River Flyfishers, and WaterWatch of Oregon.

General Activities

Much of the public involvement activities consisted of telephone or in-person contacts with individual representatives of various interests. Other activities often involved small group meetings. Many of these meetings and contacts were made to coordinate study activities, discuss study progress and findings, and to answer general questions. As an example, the Reclamation planning team met with special interest groups and private

citizens to discuss the JCWMIS and tour GPID facilities in 1989. GPID made numerous mailings to its patrons, appeared on radio shows to answer questions, and placed informational material in the local newspaper.

Reclamation prepared a progress report on the fish passage portion of the JCWMIS which was released to study participants and the interested public in July 1992.

Major public involvement activities included public meetings held in February and October of 1991 and in October 1993. Newsletters were sent by the POC to GPID patrons and to residents around the seasonal lake in November 1990 and in July 1991. GPID sent newsletters to their patrons in September 1991, March 1992, and November 1992. The planning report/draft environmental statement was distributed for public and agency review and comment in December 1994 and a public hearing was held in Grants Pass in February 1995. These activities provided opportunity for public comment on all aspects of the fish passage portion of the JCWMIS.

COORDINATION WITH FEDERAL AND STATE FISH AND WILDLIFE AGENCIES

The JCWMIS was closely coordinated with USFWS, ODFW, and NMFS. These agencies participated in identification of fish passage issues, fisheries and fish habitat in the area, and updating other information. USFWS, in cooperation with the NMFS and the ODFW, prepared a Planning Aid Memorandum in April 1990 and a draft Fish and Wildlife Coordination Act Report in 1994. ODFW provided a position paper on alternatives to GPID in December 1993. NMFS and USFWS were consulted and provided information on endangered species.

Fish and Wildlife Coordination Act Report

Findings of the Draft Fish and Wildlife Coordination Act Report were used in determining monetary and other fish and wildlife benefits of the alternatives (a copy of the Final report is included as Attachment C). The USFWS recommends that:

- Reclamation should seek authorization to remove Savage Rapids Dam and replace it with pumping plants.

- Implementation should be on an accelerated time frame.
- Funding should be nonreimbursable because of the substantial benefits to anadromous fish.
- The construction schedule should be closely coordinated with USFWS, ODFW, and NMFS.

Oregon Department of Fish and Wildlife

In December 1993, ODFW released a "position paper" to GPID (see Attachment D). ODFW indicated that:

- Their preferred alternative is dam removal.
- Replacement of fish passage structures would be acceptable provided that state-of-the-art passage structures were installed and properly maintained and operated.
- ODFW would not support any alternative that proposes to modify existing fish passage and protective structures.

Endangered Species Consultation

Consultation with the USFWS is required under section 7 of the Endangered Species Act. As an initial step in this consultation, Reclamation requested a list of threatened and endangered species from both the USFWS and the NMFS. Two species listed as threatened—bald eagle and northern spotted owl—were included in the list. In addition, there are several candidate species found in the area.

This Planning Report/Environmental Statement (PR/ES) is intended to serve as Reclamation's biological assessment of the potential effects of the alternatives on listed species. (An assessment is required under the ESA.) As indicated elsewhere, Reclamation has determined that none of the alternatives would have an effect on listed species and would have no effect on candidate species. The effects of the alternatives on anadromous fish undergoing status review or proposal for listing would be beneficial as discussed in more detail elsewhere in this document.

CULTURAL RESOURCES CONSULTATIONS

Cultural resource consultations were initiated in the 1970's when interim fish passage improvements were proposed. Findings at that time indicated that all of the affected area had been highly disturbed and it was unlikely that any cultural resources would be found. For that reason, a cultural resource survey was not needed. Areas that would be affected by implementation of the action alternatives identified in this document have been further subject to disturbance due to construction and OM&R activities since the 1970's. As a result, a cultural resource survey is not considered necessary for implementation of either action alternative. If cultural resources are found during construction, the SHPO would be consulted and appropriate actions would be taken to preserve or document any resources found.

A Reclamation historian researched the history of Savage Rapids Dam and consulted with the GPID and historical societies of Josephine and Jackson Counties. In 1991, an interpretive historic report on the dam was submitted to the SHPO who concurred in the assessment that Savage Rapids Dam was not eligible for listing in the National Record of Historic Places (see attachment H).

INDIAN TRUST ASSETS

The United States has a trust responsibility to protect and maintain rights reserved by or granted to American Indian tribes or Indian individuals by treaties, statutes, and executive orders. In 1993, the Department of the Interior and Reclamation established a policy of avoiding adverse effects to Indian Trust Assets (ITA's) where possible and assessing potential impacts to ITA's as a part of NEPA compliance policy. ITA's are defined as legal interests in property held in trust by the United States for Indian tribes or individuals, or property that the United States is otherwise charted by law to protect. Included are lands, minerals, hunting and fishing rights, water rights, and instream flows.

The public involvement program related to scoping and developing alternative actions to improve fish passage at Savage Rapids Dam were open to all public interests. No ITA's were identified through the public involvement program. A survey of lands that could be affected by the alternatives found that none of those lands were owned by Native

Americans. Consultation with the Bureau of Indian Affairs, indicates that there are no known ITA's in the Rogue River basin.

An assessment of impacts to ITA's is not needed because there are no identified ITA that would be affected.

RECREATION CONSULTATIONS

A Reclamation recreation specialist toured the project area and consulted with Josephine and Jackson County Parks Departments, Josephine County Planning Department, BLM, and OWRD on recreation opportunities and the use of the seasonal impoundment and adjacent lands. The general consensus of the various agencies was that the alternatives would have negligible impacts on recreation.

REGULATORY COMPLIANCE

This document was prepared in compliance with the National Environmental Protection Act of 1969 (Public Law 91-190) and current regulations and guidelines established by the Department of the Interior and Reclamation. A Notice of Intent to prepare an environmental statement was published in the *Federal Register* on July 26, 1993, page 39834.

It is the intent of this document to comply with other applicable laws and Executive Orders. This section discusses some of the applicable legislation.

National Historic Preservation Act (Public Law 89-665)

This act provides for the maintenance of an expanded program to preserve historic properties throughout the United States. It provides for an Advisory Council on Historic Preservation with the responsibility to review and comment on all Federal actions that affect properties eligible for listing or already listed in the National Register of Historic Places. Subsequent amendments designated the SHPO as the individual responsible for administering programs for the state. Consultation with the SHPO has been concluded.

Clean Water Act (33 U.S.C. 1251 et seq.)

This act aspires to "maintain the chemical, physical, and biological integrity of the Nation's water" by eliminating pollutant discharge into navigable waters of the United States. It established an effluent limitation and discharge permitting program. It required owners/operators of each point source to obtain a permit and monitor and maintain effluent records.

Section 404 of the Act establishes a permit program administered by the Corps to regulate discharge of dredge and fill materials into United States waters. Required permits, including a National Pollutant Discharge Elimination System permit, would be obtained before construction through coordination with EPA, the State of Oregon, and the Corps.

Fish and Wildlife Coordination Act of 1958 (Public Law 85-624)

This act provides for equal consideration of wildlife conservation in coordination with other features of water resource development programs. The Act requires that any plans to impound, divert, control, or modify any stream or other body of water must be coordinated with the USFWS and state fish and wildlife agency through consultation directed toward the prevention of fish and wildlife losses and development/enhancement of these resources. Coordination with the USFWS and ODFW have been completed in compliance with the intent of this act and a final Fish and Wildlife Coordination Act Report has been received. (See also "Fish and Wildlife Coordination Act Report" in this chapter.)

Endangered Species Act of 1973 (Public Law 93-205)

This act provides for the protection of animal and plant species currently in danger of extinction (endangered) and those species that may become so in the near future (threatened). Section 7 of the Act sets forth the procedural requirements to ensure that Federal actions do not adversely impact threatened or endangered (T&E) species or their critical habitats. First, a determination is made whether the project area contains any T&E species, and then a biological assessment of impacts on the T&E species is made. A copy of the biological assessment is transmitted to the USFWS or NMFS

office having jurisdiction. If a "may affect" determination is made, a request to enter into formal consultation accompanies the biological assessment. The USFWS or NMFS evaluates the assessment and responds back to Reclamation with a biological opinion or a request for additional information or time within a 60-day period.

The appropriate fish and wildlife agencies have provided Reclamation with a list of threatened and endangered species found in the area, and Reclamation has made an assessment of potential impacts. This PR/ES serves as Reclamation's biological assessment that neither of the action alternatives is likely to adversely affect listed species and would have a beneficial effect on all fish species through improved fish passage.

Wild and Scenic Rivers Act of 1968 (Public Law 90-542)

Selected rivers are placed in the National Rivers Inventory to be preserved in a free flowing condition and to protect their local environments. Currently, portions of the Rogue River have been placed in the National Rivers Inventory. The Wild and Scenic Rivers Act precludes Federal assistance to water resource projects that would invade or unreasonably diminish the scenic, recreational, and fish and wildlife values of a wild and scenic river. In addition, the State of Oregon has placed portions of the Rogue River in the State inventory of wild and scenic rivers.

Reclamation has assessed potential impacts. This PR/DES served as an assessment that none of the action alternatives would invade or have a significant negative effect on the Rogue River. The only significant or measurable effect that either action alternative would have on the Rogue River is to enhance salmon and steelhead. A Section 7(a) Determination by the U.S. Forest Service and the BLM concurs with this assessment (see attachment J).

Executive Order 11988 (Floodplain Management, 1977)

Federal agencies are required to reduce the risk of floodplain loss; minimize the impact of floods on human safety, health, and welfare; and restore and preserve the natural and beneficial values provided by floodplains in carrying out specific actions. For water diversion projects,

there is no alternative to the construction of some of facilities within the floodplain. Reclamation addresses this executive order, in part, by locating most facilities above the 100-year flood elevation and by designing other structures to withstand the 100-year flood. The Preferred Alternative would slightly reduce potential damage and the Dam Retention Alternative would have no effect on flood damage potential.

Executive Order 11990 (Protection of Wetlands, 1977)

This executive order provides for minimal destruction, loss, or degradation of wetlands, and for action to preserve and enhance the values of wetlands by Federal agencies in fulfilling land management responsibilities. The pool formed by Savage Rapids Dam is a seasonal pool raised for 6 months and lowered for 6 months. For that reason, there are no permanent wetlands in the affected area that result from the pool or would be eliminated by removal of the dam. None of the alternatives would have a measurable effect with regard to wetlands.

DISTRIBUTION LIST

Copies of this PR/FES were distributed to all of the agencies, organizations, and individuals listed in this section. In December 1994, the PR/DES was distributed for review and comment to agencies, organizations, and individuals. The open period for comment was from December 15, 1994 to March 20, 1995. A public hearing for oral testimony was held on February 16, 1995 in Grants Pass, Oregon, and the period until February 27, 1995 was open for written testimony of those who could not attend the hearing or wished to supplement their oral remarks. The following marks are used in the distribution list to show receipt of the PR/DES, written comment on the PR/DES, and testimony for the hearing:

✓ Received a copy of the PR/DES from Reclamation
✎ Provided written comments on the PR/DES
⊘ Provided oral or written testimony for the hearing record

U.S. Congressional Delegation

✓ Honorable Mark Hatfield, U.S. Senate, Washington DC; Portland OR; Salem OR
✓ Honorable Bob Packwood, U.S. Senate, Washington DC; Portland OR
✓ Honorable Wes Cooley, House of Representative, Washington D.C., Medford OR
✓ Honorable Peter A. DeFazio, U.S. House of Representatives, Washington DC; Eugene OR; Coos Bay OR
✓ Honorable Robert F. Smith, House of Representatives Washington D.C.; Medford OR, Salem OR

State Delegation

✓ Honorable John Kitzhaber, Governor, State of Oregon, Salem OR

✓ Honorable Brady Adams, Oregon State Senate, Grants Pass OR
✓ Honorable Lenn L. Hannon, Oregon State Senate, Ashland OR

✓ Honorable Eldon Johnson, Oregon House of Representatives, Medford OR
✓ Honorable Bill Markham, Oregon House of Representatives, Riddle OR
✓ Honorable Bob Repine, Oregon House of Representatives, Grants Pass OR
✓ Honorable John Watt, Oregon House of Representatives, Medford OR

Federal Agencies

✓ Advisory Council on Historic Preservation, Washington DC
✓ Bonneville Power Administration, Portland OR, Boise, ID
✓ Bureau of Indian Affairs, Washington DC
✓ Bureau of Land Management, Medford OR
✓ Council on Environmental Quality, Washington DC
✓✎ Environmental Protection Agency, Region, Seattle WA
✓ Environmental Protection Agency, Washington DC
✓ Federal Energy Regulatory Commission, Washington DC
✓✎ National Marine Fisheries Service, Portland OR
✓✎ National Park Service, Seattle WA
✓ National Park Service, Washington D.C.; Denver CO
✓ Northwest Power Planning Council, Portland OR
✓ Natural Resources Conservation Service, Grants Pass OR; Bend OR
✓ U.S. Army Corps of Engineers, Portland OR

✓ U.S. Army Corps of Engineers, Lost Creek Project, Trail OR
✓ U.S. Fish & Wildlife Service, Portland OR
✓ U.S. Fish & Wildlife Service, Washington DC
✓ U.S. Fish and Wildlife Service, Ecological Services, Sacramento CA
✓ U.S. Forest Service, Rogue River National Forest, Medford OR
✓ U.S. Forest Service, Siskiyou National Forest, Grants Pass OR

Indian, State, and Other Agencies

✓ Lower Elwha S'Klallam Tribe, Director Natural Resources, Port Angeles WA
✓ Oregon Department of Fish & Wildlife, Portland OR
✓ Oregon Department of Fish & Wildlife, Central Point OR; Grants Pass, OR
✓ Oregon Department of Fish & Wildlife, Watershed Health Team, Grants Pass OR
✓ Oregon Department of Transportation, Roseburg District Office, Roseburg OR
✓ Oregon Parks and Recreation Department, Salem OR
✓ Oregon Water Resources Commission, Salem OR
✓ Oregon Water Resources Department, Salem OR; Grants Pass OR

Local Entities

✓ City of Grants Pass, Mayor, Grants Pass OR
✓ City of Grants Pass, City Manager, Grants Pass OR
✓ City of Grants Pass, Utility Manager, Grants Pass OR
✓ City of Rogue River, Mayor, Rogue River OR
✓ Grants Pass Chamber of Commerce, Grants Pass OR
✓ Grants Pass Irrigation District, Grants Pass OR
✓ Jackson County Commission, Medford OR
✓ Jackson County Parks & Recreation Department, Medford OR
✓ Josephine County Commission, Grants Pass OR
✓ Josephine County Parks Department, Grants Pass OR
✓ Josephine County Planning Office, Grants Pass OR
✓ Josephine County Water Resources Department, Grants Pass OR
✓ Josephine Soil and Water Conservation District, Wolf Creek OR
✓ Rogue River Chamber of Commerce, Rogue River OR
✓ Rogue Valley Council of Governments, Central Point OR

Libraries

✓ Josephine County Public Library, Grants Pass OR
✓ Medford Public Library, Medford OR
✓ Rogue River Public Library, Rogue River OR

Radio and TV Media

✓ KAGI Radio News - 930, Grants Pass OR
✓ KAJO - 1270, Grants Pass OR
✓ KDRV - Channel 12, Medford OR
✓ KFMJ - FM 96.9, Grants Pass OR
✓ KOBI - Channel 5, Medford OR
✓ KTVL - Channel 10, Medford OR

Newspapers

✓ Medford Mail Tribune, Medford OR
✓ Grants Pass Daily Courier, Grants Pass OR
✓ Rogue River Press, Rogue River OR

Organizations and Individuals

✓✎ American Fisheries Society, Oregon Chapter, Corvallis OR; Bethesda MD
✓✎ American Rivers, Washington DC; Seattle WA
✓ American Water Resources Association, Bethesda MD
✓ Bitterroot Native Growers, Corvallis MT
✎ Center for International Environmental Law, Washington DC
◴ Curry Guides Assn., Grants Pass OR
✓ David J. Newton Associates, Inc., Portland OR
✓ Defenders of Wildlife, Washington DC
✓ Ducks Unlimited, Long Grove IL
✓ Environmental Defense Fund, Inc., New York NY
✓ Foster Wheeler Environmental, Bellevue WA
✓ Friends of the Earth, Seattle WA
✓ Greystone Development Consultants Inc., Englewood CO
✓ Harza NW, Bellevue WA
✓ Hydrowire Newsletter, Kansas City
✎ International Rivers Network, Berkeley CA

✓ Izaak Walton League of America, Grants Pass OR
✓✎ Izaak Walton League of America, Portland OR
⏲ Josephine County Farm Bureau, Grants Pass OR
✎ Kalmiopsis Audubon Society of Curry County, Port Orford OR
ManTech Inc., Corvallis OR
✓ Meyer Resources, Inc., Metchosin BC
✎ Morrison's Rogue River Lodge, Merlin OR
✓ National Audubon Society, New York NY
✓ National Water Resources Association, Arlington VA
✓ National Wildlife Federation, Washington DC
✓ Natural Resources Defense Council, Inc. New York NY
✎ Northwest Environmental Defense Center, Portland OR
✓ Northwest Steelheaders, Milwaukee OR
✓ Oregon Guides & Packers, Gold Beach OR; Eugene OR
⏲ Oregon Guides and Packers Assn., Grants Pass OR
✎⏲ Oregon Natural Resources Council, Portland OR
✓ Oregon Rivers Council, Eugene OR
✓ Oregon Trout, Portland OR
✓⏲ Oregon Water Resources Congress, Salem OR; Ashland OR
✓ Pacific Fisheries Management Council, Portland OR
✓✎ Pacific States Marine Fisheries Commission, Gladstone OR
✎ Piazza & Piazza, Medford OR
✎ Randy Nelson's Lower Rogue Canyon Outfitters, Central Point OR
✎ River Trips Unlimited, Medford OR
✓ Robert E. Meyer Consultants Inc., Beaverton OR
✓✎ Rogue Flyfishers, Medford OR
✓✎ Rogue River Guides Association, Medford OR
Rogue River Guides Association, Grants Pass OR
⏲ Rogue River Wilderness, Inc., Grants Pass OR
⏲ Sierra Club, Oregon Chapter, Monmouth OR
✓ Sierra Club, San Francisco CA
✓ Sierra Club, Rogue Group, Medford OR
✓ Siskiyou Audubon, Grants Pass OR
S.P. Cramer & Associates, Gresham OR
✓ Stone and Webster, Boston MA
✓ STRA, Arlington VA
✓ Ted Sorenson Engineers, Idaho Falls
✓ The Nature Conservancy, Arlington VA
✓ The Wildlife Society, Bethesda MD
✓ The Fund for Animals, Inc., New York NY; Silver Spring MD
✎ Three Rivers Watershed Council, Inc., Rogue River OR
✓ Total Quality NEPA, Superior CO
✓ Trout Unlimited, Vienna VA

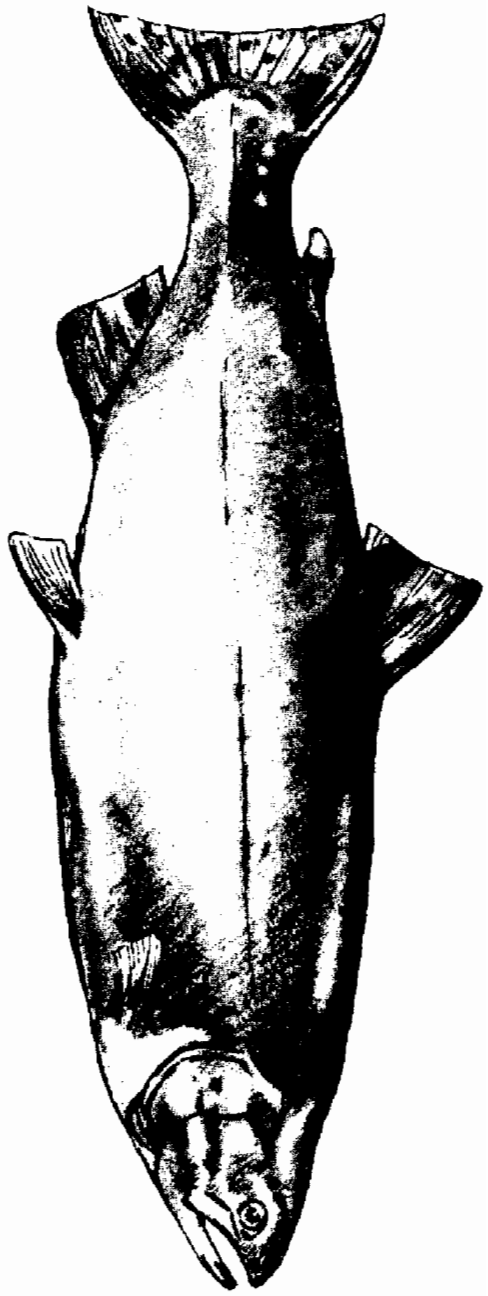
✓ Trout Unlimited, Middle Rogue Steelhead Chapter, Grants Pass OR
✓ WaterWatch of Oregon Inc., Portland OR
✓ WaterWatch, Medford OR; Hillsboro OR
✓ Wilkinson Barker, Washington DC
✓ Woodward-Clyde, Oakland CA

✓ Mr. Wilfred Allington, Englewood CO
✓ Mr. Fred Ayer, Portland ME
✓ Mr. James W. Ayling, Grants Pass
✓ Mr. William Bailey, Grants Pass OR
Ms. Jeanne Y. Balt, Grants Pass OR
Mr. Dennis Becklin, Grants Pass OR
Ms. Lucy Bennett, Grants Pass OR
Mr. Lynn and Ms. Della Berntson, Rogue River OR
Mr. Burton Blackwell, Grants Pass OR
Mr. Forest Bradfield, Grants Pass OR
Mr. Paul Brandon, Grants Pass OR
Mr. William H. Brecount, Rogue River OR
Mr. Gerald Briggs, Grants Pass OR
Ms. Esther Bristol, Grants Pass OR
Ms. Helen E. Brown, Medford OR
Mr. Clint Brumitt, Central Point OR
✓ Mr. Bruce Buckmaster, Grants Pass, OR
Ms. Robin B. Carey, Gold Beach OR
Ms. Signe M. Carlson, Grants Pass OR
Mr. Michael-Marie Chaldu, Grants Pass OR
Mr. E. Kendall Clarke, Ashland OR
Ms. Mary E. Cochran, Grants Pass OR
Mr. Jack and Bonnie Cromer, Grants Pass OR
✓ Mr. William Cross, Ashland OR
Ms. Sandrya Danehy, Medford OR
✓ Ms. Shannon Davis, The Research Group, Corvallis OR
Ms. Edna M. DeCarlo, Grants Pass OR
Mr. Dennis Dedrick, Medford OR
Mr. David Dedrick, Medford OR
✓ Mr. Royal Deland, Rogue River OR
Mr. Donald K. Denman, Medford OR
Mr. Robert W. Dolson, Grants Pass OR
✓ Ms. Shannon Donnelley, Olympia WA
✓ Mr. Walter Doucett Sr., Rogue River OR
✓ Ms. Jacalyn Elder, Tucson AZ
Mr. George Epperson, Grants Pass OR
Ms. Myra Erwin, Ashland OR

Ms. Ruth Feirich, Grants Pass OR
Mr. John E. Ferris, Medford OR
Mr. John Frewing, Portland OR
Mr. Phil Friesen, Grants Pass OR
Ms. Louise Ramsey Fuller, Grants Pass OR
Ms. Mary C. Galwas, Grants Pass OR
Mr. Ken and Krystal Garrison, Grants Pass OR
Mr. Lloyd Gilbert, Grants Pass OR
Mr. Glenn M. Gray, Gold Hill OR
Mr. Don Greenwood, Grants Pass OR
Mr. Larry Griffin, Gold Hill OR
Mr. Robert Gross, Grants Pass OR
Mr. David M. Handley, Grants Pass OR
Mr. Eric Hartmann, Portland OR
Mr. Stephen G. Haskell, Ashland OR
Mr. Elvin E Hawkins, Rogue River OR
Ms. Claire Heil, Grants Pass OR
Ms. Mary Hepler, Merlin OR
Mr. Perry A. Higgins, Medford OR
Mr. Randy Hinke, Grants Pass OR
Mr. Frank Hirst, Ashland OR
Mr. Don Huberty, Grants Pass OR
Mr. Bob Hunter, Medford OR
Mr. Ron Jensen, Lakewood CO
Mr. Bob Jones, Merlin OR
Ms. Dorothy M. Jones, Grants Pass OR
Ms. Colleen Keller, North Kingstown RI
Ms. Betty Kellems, Grants Pass OR
Mr. Jerry Kl----, unknown
Ms. Alexandria Khoury, Grants Pass OR
Mr. and Mrs. Vernon Kirkbride, Cave Junction OR
Mr. L.H. Kirtley, Grants Pass OR
Ms. Vivian Kirtley, Grants Pass OR
Ms. Elaine Lake, Rogue River OR
Mr. James Lamp, Jr., Central Point OR
Ms. Lillian F. Law, Grants Pass OR
Mr. Arnold C. Law, Grants Pass OR
Mr. Kip Lombard, Ashland OR
Mr. Robert Loveless, Grants Pass OR
Mr. John MacDiarmid, Medford OR
Mr. Robert McElroy, Grants Pass OR
Mr. Douglas M. McGeary, Medford OR
Ms. Alice Mangil, Unknown

✓ Mr. Gregory T. Markey, Grants Pass OR
✎ Mr. Ronald Marrington, Gold Hill OR
✓ Mr. Louis Maurer, Grants Pass OR
✎ Mr. T.E. Mechem, Medford OR
⊘ Mr. Homer D. Meeds, Jacksonville OR
✓ Phil Meyer, Seattle WA
⊘ Ms. Sandy Millard, Grants Pass OR
⊘ Mr. James F. Moore Jr., Ashland OR
⊘ Mr. Bernard S. Moore, Medford OR
✓ Mr. Michael Murphy
✓ Mr. Patrick M. Murphy
✓ Mr. Richard Nawa, Grants Pass OR
✎ Ms. Edith Newby, Grants Pass Or
⊘ Ms. Dorris Newman, Grants Pass OR
⊘ Ms. Jean Nightingale, Grants Pass OR
✓ Mr. Mel Norrick, Merlin OR
⊘ Ms. Annette Olson, Grants Pass OR
⊘ Mr. Andy Olson, Grants Pass OR
⊘✎ Ms. Geneva Oran, Grants Pass OR
✎ Mr. Chris Orsinger, Eugene OR
✎ Mr. Stephen K. Parsons, Dallas OR
✎ Mr. Jon Pearson, Talent OR
✎ Mr. Kathy Peckham, Grants Pass OR
⊘ Mr. Bruce W. Peddicord, Grants Pass OR
✎ Ms. Alice L. Petty, Grants Pass OR
✎ Ms. Juanita Pickett, Grants Pass OR
⊘ Mr. Gene Reedy, Grants Pass OR
✓ Mr. Joe Rohleder, Waldport OR
⊘ Mr. Hank Rogers, Ashland OR
⊘ Mr. Jack D. & Ms. Clarabell D. Russell, Grants Pass OR
⊘ Mr. Hal Schmoll, Grants Pass OR
✓ Ms. Jean Shaffer, Monmouth OR
⊘ Mr. John J. Shaw, Grants Pass OR
⊘ Mr. Iris Shores, Grants Pass OR
⊘ Mr. Dale M. Smith, Grants Pass OR
⊘ Mr. Eric Smith, Jacksonville OR
Ms. Floy Ann Smith, Grants Pass OR
⊘ Ms. Gloria D. Smith, Portland OR
✎ Mr. Mark H. Smith, Tigard OR
⊘ Mr. Bob Staal, Ashland OR
⊘ Mr. Eric Staal, Ashland OR
⊘ Mr. Charles Stevens, Grants Pass OR
⊘ Mr. Willis Stiehl, Rogue River OR

✓ Mr. Bob Steimer, Grants Pass OR
⊘ Mr. Mark Swisher, Ashland OR
✓ Mr. Edward S. Syrjala, Centerville MA
⊘ Mr. Robert Taylor, Grants Pass OR
⊘ Ms. Pella Taylor, Grants Pass OR
⊘ Mr. John Tefteller, Grants Pass OR
✎ Mr. Steven Tichenor, Grants Pass OR
⊘ Mr. Dick Twogood, Grants Pass OR
✓⊘ Mr. Irv Urie, Medford OR
✎ Mr. Hank Vann, Grants Pass OR
⊘ Mr. Don and Ms. Nancy Vogel, Grants Pass OR
✓ Mr. Michael L. Walker, Medford OR
⊘ Mr. Bob Watts, Grants Pass OR
✎ Mr. Charles Weaver, Grants Pass OR
⊘ Mr. Larry and Ms. Repita Webb, Williams OR
✎ Ms. Kelley Webb, Portland OR
✓ Mr. Joe Whalen, Grants Pass OR
⊘ Ms. Kathleen Whisonant, Grants Pass OR
✎ Ms. Sarah M. Willson, Wolf Creek OR
✓ Mr. M. John Youngquist, Water Resources Consultant, Roseburg OR



Chapter VIII—Formulation and Evaluation

GENERAL PLANNING CRITERIA

This investigation was conducted according to the *Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies* (P&G) (Water Resource Council 1983). Formulation and evaluation of alternatives followed Reclamation policy and procedures for implementing NEPA and other applicable Federal rules and regulations. The overall Federal objective for such planning is to contribute to national economic development consistent with protecting the Nation's environment.

Alternatives were formulated in a systematic manner to ensure that a full range of reasonable alternatives was identified. Under the P&G, one alternative is developed that maximizes net national economic development benefits to the Nation (national economic benefits exceed costs). Plans which address State and local concerns or emphasize other functions may also be formulated. A no action plan is identified which describes conditions that would exist in the future if the current planning effort does not result in implementation of a development plan. The no action plan also serves as a base from which to measure the benefits and impacts of the alternative development plans.

Each identified alternative was tested against four criteria to determine if it is viable. The four criteria are:

- Completeness—the extent to which a plan accounts for all investments or actions to ensure realization of planned effects.
- Effectiveness—the extent to which a plan alleviates specified problems.
- Efficiency—the extent to which a plan is responsive to the most cost-effective means of alleviating specified problems while being consistent with protecting the Nation's environment.
- Acceptability—the plan is workable with respect to State and local entities and the public and is compatible with existing laws, regulations, and public policies.

After viable alternatives were formulated they were evaluated and compared through a four-account system that consists of:

1. The national economic development account which displays changes in the economic value of the national output of goods and services.

2. The environmental quality account which displays nonmonetary effects on significant natural and cultural resources.

3. The regional economic development account which displays changes in the distribution of regional economic activity.

4. The social well-being account which displays plan effects not reflected in the other accounts.

FORMULATION PROCESS

Potential actions for improving fish passage at Savage Rapids Dam have been under study and alternatives identified since the 1970's. These alternatives were presented in a variety of publications for public review and were commonly discussed among fishery resource agencies, water resource agencies, and special interest fishery and environmental groups. Alternatives from earlier studies were reviewed as part of the formulation process and newer technology and experience gained over the intervening years were applied in reformulating and modifying the alternatives. All of the formulation activities were under the direction or review of the POC (see Consultation and Coordination chapter).

Nonstructural Alternatives

A viable nonstructural alternative was not identified, and indeed, is not possible. Since the focus of this study is a problem caused by man-made structures, any viable alternative would require structural changes of some kind.

Non-viable nonstructural alternatives could be formulated but there was no attempt to do so in this study. Any action that would ignore the anadromous fishery or that would not significantly improve fish passage at Savage Rapids Dam would be unacceptable.

No Action Alternative

A No Action Alternative was formulated to (1) identify anticipated conditions including the needs expected to exist in the future and (2) to provide a baseline for evaluation of the action alternatives. Identification and evaluation of a No Action Alternative is also required by NEPA. The No Action Alternative assumes that the current study would end, and that an action alternative would not be implemented. In formulating a No Action Alternative, Reclamation recognized that the continued loss of salmon and steelhead at Savage Rapids Dam is unacceptable to Federal, State, and local entities; private organizations; and many individuals. The major uncertainties are (1) the action(s) that would be taken and (2) the timeframe of that action.

For this analysis, it was assumed that salmon and steelhead losses at Savage Rapids Dam would continue at current or near current levels for up to 20 years. As a result, the analysis of benefits and costs for this study are based on a 20-year period in contrast to a 100-year period (life of project facilities) normally used with Reclamation projects.

Structural Alternatives

The purpose of formulating more than one alternative is to address the varying concerns and interests of the publics that may be affected. For example, under the P&G criteria one alternative should maximize economic benefits to the Nation. Other alternatives may be formulated to better address local or State concerns. However, an alternative must pass the four criteria of viability to be considered. For example, an alternative that does not substantially reduce salmon and steelhead losses would not meet the effectiveness criteria and would not be considered.

Two structural alternatives were identified that meet the four criteria of viability.

- Remove the dam and build pumping plants along the river to supply GPID with irrigation water (Preferred (Pumping) Alternative).

- Redesign and replace existing fish ladders and screens using state-of-the-art technology and replacement of irrigation pumping facilities (Dam Retention Alternative).

Optional features and variations of the pumping alternative were identified and discussed at length in a 1992 Progress Report (Reclamation 1992a). These options generally relate to pump sizes and locations. Consideration and selection among the options were based primarily on irrigation water management considerations and costs as these options were considered equivalent for fish passage considerations. The final arrangement of pumps and pipes discussed in the preferred alternative was selected after cost comparisons indicated that two new pumping facilities, one on each side of the river, with a connecting overhead power transmission line, would be less costly than one pumping site on the south side of the river and a buried pipe extending across the river to supply the Tokay Canal and Evans Creek Lateral. The option of three equal-sized pumps versus two equal-sized pumps per canal served was selected on the basis of increased operational flexibility.

A potential recreation element was identified for the pumping alternative but is not proposed as a feature in this document. This option consists of constructing a challenging river course for rafts, drift boats, and kayaks in the river reach where the dam is removed. The design would depend on the as-yet-unknown configuration of Savage Rapids, but could be designed to allow jet boat passage or to be a barrier to jet boats. This option appears to be beyond the scope of this study. Future consideration of this action would not be precluded if the pumping alternative is implemented.

Formulation Concerns

At the outset of this study, it was clear that an acceptable alternative must include (1) improved anadromous fish passage and (2) facilities for GPID water diversion. Although there were elements of the public that proposed alternatives that included only one function, these alternatives were considered unacceptable and not developed or analyzed.

The range of possible diversion options is limited to retaining Savage Rapids Dam for gravity diversion and hydraulic pumping power or installing electric powered pumps. Concepts for improving fish passage were limited to: removal of Savage Rapids Dam, construction of new fish passage and protective facilities, and modification of current fish passage and protective facilities. State and Federal fish and wildlife agencies indicated that the latter would not be acceptable.

As a result, it was clear that there could be only two viable alternatives: (1) remove Savage Rapids Dam and construct some arrangement of pumping plants and (2) retain Savage Rapids Dam and replace current fish passage and protective facilities and hydraulic pumps with new facilities.

Concerns related to retaining and to removing Savage Rapids Dam are rather polarized. Some people want to retain the dam, primarily for the flatwater recreation benefit of the seasonal reservoir. Federal and State fish and wildlife agencies, environmental groups, and many local interests want the dam removed. These views were considered during the formulation process and major points of discussion are summarized below.

Dam Removal

Major concerns expressed by the public on dam removal were:

- Effect on recreation values with elimination of the seasonal lake created by dam operations.
- Effect of sediment release on fish habitat downstream.
- Effect of long-term power costs for pumping.
- Cost sharing responsibilities.

Return of the Federal investment was an expressed concern. Analysis by Reclamation indicated that the Federal investment would be recovered in about 10 years with dam removal (Preferred Alternative) assuming the current Federal discount rate of 8 percent.

Dam Retention

The major concern related to retention of the dam is the future of GPID and the long-term integrity of the action. Rapid urban development has significantly altered the composition of GPID patrons. Past indifference and lack of cooperation between developers and administering officials have left GPID with a number of patrons who are unable to receive water. In some areas, right-of-way access to service distribution systems has been severely hampered. Recently, State legislation has made it possible and more affordable for all irrigation district patrons (those who receive water and those who do not) to buy out of irrigation districts if they feel their

needs are not being met. These actions increase uncertainty and the potential for an irrigation district to suffer financial difficulties.

One concern is that immediate action would be needed to ensure safe fish passage if GPID should become insolvent in the future. Another concern is that the Federal cost of improving fish passage while retaining the dam would not be recovered. Reclamation analysis indicates that based on the monetary costs and benefits of the Dam Retention Alternative, the Federal Government would recover its investment in about 15 years assuming the current Federal discount rate of 8 percent.

Some of these concerns could be alleviated if a vigorous and forceful program were developed to:

- Market GPID's services.
- Improve operational efficiencies.
- Achieve consistent cooperation between developers and city and county administrators where GPID services are involved.
- Enforce laws that protect GPID's interests.

COMPARATIVE ANALYSES

An abbreviated four-account display of the two action alternatives—pumping alternative (Preferred Alternative) and the Dam Retention Alternative—is presented here. Significant differences exist between the two action alternatives primarily in the National Economic Development Account and salmon and steelhead resources of the Environmental Quality Account. Meaningful differences between the alternatives in regional economic development, other environmental quality categories, and other social effects are not apparent from the available data.

Concern has been expressed by the public that data on fish losses and values are out of date and new studies should be conducted. Another concern expressed is a lack of data on the potential effects on local business with removal of the dam and loss of the seasonal reservoir. Reclamation considers existing data sufficient for decisionmaking.

National Economic Development (NED)

The NED account describes beneficial effects of a plan in terms of (1) the economic value of the national output of goods and services, (2) the value of output resulting from external economies, and (3) the value associated with the use of otherwise unemployed or under-employed labor resources. Adverse effects of the plan are described in terms of opportunity costs of resources used in project investment and operation.

In this analysis, benefits from external economies and the value associated with unemployed or under-employed labor resources were not identified.

The NED benefits of the Preferred Alternative and the Dam Retention Alternative are based on an increase in the monetary value of commercial and sport harvest of the salmon and steelhead fishery. This increase stems from an increase in salmon and steelhead escapement at Savage Rapids Dam of 22 percent with the Preferred Alternative and about 17 percent with the Dam Retention Alternative. NED effects are summarized in table VIII-1

Table VIII-1.—National economic development account

Component	Preferred Alternative (Pumping Alternative)	Dam Retention Alternative
Beneficial effects[1]		
Fish enhancement	$4,998,600	$3,870,900
Adverse effects (costs)[1]		
Project investment	$1,350,000	2,173,800
Operation	233,700	104,800
Total	$1,583,700	$2,278,600
Benefit-cost ratio	3.2 to 1	1.7 to 1
Economic rate of return	23.2 percent	12.6 percent
Net annual benefits	$3,414,900	$1,592,300

[1]Annual equivalent using the 1994 Federal discount rate (8 percent) for a 20-year period.

Environmental Quality

The environmental quality account is a nonmonetary description of beneficial and adverse changes in the ecological, aesthetic, and cultural attributes of natural and cultural resources.

The primary long-term effect of the two action alternatives would be to increase the escapement of salmon and steelhead passing the current site of Savage Rapids Dam. The preferred alternative, in addition, would eliminate the seasonal reservoir. The 3.5 mile reach immediately upstream of Savage Rapids Dam would revert to a free flowing reach with permanent vegetation being reestablished next to the new high waterline. The site of the existing dam would revert to native vegetation. The alternatives would not affect any other geographical area. Except for effects on the salmon and steelhead, most effects of the action alternatives would be temporary short-term effects due to construction. Environmental effects are summarized in Table VIII-2.

Table VIII-2.—Environmental quality account

Category	Preferred Alternative (Pumping Alternative)	Dam Retention Alternative	No Action
Biological resources			
Salmon and steelhead	Escapement increase of 26,700	Escapement increase of 20,700	Continued loss at near current rate, possible listing as threatened or endangered
Resident fish	No measurable change, increased movement	No measurable change	No measurable change
Wildlife	Minor adverse impacts during construction. Insignificant long-term increase along river corridor	Minor negative impacts during construction	No change from present
Vegetation	Minor adverse impacts during construction. Small increase of vegetation along shoreline	Minor adverse impacts during construction	No change from present
Threatened and endangered species	No impact	No impact	No impact
Ecological systems			
Aquatic	Aquatic ecology of the 3.5-mile reach upstream from the dam would change to a typical riverine ecology. Aquatic productivity could increase slightly	No change from present	No change from present
Terrestrial	Slight improvement in streamside vegetation. No significant impact on existing vegetation.	No change from present	No change from present
Water quality	Slight decrease in quality during construction	Slight decrease in quality during construction	No impact
Air quality	Slight decreased during construction	Slight decrease during construction	No impact
Sound quality	Increased noise during construction with brief periods of intense noise. Slight increase in noise near operating pumping plants	Increased noise during construction with brief periods of intense noise.	No impact
Visual quality	Change from seasonal small reservoir view to permanent river view	No change from present	No change from present
Land quality	No significant change from present	No change from present	No change from present
Streams and stream systems	3.5 miles of the Rogue River changed from seasonal reservoir to free flowing year-round	No change from present	No change from present
Lakes and reservoirs	Loss of 110 acres of seasonal reservoir	No change from present	No change from present
Open spaces and greenbelts	Area formerly inundated seasonally would be developed over time resulting in some loss of open space	No impact	No impact
Cultural resources	No impact	No impact	No impact

Regional Economic Development (RED)

The RED account described beneficial effects in terms of NED benefits that accrue to the region, plus transfer of income to the region from outside the region, and increased regional employment. Negative effects are those transfers from the region to outside the region.

The primary effects of the two alternatives on the regional economy would be beneficial effects from construction and OM&R. Short-term and long-term effects on recreation, businesses, and property values were not quantified since significant or measurable changes are not anticipated with either action alternative.

All of the regional economic development effects identified for the two action alternatives are short-term temporary effects that result from construction. Construction impacts represent the initial dollar impact on the regional economy. Once spent, a given dollar within a regional economy may be respent a number of times resulting in a multiplier effect. For this analysis, the expenditure-based economic impacts for the construction area are determined in output (sales), total income or earnings (labor income: wages, salaries, and proprietors' income), and employment. Jackson and Josephine Counties are defined as the region for this analysis.

Construction impacts are short-term corresponding to the length of the planned construction as well as the distribution of spending across that period. This period is 5 years for the Preferred Alternative and 6 years for the Dam Retention Alternative. Table VIII-3 summarizes regional economic effect.

Table VIII-3.—Regional economic development account
(short-term construction impacts)

Item	Preferred Alternative (Pumping Alternative)	Dam Retention Alternative
Construction period	5 years	6 years
Construction expenditure (total)	$11,000,000	$17,000,000
Regional output (total)	$15,200,000	$23,900,000
Employment	120 jobs	190 jobs
Increased personal income (annual)	$2,205,000	$3,950,000
Increased total income (annual)	$4,266,000	$6,713,000

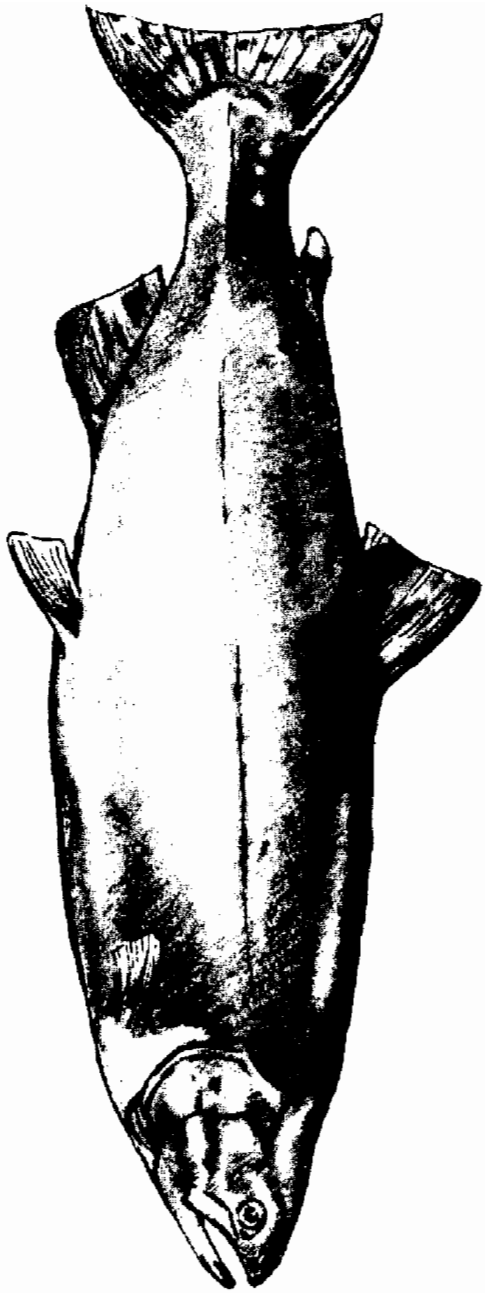
A local impact of the Dam Retention Alternative would be repayment of construction costs assigned to the GPID. The construction cost to be borne by the GPID totals $2,848,000. If financed over 30 years at 6 percent interest, this cost would increase the total of GPID's annual assessments by an estimated $207,000.

Other Social Effects

The other social effects account summarizes effects that cannot be satisfactorily quantified or described in the other three accounts. Included are urban and community effects; life, health and safety factors; displacements; long-term productivity; and energy requirements and conservation. Social effects of the alternatives accrue primarily from construction (short-term effects) and removal of Savage Rapids Dam including loss of the seasonal reservoir (long-term effects). Other social effects are summarized in table VIII-4.

Table VIII-4.—Other social effects account

Component	Preferred Alternative (Pumping Alternative)	Dam Retention Alternative	No Action
	Urban and Community		
Employment	Construction employment would provide about 120 jobs for 5 years	Construction employment would provide about 190 jobs for 6 years	
Income	Short-term increase in personal and other income. The few construction jobs would temporarily increase family income for those affected	Short-term increase in personal and other income. The few construction jobs would temporarily increase family income for those affected	No impact
Population	No impact	No impact	No impact
Attitudes	Favored by most fish and wildlife agencies and interests and whitewater recreationists	Favored by many or most property owners with river frontage (214 tax lots)	Favored by a minority
	Life, Health, and Safety		
Safety	Traffic hazards increased during construction. Flatwater boating hazards eliminated. Whitewater recreation hazards increased	Traffic hazards increased during construction	No impact
Environment	Minor impacts (noise, air, and water) for those living near the construction area	Minor impacts (noise, air, and water) for those living near the construction area	No impact
	Displacements		
Services and facilities	Some change of business emphasis from flatwater to river activities.	No impact	No measurable impact
Recreation	Reduced flatwater recreation in the immediate area. Increased opportunity for whitewater recreation.	No impact	No impact
Family	Those with riverfront lots would lose adjacent flatwater recreation.	No impact	No impact
	Energy		
Power	Increase of projected Northwest energy shortfall by 5,675,800 kilowatt-hours (equivalent to the needs of 380 households)	Insignificant increase	No impact



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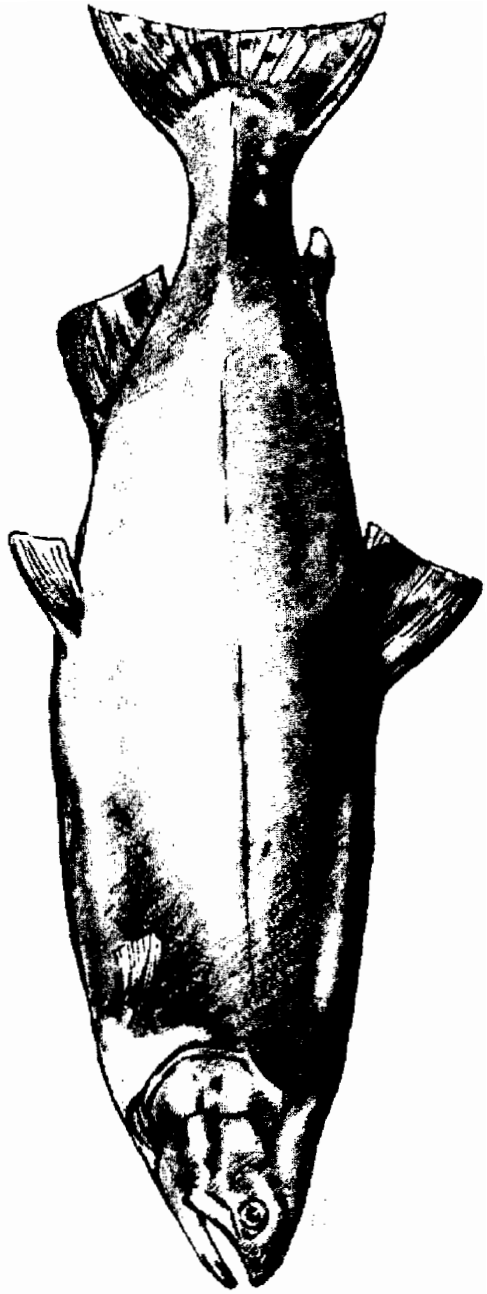

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This planning report/environmental statement was prepared by the Bureau of Reclamation Denver Office, Denver, Colorado and Pacific Northwest Region, Boise, Idaho. A list of persons who participated to a significant degree in the preparation of this document is provided below.

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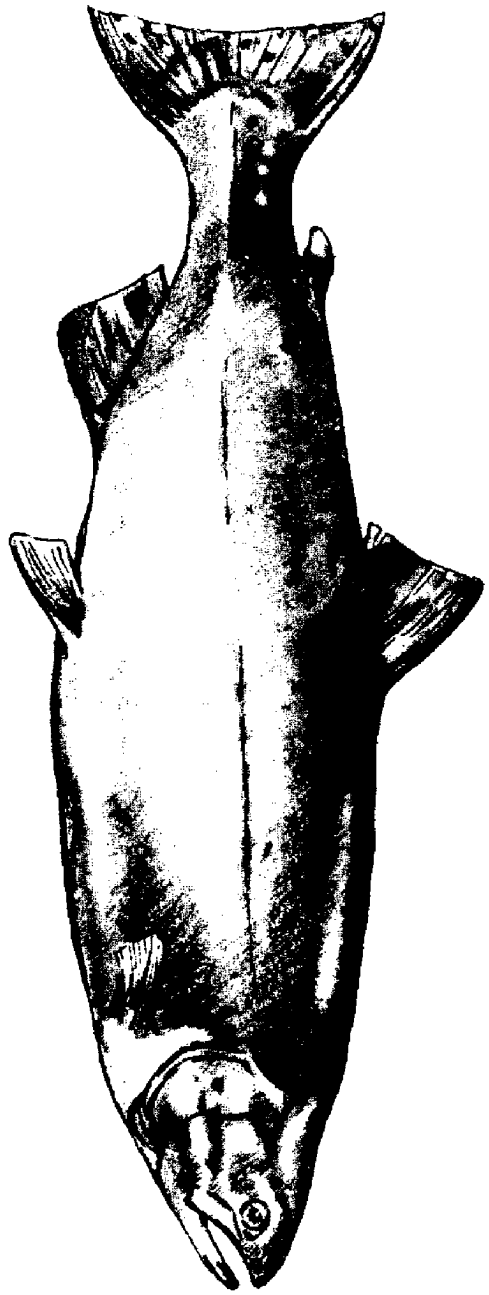

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