

# RECLAMATION

*Managing Water in the West*

## National Environmental Policy Act (NEPA)

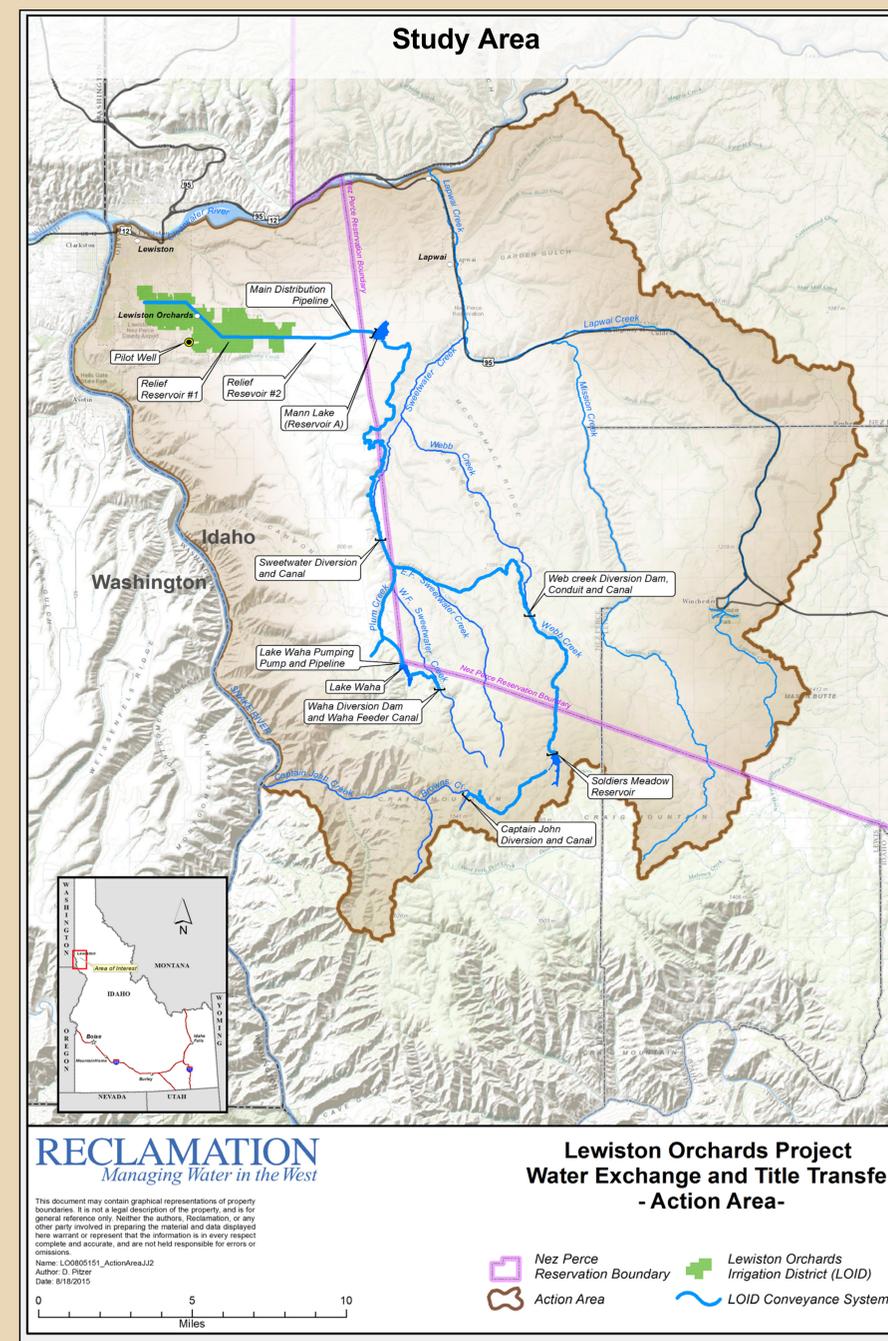
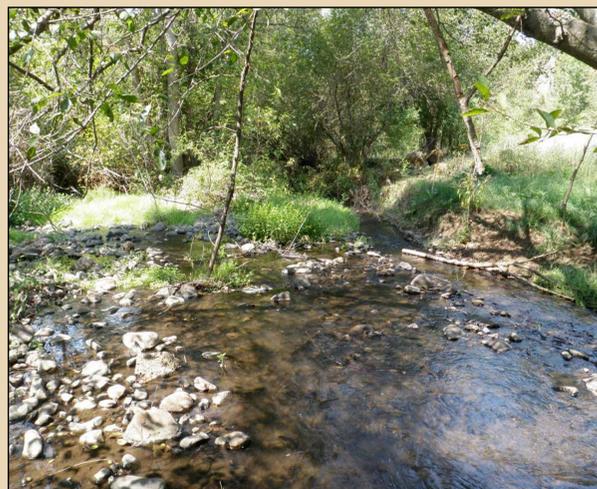
### NEPA Process Purpose and Need for Action

NEPA requires that the action agency determine whether or not there are any environmental impacts associated with proposed Federal actions. This evaluation will be documented and presented to the public by the Bureau of Reclamation through an Environmental Assessment (EA) for this project. If no significant impacts to the human environment are identified in public scoping and alternative evaluation, a Finding of No Significant Impact (FONSI) will be prepared and signed. The FONSI documents the decision on which alternative Reclamation will implement and reasons for its selection.

Currently, Reclamation's Lewiston Orchards Project (LOP) acquires water for irrigation by diverting surface water from within the Lapwai Creek and Captain John Creek basins, which is primarily located within the Nez Perce Reservation. Water availability is insufficient to meet system demands, resulting in use restrictions for district patrons. Many features and facilities associated with LOP are also in need of substantial repair, maintenance and in many cases, total replacement, at great cost to Reclamation and Lewiston Orchards Irrigation District (LOID). In addition, LOP facilities and operations are in conflict with Tribal cultural and natural resource interests. Finally, LOP surface diversions seasonally reduce water availability and connectivity within the Lapwai Creek watershed, resulting in adverse effects to ESA-listed steelhead utilizing the watershed.

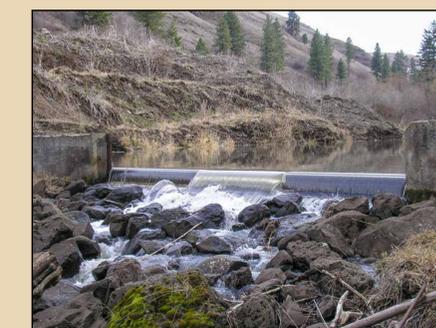
The National Performance Review goal of a Federal Government that works better and costs less seeks opportunities to develop partnerships and advance opportunities to reduce costs to the Federal Government. Reclamation's title transfer initiative implements this performance review goal by divesting all or portions of Reclamation's interest in authorized projects to local governing boards.

The purpose of the proposed action is to eliminate impacts to Tribal cultural and natural resources, reduce system rehabilitation costs to Reclamation and LOID, increase system reliability for LOID patrons, reduce costs to the Federal Government and avoid future litigation associated with surface diversions within the LOP. This would be accomplished through a water exchange and title transfer where LOID would acquire title of the Reclamation property interests located below Mann Lake and satisfy irrigation needs through ground-water pumping. The remaining Reclamation property interests would be transferred to the Bureau of Indian Affairs to be held in trust for the Tribe for future management and administration.



### Resources To Consider

- Water Rights
- LOP Operations
- System Hydrology
- Land Use
- Recreation
- Threatened and Endangered Species
- Water Quality
- Groundwater and Geology
- Fisheries
- Wildlife
- Vegetation
- Historical and Paleontological Resources
- Socioeconomics
- Indian Sacred Sites
- Indian Trust Assets
- Environmental Justice
- Climate Change
- Cumulative Impacts



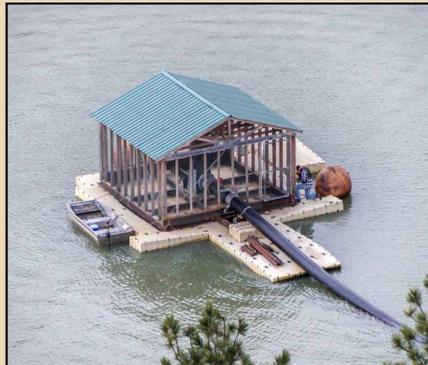
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## Lewiston Orchards Project – System Operations and Hydrology

### System Operations

- Capture water from Lapwai Creek and Captain John Creek basins
- Water stored in three reservoirs (Soldiers Meadow Reservoir, Lake Waha, Mann Lake)
- Water diverted via four diversion structures to provide water to Lewiston Orchards Irrigation District (LOID)
- Water used to supply residential irrigation to over 18,000 patrons in a 3,629-acre service area
- Water also used for local fire suppression activities and stock watering
- Water supply from year to year is dependent upon annual precipitation

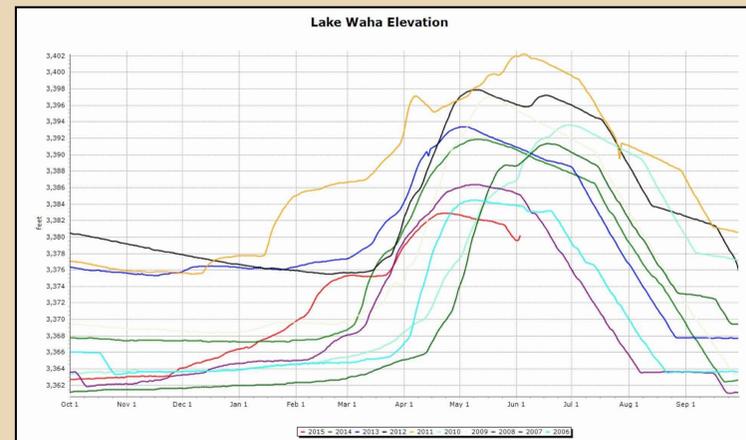
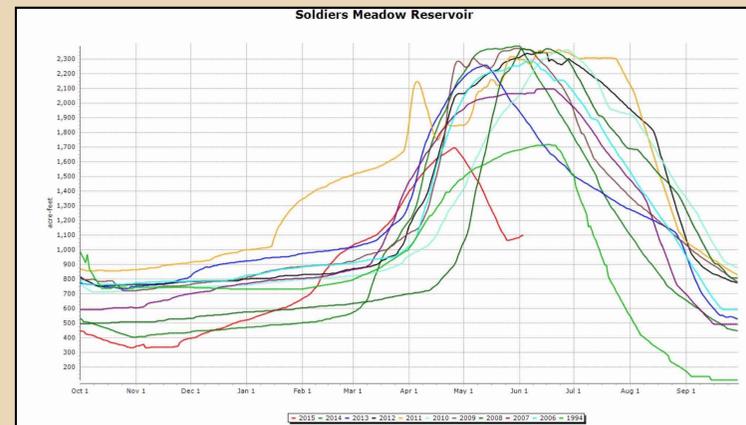
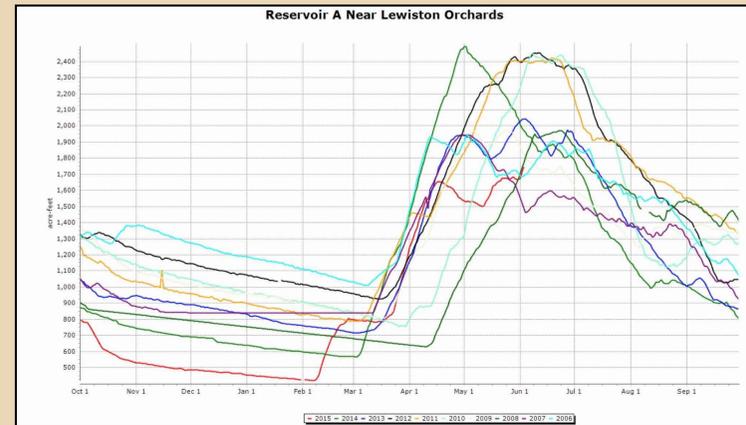


### Use Restrictions

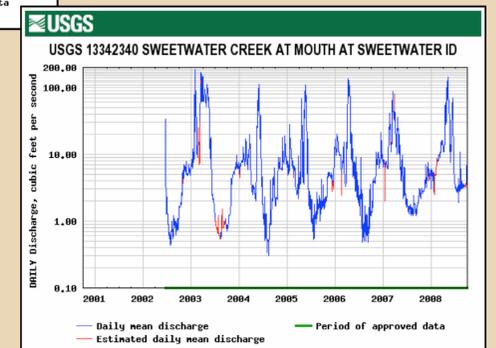
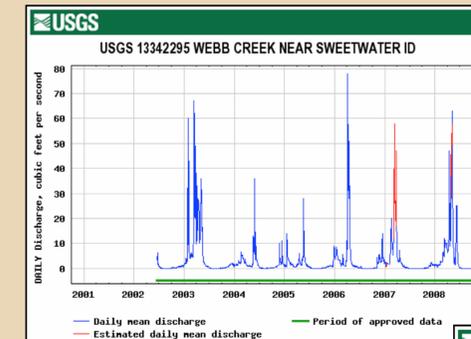
- Some years, insufficient water supplies exist to meet the demands of the system
- Water shortages result from reduced winter precipitation
- Increased rain in the winter reduces the water available for storage and use
- In-stream flow requirements for Snake River steelhead place additional demands on the system
- When not enough water exists to meet demands, LOID must implement use restrictions to ensure the water supply will last through the irrigation season and provide water for fire suppression
- Restrictions are necessary until sufficient precipitation and storage exist to replenish the system



### Water Supply



### System Hydrology



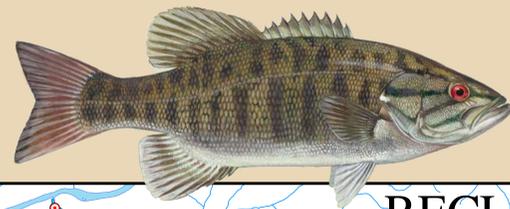
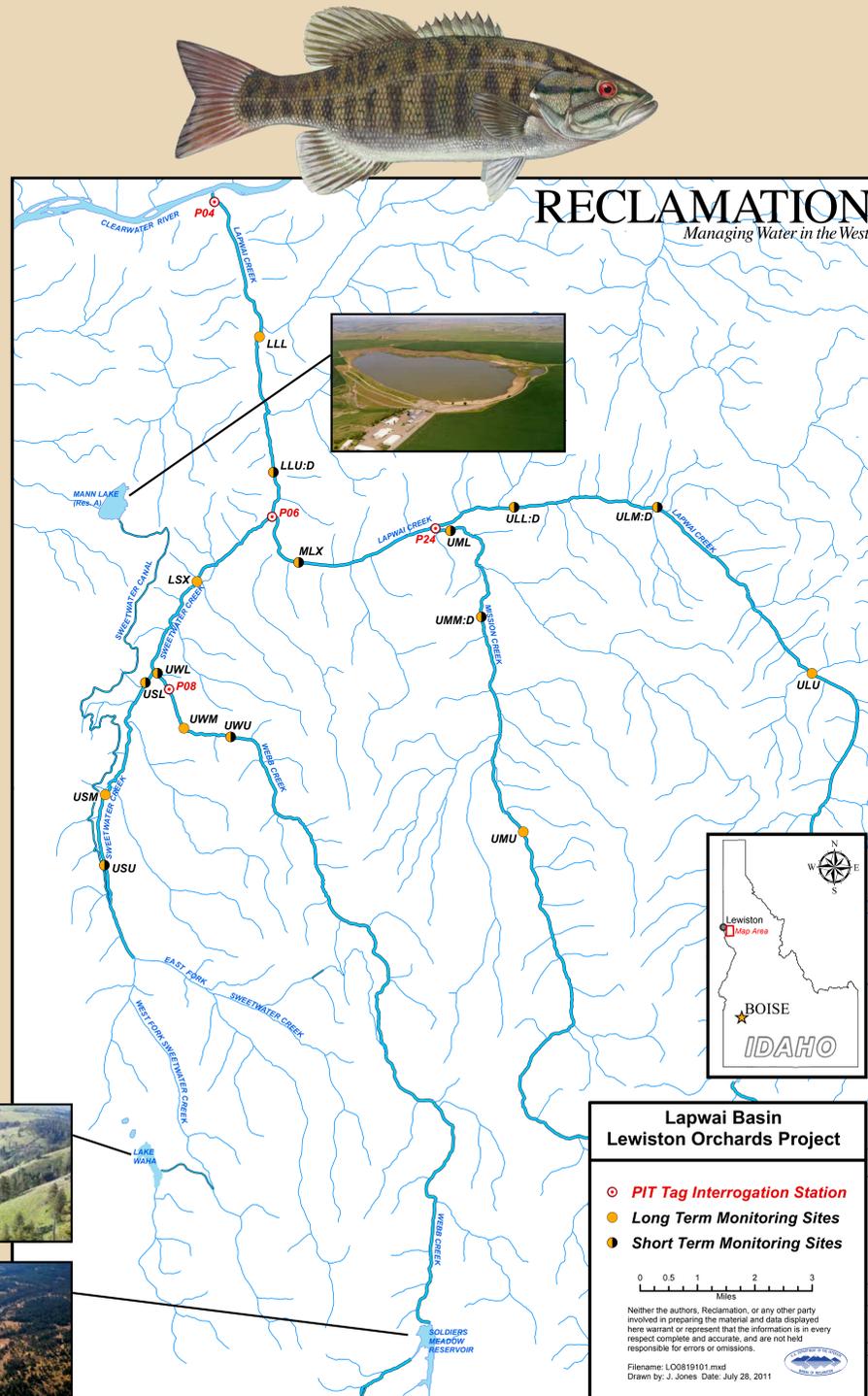
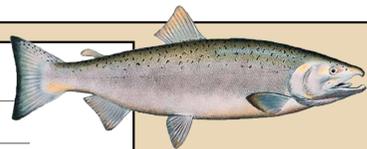
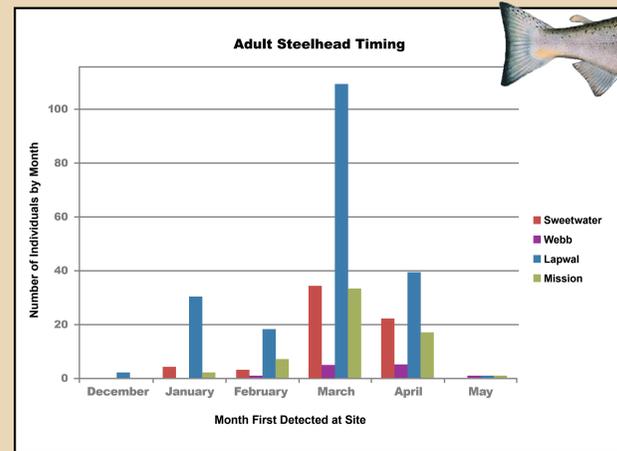
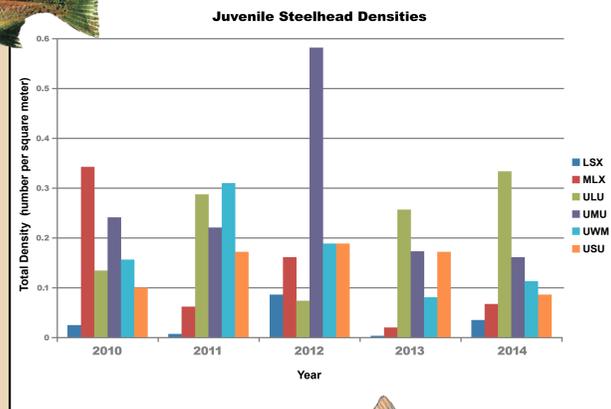
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## Fisheries Resources

### Endangered Species

SPECIES	STEELHEAD	COHO
STATUS	Threatened under Endangered Species Act	Experimental Population
ADULTS PRESENT	December to May	October to January
JUVENILES EMERGE	May through June	March through April
JUVENILES LEAVE SYSTEM TO MIGRATE TO OCEAN	March through June	March through May



### Recreational Species

LAKE WAHA	SOLDIERS MEADOW RESERVOIR	MANN LAKE
Rainbow Trout – stocked	Undesirable Fish Removed in 2013	Rainbow Trout and Channel Catfish – stocked
Kokanee – stocked	Rainbow Trout – stocked	Largemouth Bass – natural production
Smallmouth Bass – natural production	Kokanee – stocked	Black Crappie – natural production
Yellow Perch – natural projection		Bluegill – natural production



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## Alternatives

### Alternatives Analysis

Reclamation will identify a range of reasonable and viable alternatives. In order for an alternative to be considered viable, it must meet the purpose and need of the project. The alternatives will be analyzed, with effects to respective resources being identified in the Environmental Assessment. Alternatives will be compared against current conditions to evaluate possible impacts.



### Alternatives Considered but Eliminated

The Lower Clearwater Exchange Project (LCEP) conducted a study in 2010 to identify opportunities to replace Lewiston Orchards Irrigation District's (LOID's) current system with a more reliable system. Through this process, 32 alternatives were identified that would address water supply issues with LOID, 10 of which fully or partially met the objectives established by the LCEP.

#### The objectives were:

- Had a generally reasonable capital cost,
- Met operational requirements,
- Met long-term and annual maintenance objectives,
- Had reasonable replacement costs,
- Had manageable power requirements.

#### The final three alternatives were:

- Clearwater River Pumping Station, Attenuated System,
- Snake River Pumping Station, Attenuated System,
- Groundwater Supply, Attenuated System.

Each had very high initial costs, precluding them from further consideration. Reclamation developed an incremental approach associated with the groundwater supply system where wells could be constructed as funding becomes available; subsequently reducing initial construction costs.



### No Action

- This alternative evaluates impacts in the absence of a federal project
- Maintains current system
- Water reliability issues will continue
- Water reliability may become increasingly difficult with increased winter rains and continued Endangered Species Act litigation
- Minimum stream flows will persist
- System rehabilitation costs will be high due to replacement costs associated with aging and deteriorating infrastructure
- Restrictions are likely to occur as system demands increase

### Well Field with Water Exchange and Title Transfer

- Construction of multiple wells near Tammany Creek
- Utilizes LOID's new pilot well
- Replaces surface water with groundwater
- No longer requires current storage and diversion features
- Utilizes Mann Lake as a balancing reservoir
- Provides reliable, sustainable water from a deep regional aquifer
- Involves a transfer of title from Bureau of Reclamation to LOID and Bureau of Indian Affairs
- Meets the purpose and need for action
- Meets objectives identified in the LCEP report
- Passes alternatives screening criteria

### Alternatives Screening

#### Alternatives Must:

- Eliminate impacts to steelhead
- Increase system reliability for LOID patrons
- Provide enough water to meet LOID's annual needs
- Eliminate impacts to Tribal natural, cultural and spiritual resources
- Utilize water originating outside of the Nez Perce Reservation
- Reduce costs to the Federal Government

### Other Alternatives??

We want to hear from you. If you have another alternative or variations to the existing alternatives, please submit your ideas, suggestions and/or comments.

**Thank You!**



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## Lands and Recreation

### Reclamation Assets

- Captain John Diversion and Canal
- Soldiers Meadow Reservoir
- Lake Waha
- West Fork Sweetwater Diversion Dam and Feeder Canal
- Waha Pumping Plant and Pipeline
- Webb Creek Diversion Dam, Conduit and Canal
- Sweetwater Diversion Dam and Canal
- Reservoir A Dam and Mann Lake
- Filter Plant
- Main Distribution Line
- Relief Reservoirs #1 and #2
- Hereth Park

### Agreements and Leases

Reclamation enters into agreements and leases from time to time with various entities for a variety of purposes. Examples include:

- Grazing Leases
- Recreational Leases
- Resource Management Agreements
- Operations and Maintenance Agreements

These agreements and leases allow lands and facilities associated with the Lewiston Orchards Project (LOP) to be operated, maintained and management to meet a variety of needs within the greater action area (i.e., the greater Lewiston area).



### Land and Asset Management

Reclamation and Lewiston Orchards Irrigation District work together to operate, maintain and manage lands and assets associated with the LOP for the purpose of maintaining water delivery operations, maintaining system features, and minimizing environmental impacts while striving to meet the needs of the recreating public. This cooperative effort has resulted in years of successful system management in an ever-changing environment.

### Recreation

Many recreational opportunities exist on or adjacent to Reclamation lands and facilities associated with the LOP. Recreational opportunities are available throughout the year and serve many people within the action area. Examples include:

- Fishing
- Boating
- Canoeing
- Hunting
- Camping
- Bird Watching
- Picnicking
- Model Airplane Use
- Wildlife Viewing



**Lands and reservoirs associated with the LOP provide a great deal of recreational opportunities within close proximity to Lewiston, with fishing comprising the majority of use. Recreational resources are very important both socially and economically, thus necessitating careful consideration of actions that may impact recreational resources.**



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## Cultural and Historic Resources

### Overview

Cultural and historic resources within the Lewiston Orchards Project (LPO) have been identified through a number of surveys and investigations. The infrastructure of the LOP is the most prominent historic resource involved in the proposed title transfer, and includes three reservoirs and a number of other structures such as dams, canals, pipelines, and a pumping plant. The majority of the structures were constructed in the early twentieth century to provide water to small upland farms in the Lewiston Orchards land development. Most of these structures have been rebuilt at least once since original construction, and a few have been rebuilt and/or expanded several times. In addition, the Nez Perce Tribe (Tribe) considers several areas in and around portions of the LOP to hold traditional cultural importance, and these areas, along with the physical project structures, are given special attention during the environmental assessment process.

### Consideration of Cultural Resources

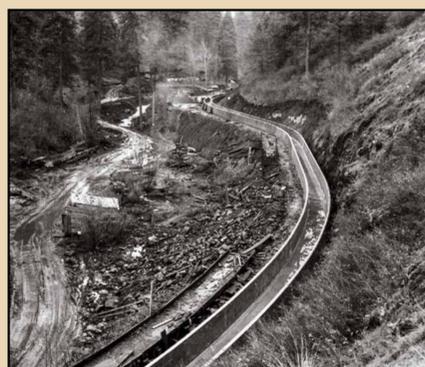
The LOP area lies entirely within the originally occupied territory of the Tribe. Therefore, establishment of the LOP has impacted many Tribal traditional uses associated with this culturally significant geographical area. Beliefs, customs and practices have been passed down through generations that establish the traditional cultural significance of the area and have ongoing importance to the Nez Perce community to this day. Some traditional practices include:

- Traditional resource gathering area
- Areas used for spiritual supplication and other sacred rites
- Rock art sites
- Legend sites
- Villages, campsites, and trail systems
- Traditional named geographic areas

Special consideration must be given to these resources with the understanding that the values which were at the core of these practices still remain.

### Historical Features

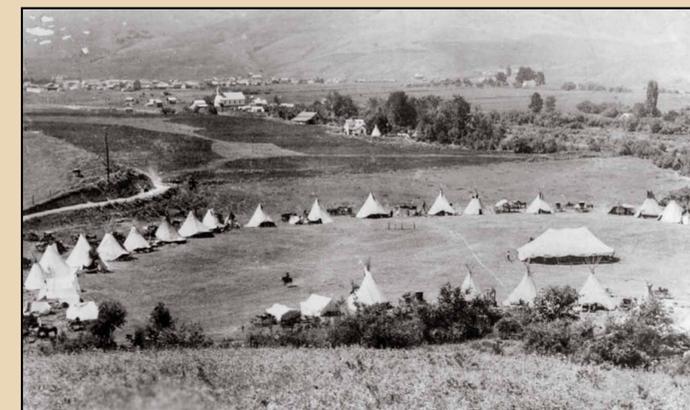
- Captain John Canal and diversion
- Soldiers Meadow Reservoir
- Webb Creek Canal and pipeline
- Waha feeder canal
- West Fork Sweetwater Creek Diversion Dam
- Lake Waha
- Sweetwater Canal
- Reservoir A and main distribution line
- Hereth Park area



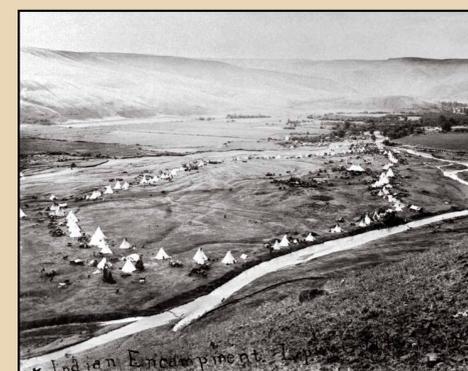
Looking upstream from Sta. 11+00, completed concrete flume replaces old wooden flume for Sweetwater Creek diversion. USBR Photo, November 18, 1947

### The Nez Perce Tribe

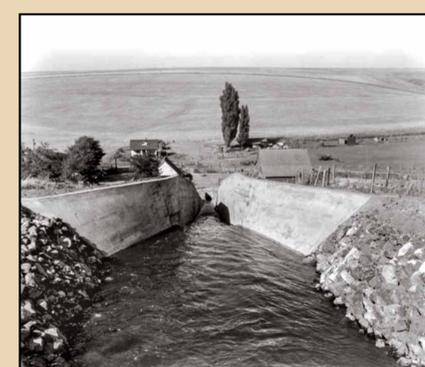
The Lapwai Creek and Sweetwater Creek Valleys have been occupied by Nez Perce people and their ancestors since time immemorial. These valleys have been a steward to Nez Perce culture by giving the Nez Perce people foods and medicines to sustain themselves. Their relatives are buried on the promontories overlooking the same places where their ancestors put up tipis and held ceremonies. These valleys are also a source of profound power and spirituality that enabled the Nez Perce to hold



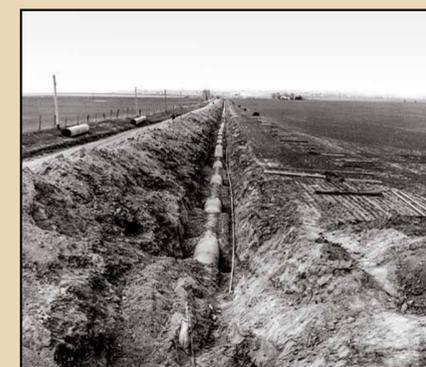
a sensitive relationship with the land that would survive a drastic cultural change. The Lapwai Valley is also the place where a man received a prophetic vision which foretold of the arrival of both horses and white people. The prophecy foretold of great changes that would be brought to the Nez Perce people by them.



The Nez Perce are still in the Lapwai valley. The Nez Perce Tribal Government radiates from the valley with many programs working to protect the very resources the Nez Perce people depend upon. Water, plants, fish, as well as many other things, are still sacred to the Nez Perce people in the Lapwai and Sweetwater valleys.



Sweetwater Chute and Siphon, Lewiston Orchards Project, ID. USBR Photo, October 16, 1948



Main 50" enameled steel pipeline looking downstream from Sta. 47+00 toward Lewiston Orchards district. Lewiston Orchards Project, ID. USBR Photo, April 11, 1949

