

**Testimony
on the
Upper Mississippi River Basin Protection Act (H.R. 3480)
to the
Subcommittee on Water and Power
Committee on Resources
U.S. House of Representatives**

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Representing
Wallowa Lake Dam Rehabilitation and Water Management Plan Steering Committee**

Dear Mr. Chairman and Members of the Subcommittee on Water and Power:

We wish to thank the members of the U.S. House of Representatives and the Subcommittee on Water and Power for the opportunity to testify on behalf of bill H.R. 3606 to authorize the Bureau of Reclamation to participate in the Wallowa Lake Dam Rehabilitation and Water Management Plan. It is truly an honor to be present here in our Nation's Capital and participate in the democratic process which is the foundation of our Country.

As a member of the Steering Committee and native of Wallowa County, I bring a project proposal before you which is founded in the soil of Wallowa County, balances the needs of competing demands for our precious water resources, and protects the economic foundation of the community. This project was framed by the local residents to meet the needs of agriculture, recreation, flood control, recreation and water supply while also protecting our invaluable fish and wildlife resources.

The Steering Committee requested that I present written and verbal testimony to this Subcommittee hearing representing the interests of the Steering Committee partners. My understanding of the engineering and scientific basis for the proposed project as well as a hands on understanding of the issues facing the local residents was the basis for this selection. My roots are firmly entrenched in the Wallowa Valley and I bring a personal commitment to see this project through to completion to the Subcommittee.

My family originally homesteaded in the Grangeville, Idaho area and relocated to the Wallowa County in 1948. My grandfather raised cattle and farmed until his retirement in 1975. My father and most of my relatives have been employed in the agriculture or timber industry within Wallowa County. I was raised on

a cattle farm outside of Enterprise and grew up using the irrigation systems provided with water stored behind Wallowa Lake Dam. My father served as the foreman for an Angus cattle ranch and my mother was a charge nurse at the Wallowa County nursing home.

Upon graduation from Enterprise High School, I attended the University of Idaho at Moscow, Idaho graduating with a degree in Civil Engineering in May 1986. My first professional employment was with the Army Corps of Engineers, Walla Walla District. I started employment with the Corps as a cooperative education student in 1984 and continued following graduation until 1989. While with the Corps, I was actively involved in the planning and design of fish passage and production facilities within the Snake River Basin, including the Grande Ronde River for which the Wallowa River is a tributary. Specific project experience included juvenile and adult passage projects on the Lower Snake River dams, hatchery production facilities on the Clearwater and Snake River, and acclimation facilities in Idaho and Eastern Oregon. My work experience also includes design of flood control structures including dams, channels, and pipelines.

I returned to graduate school in 1989 at Stanford University where I focused on expanding my background into water quality and treatment process design. Upon graduation, I entered the private engineering industry. For the past 9 years I have been employed at Montgomery Watson Harza where I serve as a senior project engineer and manager for water resources and aquaculture projects. I have been involved in projects throughout the Umatilla, Walla Walla, and Grande Ronde River Basins.

This written testimony was developed to provide a summary of the background and elements of the project, the benefits and schedule, and the importance of the project to the community and watershed planning in future basins. The testimony is organized as follows:

- ! Project Background summarizing the events leading to the program development.
- ! Mission Statement guiding the program development.
- ! Identified Issues addressed within the program.
- ! Water Management Plan and Infrastructure project elements.
- ! Proactive Agency Coordination which has occurred
- ! Proactive Coordination with Other Programs which has occurred.
- ! Achieved Visible Accomplishments already derived.
- ! Measurable Benefits resulting from the program.
- ! Budget and Schedule requirements.
- ! Summary

Project Background

The Wallowa Valley is located in Northeast Oregon approximately 330 miles east of Portland, Oregon. The valley is encircled by the Wallowa Mountains, Blue Mountains, and Seven Devil Mountains. Located one mile south of Joseph, Oregon, Wallowa Lake sits at the base of the Wallowa Mountains and is fed by a drainage basin over 50 square miles in size located within the Eagle Cap Wilderness Area.

Wallowa Lake Dam is located on the natural outlet of Wallowa Lake and provides up to 50,000 acres-feet of storage. The dam was originally constructed in 1918 and raised in 1929 to provide additional storage for irrigation and hydropower generation. The dam is owned and operated by the Associated Ditch Companies, Incorporated (ADC).

Fed from wilderness area high in the Wallowa Mountains, the Wallowa Lake reservoir has historically provided high quality water supporting a wide range of uses including:

- ! Irrigation of over 15,000 acres of prime agricultural land within the Wallowa Valley.

- ! Potable water supply for the City of Joseph.
- ! Recreation with over 800,000 recreational users enjoying boating, water skiing, personal water craft, swimming, and fishing.
- ! Flood control with the active storage managed to provide flood protection to the Cities of Joseph, Enterprise, and Wallowa during spring runoff periods.
- ! Base flows to the Wallowa River and Grande Ronde Rivers preserving and enhancing riparian habitat, fish stocks, water fowl, and overall water quality.

Wallowa Lake Dam was listed as a high hazard structure in March of 1996 by the Oregon Water Resources Department of Dam Safety. The sudden failure and release of water would probably result in loss of life as well as severe economic and environmental damage. The ADC moved quickly to implement short-term structural improvements in 1996 to stabilize the dam. The reservoir has subsequently been held below full pool elevation to maintain safety.

The ADC embarked on the planning and design of long term improvements to Wallowa Lake Dam and quickly realized that the dam was the central structure to water management within the Wallowa Valley. The balance between agricultural needs and salmon recovery was identified as one of the primary program elements. The Nez Perce Tribe in cooperation with the Oregon Department of Fish and Wildlife are actively planning and implementing salmon recovery measures throughout the Wallowa Valley. An integrated water management plan for the Wallowa River corridor is necessary to ensure these measures are successful as well as meet demands from a wide spectrum of additional users.

ADC invited members of the community, state resource agencies, and federal agencies to participate in the development of a water management plan, which considered the multi-purpose water demands. Through this coordinated effort, a partnership was formed led by the ADC and the Grande Ronde Model Watershed Program with technical assistance provided by Montgomery Watson Harza. An integrated plan was formulated addressing water management issues through the length of the Wallowa River Corridor. The basic elements of this plan are presented within the Wallowa Lake Dam Rehabilitation and Water Management Plan Vision Statement, dated February 2001.

Mission Statement

The steering committee set out to define the goals and objectives at the onset of the project development. These objectives are clearly summarized in the project Mission Statement:

“To rehabilitate Wallowa Lake Dam and implement a water management program for the Wallowa Valley serving the needs of agriculture, salmon recovery, fish and wildlife enhancement, recreation, flood control, municipal water supply, and hydropower generation.

This mission statement serves as the foundation of the program upon which progress and benefits will be measured. Throughout the project development and implementation, the steering committee will return to the mission statement to ensure the project is managed within the original mission framework.

Identified Issues

Water management issues within the Wallowa River corridor, both environmental and infrastructure needs were identified by the study team through pre-planning work tasks and coordination meetings. The primary issues identified were:

- ! Wallowa Lake Dam does not meet current dam safety requirements for stability against sliding and overturning, earthquake resistance, spillway capacity, and outlet tunnel condition. The dam is listed as a high hazard structure by the Oregon State Department of Dam Safety and major improvements

are necessary to protect human life and property.

- ! Three irrigation withdrawals downstream from the dam are unscreened potentially impacting ESA listed bull trout and salmon.
- ! Accurate water measurement and control are not possible with the existing manual diversion gates. Without these systems in place, active conservation efforts would be difficult to implement and monitor.
- ! Adult fish passage at Wallowa Lake Dam will be required to support the re-introduction of coho and sockeye salmon to Wallowa Lake as part of the Wallowa County Salmon Recovery Plan.
- ! Irrigation withdrawals in the Lostine River create low flow conditions impassable to migrating ESA listed Spring Chinook salmon and Bull Trout.
- ! Hydropower production with the dam water releases is not being realized.
- ! Current water management in the Wallowa River corridor is fragmented with competing needs for irrigation and salmon recovery efforts.

Water Management Plan and Infrastructure

The participating partners have developed a phased project approach focusing on early action on the high priority project elements. The phased approach allows the planning and design of the complete project, then implementation of the infrastructure in a sequenced manner. The project phases are:

- ! Phase I – Wallowa Lake Dam Rehabilitation and Water Management Plan Development
- ! Phase II – Fish Passage Improvements and Water Conservation Measures
- ! Phase III – Implementation of Water Exchange Infrastructure
- ! Phase IV – Hydropower Implementation

Rehabilitation of Wallowa Lake Dam is the critical element to the success of the program. The dam serves as the water management tool for storing and releasing water to support the multi-purpose uses. The priority of Phase I is to plan, design, and construct the recommended improvements to Wallowa Lake Dam. With the dam rehabilitation complete, operation will return to the full pool storage elevation. Water from the storage reservoir will then be allocated to the Lostine River and Bear Creek Valley irrigators in exchange for Lostine River water to remain within the river. A water management plan will be developed outlining the water management framework for the Wallowa River corridor including the water exchange from the storage reservoir.

The Phase I work will also complete the planning and environmental analysis required to support implementation of the integrated water management plan. The administrative, policy, and management framework required to develop a successful water management plan will be developed. The mechanism and infrastructure necessary to address the critical water management issues will be identified and serve as the basis for the subsequent work phases.

Phase II will focus on the planning and implementation of fish screens, automated head gates, and flow measurement devices at the unscreened diversions. Provisions for adult fish passage will be planned as part of the Phase I work and implemented in Phase II to support re-introduction of coho and sockeye salmon to Wallowa Lake. The Nez Perce Tribe are currently preparing a masterplan outlining the requirements for coho re-introduction within the Wallowa Valley.

With Wallowa Lake Dam Rehabilitation complete, the stored water will be available to supplement

irrigation needs within the Lostine River and Bear Creek Valleys. Phase III will plan, design, and implement the infrastructure and institutional framework to execute a water exchange. The infrastructure requirements include pumps and pipelines to transfer water from the Wallowa River to the Lostine and Bear Creek Valley irrigation system. Lostine River water will remain in the river during the critical spring chinook salmon migration period of late July through September. Storage in Wallowa Lake will be reserved to supplement irrigation demands in the Lostine Valley during this period. The Bonneville Power Administration has completed the predesign for new production facilities on the Lostine River designed to supplement and enhance runs of ESA listed spring chinook salmon. The production facilities will be completed in December 2005 which concurs with the scheduled completion of Phase III.

Phase IV will evaluate and implement a hydropower facility to recover energy from water releases from Wallowa Lake Dam. A generation plant was operated at the dam for many years, but was decommissioned following a fire in the 1950's. With the current increase in power rates throughout the country, re-establishing a hydropower facility at the facility is a prudent step. Plans are in place to donate revenue in excess of cost to support the Wallowa County Hospital. The hospital has been operating unprofitably for many years and is threatened with closing. The hydropower facility would provide the hospital with a stable revenue stream and benefit the community. The proposed hydroelectric generation facility provides a renewable energy source operating with environmental measures in place to protect endangered species and maintain water quality.

Proactive Agency Coordination

The partners have been working over the past two years to develop a framework for planning and implementation of the program. This framework is designed with a foundation led by local Wallowa County groups and extending to the support of State and Federal agencies. This grass roots approach has led to a number of accomplishments.

- ! Development of a steering committee to assist in development and guidance of the program. This steering committee is led by strong local groups, which are the Grande Ronde Model Watershed and the ADC.
- ! Coordination with the Nez Perce Tribe and the Oregon Department of Fish and Wildlife to integrate ongoing salmon recovery measures with water management. The tribe and Oregon Department of Fish and Wildlife are co-managers of the fishery resources within the Wallowa Valley and have established working relationships to manage and enhance fishery resources.
- ! Submittal of grants proposals to obtain technical data and install flow measuring devices. These grants were obtained and monitoring devices installed to assist in the planning, design, and implementation of the project elements.
- ! Implementation of a public involvement program to involve members of the community and participating agencies.
- ! Collection of engineering and scientific data on Wallowa Lake Dam, Wallowa River, and Lostine River.
- ! Conducted a dam safety inspection, evaluation, and remediation evaluation.
- ! Preliminary evaluation of the feasibility of hydropower generation at Wallowa Lake Dam.
- ! Developed groundwork with the affected irrigators to develop administrative framework for executing the water exchange.

The partners have been pro-active in developing relationships with the regulatory agencies and bringing these agencies on board as part of the steering committee. The program is designed to address looming ESA issues, develop solutions, and implement these solutions before regulatory action is required.

Proactive Coordination with Other Programs

Many local, State, and Federal agencies are involved in restoration programs within the Wallowa Valley. The Wallowa Valley has historically supported a wide range of fisheries resource including sockeye salmon, coho salmon, spring chinook salmon, steelhead, as well as bull trout. Through the Steering Committee and the leadership of the partnership, close coordination will occur with these programs. Coordination is currently ongoing with but not limited to:

- ! Wallowa County Salmon Restoration planning activities.
- ! Northwest Oregon Hatchery Project where the Nez Perce Tribe and Oregon Department of Fish and Wildlife are planning a spring Chinook hatchery on the Lostine River.
- ! Coho Salmon restoration master plan led by the Nez Perce Tribe to re-introduce coho salmon to Wallowa Lake and the Wallowa River.
- ! Steelhead enhancement master plan designed to supplement current steelhead runs on the Wallowa River and throughout the Grande Ronde Basin.
- ! Oregon Department of Fish and Wildlife fish screening program designing and constructing fish screens on small irrigation diversions.
- ! Watershed planning and implementation projects led by the Grande Ronde Model Watershed.
- ! Oregon Dam Safety requirements.

Coordination with these and other ongoing program will ensure that measures developed and implemented as part of the Wallowa Valley Project will be optimized and fully support other program objectives.

Achieved Visible Accomplishments

The partners have been working over the past year to develop a framework for planning and implementation of the program. This framework is designed with a foundation led by local Wallowa County groups and extending to the support of State and Federal agencies. This grass roots approach has led to a number of accomplishments.

- ! Development of a steering committee to assist in development and guidance of the program.
- ! Coordination with the Nez Perce Tribe and the Oregon Department of Fish and Wildlife to integrate ongoing salmon recovery measures with water management.
- ! Submittal of grants proposals to obtain technical data and install flow measuring devices.
- ! Implementation of a public involvement program to involve members of the community and participating agencies.
- ! Collection of engineering and scientific data on Wallowa Lake Dam, Wallowa River, and Lostine River.

- ! Conducted a dam safety inspection, evaluation, and remediation evaluation.
- ! Preliminary evaluation of the feasibility of hydropower generation at Wallowa Lake Dam.
- ! Developed groundwork with the affected irrigators to develop administrative framework for executing the water exchange.

These accomplishments are visible, productive, and meet the objectives of the mission statement. The demonstrated ability to develop and implement specific project elements has been demonstrated and will be maintained throughout the course of the program.

Measurable Benefits

The proposed project benefits the Wallowa Valley community in many ways. The integrated approach to the dam rehabilitation and water management is a true ecosystem approach to resource management. Both the citizens of the Wallowa Valley and the environment can co-exist. Benefits to be realized by the project include:

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| ! Flood protection | ! Fish protection |
| ! Water conservation | ! Agricultural production |
| ! Potable water supply | ! ESA listed salmon restoration |
| ! Fish passage and protection | ! Improved fish and wildlife habitat |
| ! Continued recreational use | ! Increased tourism |
| ! Hydropower energy production | ! Economic stability |

The Wallowa Valley economy has historically been founded in natural resource industries, primarily agriculture and timber. Wallowa Lake Dam has provided the irrigation water to support the agriculture development. As with most rural communities, timber based industries are rapidly disappearing. Tourism has become an increasingly important component of the local economy. Wallowa Lake is the principal draw to the area. Rehabilitation of the dam and enhancement of the fishery restores will provide additional tourism dollars to the local economy.

The experience and knowledge gained from this project will also serve watershed planning efforts throughout the Northwest. This program will outline the framework and institutional requirements to implement a true watershed approach to balancing competing demands for out water supplies. The grass roots driven approach which anticipates and plans for regulatory requirements, rather than reacting to regulatory enforcement is critical to maintain economic stability and cooperative working environments.

Summary

We strongly support the passing of bill HR 3606 authorizing the Bureau of Reclamation to participate in the rehabilitation of the Wallowa Lake Dam in Oregon and for other purposes. This project has its roots in the Wallowa Valley. The local residents developed the framework for the project to address current pressing dam safety issues as well as anticipating future regulatory requirements. These stakeholders have proactively formed a steering committee and invited all interested agencies to participate and become part of the solution. The stakeholders have a vision beyond the rehabilitation of Wallowa Lake Dam and outlined a program which:

- ! Addresses pressing dam safety issues with Wallowa Lake Dam.

- ! Allocates storage in the Wallowa Lake reservoir to use for enhancing fish passage and habitat conditions in the Lostine River and Bear Creek.
- ! Proactively identifies fish passage improvements to protect existing ESA listed species as well as support future re-introduction of coho and sockeye salmon.
- ! Allows for incorporation of a renewable hydroelectric power energy source.
- ! Maintains the agricultural economic base for the community.
- ! Enhances the tourism and recreation economic expansion within the valley.

The Steering Committee initiated the planning and coordination for this project prior to the Klamath Falls calamity. The committee implemented a cooperative program requesting up front coordination with the participating agencies. The proposed project elements represent a balance between what is physically, institutionally, and financially feasible. This grass roots approach is the foundation to a successful project development, implementation, and operation.