



IN REPLY REFER TO:
PN-150

United States Department of the Interior



BUREAU OF RECLAMATION
Pacific Northwest Region
Federal Building & U.S. Courthouse
Box 043-550 West Fort Street
Boise, Idaho 83724-0043

December 16, 1992

Ladies and Gentlemen:

Enclosed for your information is a copy of our Record of Decision (ROD) on the Milltown Hill Project, Douglas County, Oregon. Under provisions of the Small Reclamation Projects Act, Douglas County has applied for a Federal loan and grants to develop a dam and reservoir at the Milltown Hill site on Elk Creek. The primary purpose of the project is to provide a reliable water supply in the Elk Creek subbasin, a tributary of the Umpqua River.

The ROD is Reclamation's final step of National Environmental Policy Act (NEPA) compliance for the Milltown Hill Project but does not approve the loan. A loan application package will be forwarded separately to the U.S. Department of the Interior for action. A final environmental impact statement (EIS No. 920333, INT-FES 92-19) on the proposal was prepared in compliance with NEPA and filed with the Environmental Protection Agency (EPA) on August 14, 1992.

Additional copies of the ROD may be obtained by contacting the Bureau of Reclamation's Regional Office in Boise at Box 043 - 550 West Fort Street, Boise ID 83724; telephone: (208) 334-9442.

Sincerely,

Regional Environmental Officer

Enclosure

RECORD OF DECISION

BUREAU OF RECLAMATION

FINAL ENVIRONMENTAL IMPACT STATEMENT

MILLTOWN HILL PROJECT DOUGLAS COUNTY, OREGON

NOVEMBER 1992

I. INTRODUCTION

This document constitutes the Record of Decision (ROD) of the Bureau of Reclamation (Reclamation), Pacific Northwest Region, regarding Douglas County's application for a Federal loan and grants under the Small Reclamation Project Act (Public Law 84-984, as amended) to develop a dam and reservoir at the Milltown Hill site on Elk Creek (tributary of the Umpqua River), which would provide water for irrigation, municipal and industrial supplies, improved anadromous fish habitat, improved water quality, flood control, and outdoor recreation opportunities. The ROD is the final step of National Environmental Policy Act (NEPA) compliance, but does not approve the loan. A loan application package will be forwarded separately to the Department of the Interior for action. A final environmental impact statement (EIS No. 920333, INT-FES 92-19) on the proposal was prepared in compliance with NEPA and filed with the Environmental Protection Agency (EPA) on August 14, 1992.

II. RECOMMENDED DECISION

Reclamation proposes to proceed with approval of Douglas County's loan and grants application for development of the Milltown Hill Project. The recommended plan is the preferred alternative as presented in the final environmental statement (FES). The preferred alternative would consist of a 186-foot-high dam and 24,143 acre-foot reservoir on Elk Creek which would provide storage and distribution of water to the communities of Rice Hill, Yoncalla, and Drain, allowing for municipal expansion and industrial diversification; water to provide a supplemental or full irrigation supply for up to 4,661 acres of arable lands; provide regulated flows of water for improved anadromous fish habitat; improved water quality in Elk Creek and Yoncalla Creek; and new water-related recreational facilities at the proposed reservoir. The project would also provide limited

flood control in and near the city of Drain and would provide drainage facilities on agricultural lands as needed.

Environmental effects due to implementation of the preferred alternative would include a loss of wetland and riparian habitats which would be fully mitigated. The project would provide an opportunity to secure 767 additional acres of habitat for the Columbian white-tailed deer, an endangered species, as a project mitigation measure. Construction of the proposed dam and reservoir would require relocation of local residences, roadways, and utility lines.

III. OTHER ALTERNATIVES CONSIDERED

In addition to the preferred alternative, the no action alternative was evaluated in the FES. The no action alternative was presented as the "future without" the project condition and utilized as a base from which to measure benefits and impacts of the preferred alternative.

IV. ENVIRONMENTALLY PREFERABLE ALTERNATIVE

The FES did not present an environmentally preferable alternative; however, Reclamation feels that the benefits attributable to the preferred alternative along with the proposed mitigation measures, as presented in the FES, make the preferred alternative an environmentally acceptable plan.

V. PUBLIC RESPONSE TO FINAL ENVIRONMENTAL STATEMENT

Following the filing of the FES on August 14, 1992, Reclamation received nine letters of comment on the FES. Reclamation prepared individual responses to each letter as summarized below.

- Congressman Les AuCoin encouraged Reclamation to proceed with the project.

Response: Reclamation's approval of this ROD will be an affirmative response to the Congressman.

- The Oregon Department of Transportation (DOT) agreed that the FES addressed their early concerns and asked that Douglas County work with their local office in evaluating alternative pipeline routes to minimize impacts on highway rights-of-way.

Response: By copy of the response letter, Douglas County was directed to work with DOT in analyzing pipeline alternatives.

- **The Bureau of Land Management (BLM)**, as a cooperating agency, was satisfied that BLM lands affected by the project received careful consideration in the FES.

Response: No response needed.

- **The U.S. Fish and Wildlife Service (FWS)** described their involvement in the project since 1985 and agreed with the environmental commitments summarized in the FES but cautioned that additional work needs to be done to finalize plans for implementation, operation, and monitoring of the respective mitigation and enhancement measures. They expressed a need for the resource agencies to be involved in the followup evaluation of project accomplishments.

Response: Reclamation responded that Douglas County will be responsible for working with the resource agencies to see that these plans are cooperatively developed and carried out. Reclamation agrees that the resource agencies should be involved in followup evaluation and monitoring of mitigation and enhancement measures as described in the FES. Also, Reclamation would expect FWS to take the lead role in this effort since they have legal authority under Section 5(d) of the Small Reclamation Projects Act (Public Law 84-984, as amended) to monitor Douglas County's implementation of project mitigation measures and environmental commitments.

- **The Oregon Department of Fish and Wildlife (ODFW)** provided two letters, the first addressed the loan and grant application and the second commented specifically on the FES. ODFW stated that they had worked with the cooperating agencies for several years on the project and believe the proposed project will result in overall net benefits to fish and wildlife and their habitats. They expressed concern, however, that some of the environmental commitments were specifically included as responses to their comments on the draft environmental statement (DES) and were included in the list of environmental commitments but were not found in the body of the FES. They were also concerned that some of the mitigation measures described in the DES had been modified in the FES. ODFW reiterated their earlier comments that detailed mitigation and monitoring plans should be completed and approved prior to construction and that alternative mitigation measures should be provided if monitoring indicates that measures are not producing fish and wildlife benefits as anticipated. They also recommended that Reclamation require Douglas County to hire a qualified biologist with research experience to assure that the mitigation plan is implemented according to scientifically sound principles.

Response: Reclamation explained that as long as the mitigation measures are included in the FES, whether in the main body of the statement or in an appendix, they are commitments of the project. The environmental commitment listing (Appendix B) is especially important in this respect since it is a central summary of all commitments which Reclamation and Douglas County have agreed to implement.

Some mitigation measures were modified, but in all, the commitments were not changed in a manner that would significantly compromise any single resource or the integrity of the mitigation plans as a whole. The changes that were made were first discussed with the resource agencies and were a result of fine-tuning and jurisdictional authority.

There is still a considerable amount of work remaining to finalize details of respective mitigation plans and environmental commitments for the project. Douglas County will be responsible for working with the resource agencies to see that these plans are cooperatively developed and carried out. Reclamation agrees that the resource agencies should be involved in followup evaluation and monitoring of mitigation and enhancement measures as described in the FES. Reclamation would expect FWS to take the lead role in this effort since they have legal authority under Section 5(d) of the Small Reclamation Projects Act (Public Law 84-984, as amended) to monitor Douglas County's implementation of project mitigation measures and environmental commitments.

In summary, Reclamation believes that the mitigation measures and environmental commitments for the project are sufficient and that they are adequately detailed in the FES. Reclamation assigns Douglas County with the responsibility for implementation, monitoring, and evaluation of these commitments in cooperation with ODFW, FWS, National Marine Fisheries Service, and other applicable resource agencies. This will be a condition of the County's loan and grant agreement with the United States. The County is currently considering hiring a professional biologist to direct this work.

- The National Marine Fisheries Service (NMFS) agreed that the proposed project provides a significant opportunity to enhance indigenous anadromous fish populations. They recommended that Douglas County continue working with the resource agencies in developing operational plans and followup evaluations. They expressed the concern that followup monitoring and commitment for funding of remedial action be provided as needed to ensure that the projected anadromous fish benefits are actually realized.

Response: See response to ODFW above. Douglas County will be responsible for working with the resource agencies to see that mitigation, enhancement, and monitoring plans are cooperatively developed and carried out, and specifically to ensure that the projected anadromous fish benefits are actually realized.

- Mr. Richard Sommer expressed concerns about the adequacy of the FES, adequacy of background studies and inventories, adequacy of alternative analysis, as well as whether there was a real need for or a viable purpose for the project. Reclamation had previously responded to the same issues presented by Mr. Sommer on the DES after the comment period had closed.

Response: Reclamation's response stated that the FES adequately demonstrates the need for an additional water supply in the Elk Creek subbasin in order to diversify the economic base of the area. Douglas County has adequately demonstrated through their economic analysis associated with the loan application process that the project is economically viable and that the County has the ability to repay the loan amount plus interest to the Federal Treasury.

Reclamation feels that the draft and final environmental statements provide full public disclosure on the environmental impacts which may be expected to occur with implementation of the project and are in full compliance with NEPA and corresponding Council on Environmental Quality (CEQ) regulations for implementing NEPA.

As explained in the FES, numerous structural and nonstructural alternatives to the preferred plan were studied in detail prior to preparation of the two NEPA documents. These alternatives were excluded from detailed NEPA analysis because they were found not to be cost effective, they did not provide the desired water resource benefits, the environmental impacts were too severe, and/or they were largely unacceptable to the public.

Reclamation and Douglas County completed a number of physical and biological studies and inventories prior to preparation of the NEPA documents and have coordinated inventory and impact analysis results with a wide variety of Federal, State, and local agencies. There has been general support for the project from these agencies and most concerned publics because of the environmental benefits of the project in combination with the commitment to implement project mitigation measures.

See responses to FWS, ODFW, and NMFS above.

- **The Environmental Protection Agency** recommended that (1) mitigation and monitoring plans be completed before any construction activities begin and (2) that the ROD documents how the public can participate in the development and review of the mitigation and monitoring plans for fish, wildlife, and wetlands.

Response: Preparation of detailed mitigation, enhancement, and monitoring plans prior to initiation of construction activities is an environmental commitment of the project as listed in Appendix B of the FES. These detailed plans have been in preparation the past 3 years during project formulation and have evolved as input from the public resource agencies has occurred. The mitigation and enhancement plans for resources have been designed to include all of the environmental commitments listed in Appendix B of the FES. The monitoring plan has been designed to evaluate the success of each specific mitigation and enhancement measure.

Douglas County has agreed to provide the mechanism for additional public review and input of the mitigation, enhancement, and monitoring plans through the County's Water

Advisory Board (Board). The Board is a citizens group which has staff support from Douglas County Water Resources Department. The Board meets monthly, and public notices are sent out prior to each meeting.

Douglas County has made application for a Corps of Engineers Section 404 Permit and the Oregon Division of State Lands Removal/Fill Permit for the Milltown Hill Project. The application and the Public Notice describe details of the wetland mitigation plan. As a result of this permitting process, a final wetland monitoring plan will be developed consistent with public review of the permit application.

Another way that the respective plans will be available for public review will be during the Oregon Water Resources Commission (OWRC) hearing for the project's water rights. OWRC will have available a staff report from the Oregon Water Resources Department (OWRD) as well as other documents, including the mitigation, enhancement, and monitoring plans. All of these documents will be available for public review and the hearing will be open to the public. Written and oral comments made by the public and agencies will be evaluated by OWRD in their decision process.

VI. BASIS FOR DECISION AND ISSUES EVALUATED

The preferred alternative provides for a portion of existing and projected needs of urban and rural water users in the Elk Creek subbasin of western Oregon. The project would provide increased water supplies during the growing season for both full service and supplemental service lands. Storage and distribution of water to local cities and communities would allow for limited municipal expansion and industrial diversification. A reliable source of water would be provided for rural domestic uses in areas served by the proposed pipeline distribution system. The project would improve water quality and instream flows and would provide opportunities to improve resident and anadromous fisheries and local wildlife habitats. Other benefits of the project would include development of new water-related recreational facilities at the proposed reservoir and improved flood control capabilities in the project area.

Reclamation and Douglas County have adopted all practical measures to mitigate environmental harm. Commitments have been made to improve the anadromous fishery and provide mitigation measures which will fully compensate for identified terrestrial and wetland impacts and will protect the natural resource values within the project area.

VII. IMPLEMENTING THE DECISION AND ENVIRONMENTAL COMMITMENTS

Douglas County, Oregon, proposes to construct and operate the Milltown Hill Project on Elk Creek. The agency consultation and public involvement process has identified various opportunities to maintain or enhance the environment. Douglas County, in consultation

with Reclamation, has considered the opportunities and has agreed on the following as environmental commitments that will be implemented with the project. These commitments are hereby made a part of the Federal decisionmaking process and will become conditions of the loan and grant agreement between Douglas County and the United States. Douglas County will be responsible for carrying out and overseeing all environmental commitments as described in the final environmental statement and as listed below.

SUMMARY OF ENVIRONMENTAL COMMITMENTS

A. Preconstruction Phase

1. Permits and Approvals

- Douglas County or its contractors will obtain all necessary permits and approvals prior to construction.

2. Mineral and Aggregate Resources

- Permits will be obtained, if needed, for Otten Quarry.

3. Geology, Soils, and Seismicity

- Investigations and evaluations will be performed of possible landslide areas within the reservoir basin which could be affected by road construction, borrow operations, or inundation.
- Investigations and evaluations will be performed to verify the adequacy of the foundation and abutments.
- The dam and appurtenant structures will be designed for the appropriate seismic values for the area.

4. Dam Safety

- The dam and related facilities will be designed in accordance with sound engineering practices.
- Construction plans and specifications will be submitted to the Bureau of Reclamation and the Oregon Water Resources Department for safety review as well as to an independent review board.
- An emergency action plan will be developed.

5. Surface Water

- The discharge facilities will be designed to provide aeration of flows.

6. Cultural Resources

- Historic structures evaluation and test excavations will be completed to determine if they are eligible to the National Register; means to avoid or reduce the adverse project effect will be investigated, and the adverse effect will be mitigated through data recovery. The State Historic Preservation Officer (SHPO) and the Advisory Council will be consulted for review and approval. A Memorandum of Agreement (MOA) for impact mitigation actions will be signed by Reclamation, Douglas County, the SHPO, and the Advisory Council. Impact mitigation actions will be completed at each site before any project action affects that structure or site location.

7. Social Environment

- Once the ROD and the loan and grants agreement are signed, Douglas County will initiate negotiations with property owners at the earliest possible date to minimize speculation, apprehension, and misinformation.
- Private property will be purchased and relocation assistance provided in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act.

8. Wildlife

- A wildlife mitigation and enhancement plan will be prepared prior to construction in consultation with resource agencies.
- A habitat and population survey will be conducted prior to construction. If the western pond turtle is proposed for listing, or listed prior to construction, consultation with the FWS will be reinitiated. Following construction, populations of western pond turtle will be monitored and measures taken to insure the conservation of the species in Elk Creek in coordination with ODFW and FWS.

9. Vegetation

- A survey will be conducted within any affected potential habitat for rough allocarya (a Category 1, Candidate Species) in the inundation area. If the species is found to occur in the inundation zone, consultation will be

reinitiated with FWS to determine requirements if the species is listed as threatened or endangered.

10. Fisheries Resource

- A fisheries mitigation and enhancement plan will be prepared prior to construction in consultation with FWS, NMFS, ODFW, and other resource agencies.
- If the Umpqua chub is proposed for listing or listed prior to construction, consultation with FWS would be reinitiated. Following construction, downstream populations of Umpqua chub would be monitored and measures be taken to ensure the conservation of the species in Elk Creek in coordination with ODFW and FWS.

B. Construction Phase

1. Topography

- Slope cuts and fills will be at angles that minimize potential for landslides; revegetate where appropriate to minimize erosion.

2. Mineral and Aggregate Resources

- Utilize excavated materials found within the impoundment perimeter for construction purposes if suitable.

3. Dam Safety

- Twenty-four hour electronic sensors will be installed directly linked to Douglas County Reservoir Operations Center.
- Appropriate instrumentation systems will be installed to allow monitoring of structure performance.

4. Air Quality

- Dust will be controlled during construction by wetting the ground surface as necessary.
- Exposed areas will be revegetated to achieve long-term soil stabilization.

- **Hauling distances will be minimized by using fill material from within the pool area to avoid exposing downstream residences to windblown dust.**
- **Methods and devices as are reasonably available will be used to control, prevent, and otherwise minimize atmospheric emissions or discharges of atmospheric contaminants and noise.**

5. Surface Water

- **Cut and remove vegetation from the impoundment to minimize decaying organics, except for Walker Creek which will not be disturbed. The area in the upper impoundment will be cleared under the direction of ODFW to leave trees/snags for wildlife.**
- **Avoid grubbing vegetation and soil disturbance in the reservoir area, to the extent possible, to minimize nutrient release from soils.**
- **Install a multilevel water intake structure in the dam to help regulate temperature in the water released to Elk Creek.**
- **The project will comply with Executive Order 11988, Floodplain Management.**
- **Reasonable care will be taken during construction of cofferdams or diversion dams to prevent increased turbidity or siltation in Elk Creek.**
- **To the extent possible, machinery for instream construction will be operated from the streambank, not in the stream.**
- **To the extent possible, disturbance of the streambed will be kept to a minimum, and the streambed will be returned as nearly as possible to its original condition or better outside the reservoir.**
- **Excavated materials will not be stockpiled or deposited near or on streambanks, steep slopes, wetlands, or other watercourse perimeters where they could be washed away by high water or storm runoff or encroach upon the watercourse itself.**
- **Contractors will be required to use such methods and devices as are reasonably available to ensure that any wastewaters discharged into surface waters will be essentially free of settleable material.**
- **Contractors will be required to comply with all State and Federal laws and regulations regarding the control and abatement of water pollution. The County has included a Clean Air and Water Certification in the loan**

application attesting that no facilities to be utilized in performance of the contract have been included on the EPA list of Violating Facilities.

- Any water quality monitoring required to assure that applicable State and Federal water quality standards are met during construction will be done by the contractor or Douglas County.
- The instream water right (minimum perennial streamflow) will be maintained whenever sufficient natural flow is available in the stream.

6. Ground Water

- Sanitary wastes will be collected from the tanks of portable toilets and trucked to the nearest municipal wastewater treatment plant for disposal.

7. Vegetation

- Disturbed areas will be revegetated (either reseed or landscape) that are not permanently occupied by new facilities and those areas around new facilities, and at Otten Quarry.
- Douglas County will comply with Executive Order 11990, Protection of Wetlands by preventing conversion of wetlands to agricultural use.
- Vegetation will be left undisturbed in the Walker Creek area.

8. Wildlife

- Work with ODFW to develop the upper reservoir area for wildlife habitat.
- Excavate areas in upper pool area to create wetlands for wildlife habitat under the direction of ODFW.
- Block construction roads that will not be permanent access roads to minimize disturbance to wildlife.
- Monitor populations of western pond turtle in the reservoir area if the species is listed as threatened or endangered.
- Enhance vegetation for nesting habitat on the island in the upper reservoir.

9. Fisheries Resources

- Install suitable facilities in the outlet system to aerate water releases.

- Minimize work in the stream that will cause turbidity or sedimentation or disturbance to spawning or rearing fish.

10. Visual Quality

- Any long-term adverse impact on the esthetic character of the project area will be minimized by proper landscaping, site design, or site restoration. When an area is no longer needed for construction, stockpiling, or access, any land disturbed but not permanently occupied by new facilities will be landscaped and/or revegetated as needed.
- Develop and maintain a vegetated buffer zone between the access road and reservoir and around the reservoir where possible.
- Provide landscaping or maintenance of vegetation at reservoir access areas.
- Shape the land where appropriate at the damsite and Otten Quarry and revegetate the area.

11. Property Lines

- Provide permanent reference survey markers for all land survey monuments to be inundated by the reservoir or destroyed by construction activities.

C. Operation Phase

1. Noise

- Restrict high-speed boating to the main pool by limiting access to the upper end of the reservoir.
- Restrict Walker Creek arm and upper reservoir to nonmotorized boating.

2. Surface Water

- Elk Creek water temperature and instream flows will be monitored by the County throughout the life of the project. Data gathered will be used to improve project operations.
- Coordinate with ODFW for optimum releases to benefit anadromous and resident fish.

- Operate the facility so existing minimum streamflows and prior water rights of record are not adversely affected.
- Flood control operations will be coordinated with the Corps of Engineers.
- Douglas County will coordinate with the BLM to review timber harvest activities near the reservoir.

3. Ground Water

- The contents of all existing septic tanks and cesspools which are in the reservoir pool area will be pumped and disposed of in wastewater treatment plants.
- Where required, drainage systems will be designed and constructed in those fields which would be irrigated, where natural ground-water movement is at a rate unacceptable at the crop root zones.

4. Vegetation

- A vegetated buffer strip will be maintained around the Walker Creek area and around the impoundment. About 90 acres of timber will be left in the Walker Creek arm and in the lower reservoir.
- Riparian vegetation will be enhanced downstream of the damsite by establishing a local riparian vegetation habitat program. The County will promote, in cooperation with the Soil Conservation Service and ODFW, maintenance of existing riparian vegetation.
- County will develop a wetlands enhancement program for the upper end of the reservoir. No project drainage or change in agricultural practices will occur to negatively affect jurisdictional wetlands at the time the water service contract is negotiated. This will be enforced by the County with a water protective clause in the water service contract between the County individual water user.
- The purchase of a 3-acre log pond that was discussed in the DES for the project will not be part of the project as planned. A decision to remove the log pond from the project was made after further investigation by Douglas County determined that water quality in the log pond was not as anticipated based on prior conversations, and that a considerable cleanup liability may be incurred if the pond was part of the project. This decision to remove the log pond from the project does not deter Douglas County's desire to use the log pond for development of a recreational and wildlife facility, but it is in

Douglas County's best interest to pursue it separately from the Milltown Hill Project. Also, there may be additional funding sources available (for cleanup) if the log pond is not part of the project.

- Wetlands on irrigated service land will not be converted to agricultural use. No project drainage or change in agricultural practices will occur to negatively affect jurisdictional wetlands at the time the water service contract is negotiated. This will be enforced by the County with a wetland protective clause in the water service contract between the County and individual water user.

5. Fisheries

- Debris piles will be left in the main pool area for fisheries enhancement.
- Placement and development of about 45,000 square feet of spawning gravels and associated habitat structures will be accomplished at a total of 8 areas between the damsite and the mouth of Elk Creek.
- The locations for habitat improvements further downstream in the main stem of Elk Creek will be based on monitoring of physical conditions that develop during operation.
- Supplementation of juvenile anadromous fish will be initiated prior to and during early project construction and will continue through at least one life cycle to build the run size.
- A detailed monitoring and evaluation plan will be developed prior to construction and implemented to track fishery accomplishments with the project and serve as the basis to "fine-tune" project operations and management to achieve the optimum fishery benefits. Development of the plan will be coordinated with the fishery agencies.
- The County will utilize up to 7,737 acre-feet of storage capacity for release to enhance anadromous and resident fisheries habitat below the damsite. Instantaneous release of this water will be maintained at a level sufficient to enhance fisheries as directed by ODFW.
- After Construction Douglas County, in conjunction with appropriate resource agencies and the public, will take the lead in developing a detailed plan to maintain and enhance riparian habitat between the dam and Elkton and will seek funding sources to implement the plan.

- The County will maintain sufficient gauging and thermograph stations to ensure that target temperature and flow are met.
- The County will monitor mercury content for reservoir fish for a 3-year period and evaluate annually.

6. Wildlife

- A wildlife monitoring plan developed prior to construction will be implemented.
- A detailed monitoring and evaluation plan will be developed prior to construction and implemented to track wildlife accomplishments with the project and serve as the basis to "fine-tune" project operations and management to achieve the optimum wildlife benefits. Development of the plan will be coordinated with the wildlife agencies.
- The County will secure 767 acres of area suitable for Columbian white-tailed deer.
- About 90 acres of standing timber will be left in the Walker Creek arm and the lower reservoir.
- Shallow, permanent water bodies will be created in the upper end of the pool (upstream of the road crossing). About 23 acres of wetlands will be created in association with these pools which will retain water and support emergent vegetation upon lowering of the reservoir surface to elevation 740 feet msl.
- About 120 acres in the upper end of the pool will be maintained for high quality wildlife habitat.
- About 200 acres of upland at the upper part of the reservoir and within the take-line will be managed for wildlife. A variety of habitat improvements will be realized on this land, including fencing, grazing restrictions, planting wildlife cover and forage crops, nesting structures, and development of snags. An interagency team of biologists will develop a management plan for this area.
- Riparian enhancement will be conducted on about 1.5 miles of Elk Creek downstream of the project site. Restoration will include plantings and/or fencing in areas where vegetation has been impacted by grazing, brush clearing, and other human activities. Potential funding sources include land-owners and local, State, and Federal funds, and funds from special-interest groups.

7. Recreation

- The County will provide a part-time caretaker to help minimize trespassing and vandalism.
- Facilities will be operated by Douglas County Parks Department as part of its normal program.

8. Transportation

- The County will monitor traffic to the reservoir to determine the need for increased road maintenance and road improvements.
- Roads will be constructed and upgraded for access to the reservoir.

9. Police Protection

- Increased summer patrols will be implemented by the County Sheriff's Department in the project area to minimize vandalism and trespassing.

10. Visual Resources

- Douglas County will coordinate with the BLM to determine if modification of timber harvest activities would be necessary to maintain visual quality of the area near the reservoir.

MONITORING PROGRAM

The environmental commitments listed above include measures to monitor fish, wildlife, and water quality. More specifically, detailed monitoring and evaluation plans will be developed prior to construction and implemented to track fishery and wildlife accomplishments with the project and serve as the basis to "fine-tune" project operations and management to achieve the optimum fishery and wildlife benefits. Development of the plan will be coordinated with the respective resource agencies and concerned publics.

Douglas County will be responsible for working with the resource agencies and the public to see that these monitoring plans are cooperatively developed and carried out. Monitoring and reporting will be made a part of Douglas County's loan and grant agreement with the United States. The resource agencies and appropriate public groups and individuals will be involved in followup evaluation and monitoring of mitigation and enhancement measures as

described in the FES. FWS will take the lead role in this effort since they have legal authority under Section 5(d) of the Small Reclamation Projects Act (Public Law 84-984, as amended) to monitor Douglas County's implementation of project mitigation measures and environmental commitments.

APPROVED:

Date 11/4/92

ACTING Felix H. Cook, Jr.
Regional Director
Pacific Northwest Region

Date 11-7-92

[Signature]
Deputy Commissioner
Denver Office

