

RECLAMATION

Managing Water in the West

City of Hermiston Recycled Water Pipeline and Outfall License Agreement

Draft Environmental Assessment

**Columbia-Cascades Area Office
Yakima, WA.**



**U.S. Department of the Interior
Bureau of Reclamation**

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Acronyms and Abbreviations

CWA – Clean Water Act

EA - Environmental Assessment

EPA – Environmental Protection Agency

ESA - Endangered Species Act

FDS - Flow Distribution Structure

FONSI - Finding of No Significant Impact

ITA - Indian Trust Assets

MCR - Middle Columbia River

NEPA - National Environmental Policy Act

NPDES - National Pollutant Discharge Elimination System

NMFS – National Marine Fisheries Service

Reclamation - Bureau of Reclamation

RWP – Recycled Water Plant

Service - U.S. Fish and Wildlife Service

TMDL - Total Maximum Daily Load

TCP - Traditional Cultural Properties

SHPO -State Historic Preservation Office

1. Purpose and Need

1.1 Purpose and Need for Action

The purpose of the project is for the Bureau of Reclamation (Reclamation) to authorize a license agreement to the City of Hermiston to install, operate and maintain a recycled water pipeline and outfall structure on Reclamation fee title land. The pipeline and outfall structure will be used by the City to transport and deliver high quality recycled water from the City's municipal Recycled Water Plant (RWP) to the West Extension Irrigation District (WEID) Main Canal during the summer season for irrigated agricultural purposes.

The need for this action will be to help the City meet National Pollutant Discharge Elimination System (NPDES) permit levels for the next 20 years, address environmental concerns impacting the Umatilla River and threatened salmonid species, and discharge high quality Class A recycled water to the Umatilla River within approved limits.

1.2 Location and General Description of Area

The portion of the project that is located on Reclamation property is within Lots 6 and 7 of Section 28, T. 5 N., R. 28 E., Willamette Meridian, Oregon.

1.3 Description of Current Facilities

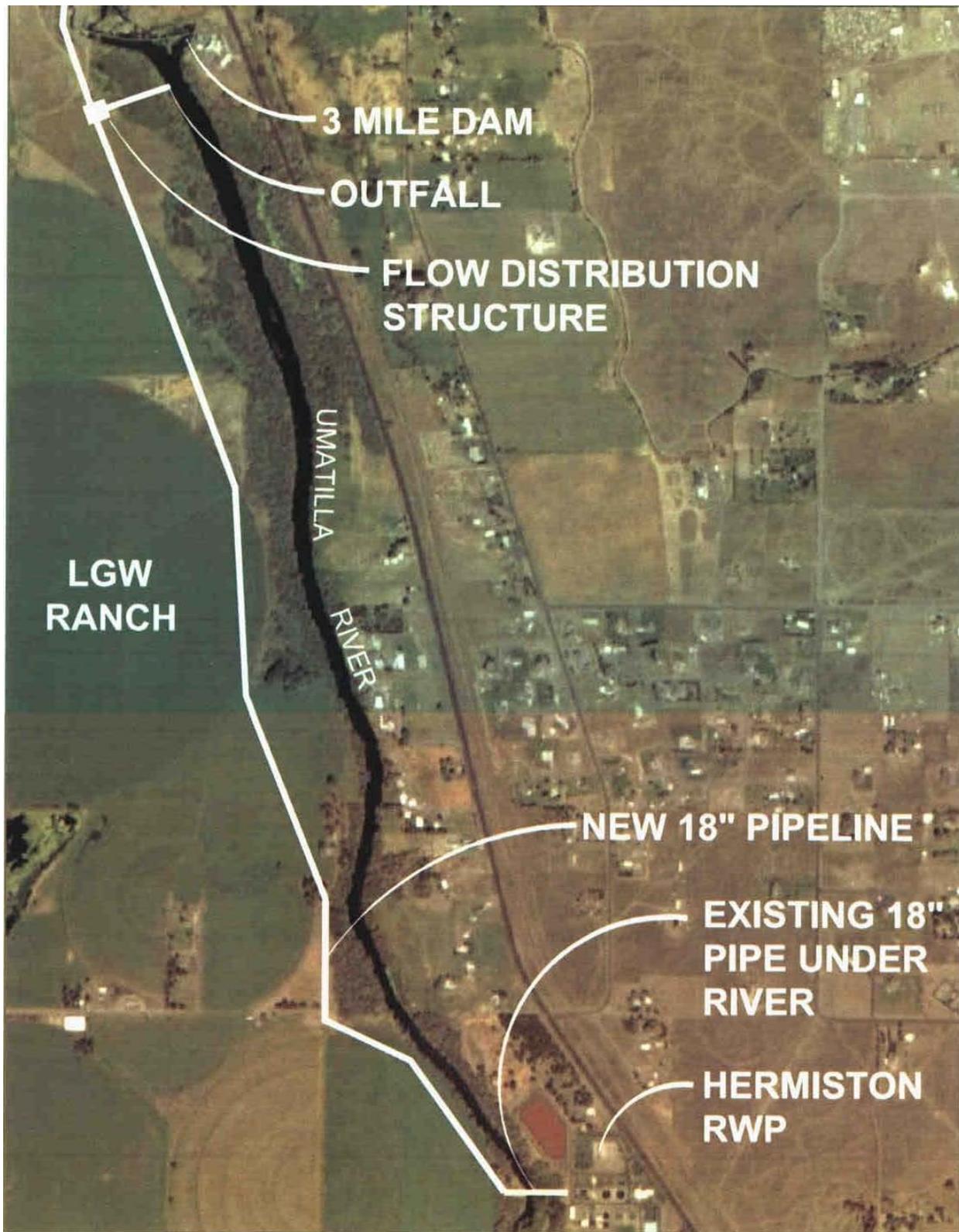
The West Extension Irrigation District is located in north central Oregon in Morrow and Umatilla Counties. The district lies west of the town of Umatilla, Oregon bordered on the north by the Columbia River. It extends for 27 miles with its westernmost boundary approximately three miles west of the City of Boardman, Oregon.

The City of Hermiston, located in north central Oregon, is one of the largest communities within Reclamation's Umatilla Project area. The proposed project includes upgrades and construction at the City's existing RWP facilities which are located at 2205 North 1st Place in Hermiston, Oregon.

1.4 Permits and Related Laws

1.4.1 National Environmental Policy Act

The Bureau of Reclamation (Reclamation) is responsible for determining if the proposed project might have significant effects to the environment under the National Environmental Policy Act (NEPA). If Reclamation determines that effects would not be significant, a Finding of No



Significant Impact (FONSI) will be prepared. A FONSI would allow Reclamation to proceed with the proposed action without preparation of an Environmental Impact Statement.

In 2009, the City sought out funding from the U.S. Environmental Protection Agency (EPA) Clean Water State Revolving Fund to improve the City's current water treatment facility, associated recycled water pipelines, and outfalls structures. As a result, EPA took the position of lead action agency to ensure compliance with NEPA. EPA and associated consultants completed an environmental assessment (EA) regarding federal funding from the EPA and state funding through the Oregon Department of Environmental Quality for planned improvements to the City's existing RWP facilities. The information provided in the EPA's EA proposed upgrades to their existing water treatment facility to create an RWP, complete with a new outfall pipeline with three discharge locations. This EA, prepared by Reclamation, will only address the structures associated with the City's RWP pipeline installation on Reclamation property and the construction of the water outfall facility on the WEID Main Canal.

1.4.2 Endangered Species Act

In compliance with Section 7 of the Endangered Species Act (ESA), EPA prepared a biological assessment for the improvements to the City's RWP as well as impacts of recycled water discharge on two ESA-listed species: Middle Columbia River (MCR) steelhead (*Oncorhynchus mykiss*) and bull trout (*Salvelinus confluentus*). EPA's BA also addressed the essential fish habitat (EFH) requirements of the Magnuson-Stevens Fishery Conservation and Management Act of 1996. The portion of the project that involves structures and facilities on Reclamation property was also included in this BA.

The National Marine Fisheries Service (NMFS) issued a biological opinion, under Section 7 of the ESA, regarding EPA funding provided to the City for constructing the RWP project. NMFS biological opinion concluded that the proposed action is not likely to jeopardize the continued existence of Middle Columbia River steelhead or result in the destruction or adverse modification of designated critical habitat for MCR steelhead.

The U.S. Fish and Wildlife Service concurred with EPA's determination that the City's proposed project may affect, but is not likely to adversely affect bull trout or its designated critical habitat.

1.4.3 National Historic Preservation Act

The National Historic Preservation Act (NHPA) requires that Federal agencies complete inventories and site evaluation actions to identify cultural resources that may be eligible to the National Register, and then ensure those resources "are not inadvertently transferred, sold, demolished, substantially altered, or allowed to deteriorate significantly". Regulations entitled "Protection of Historic Properties" (36 CFR 800) define the process for implementing requirements of the NHPA, including consultation with the appropriate State Historic

Preservation Office (SHPO) and the Advisory Council on Historic Preservation.

Reclamation reviewed the proposed area of potential affect and determined that the project would have no potential to cause affect to cultural resources. There is minimal potential for intact subsurface archaeological deposits along the proposed alignment for the buried pipeline on Reclamation property due to past land disturbance activities in the project area. Also, there would be no impacts to current facilities therefore, no affects to historic properties.

1.4.4 Indian Trust Assets

Indian Trust Assets (ITA) are legal interests in property or rights held in trust by the Federal government for federally recognized Indian tribes or individual Indians. Trust status originates from rights imparted by treaties, statutes, or executive orders. Examples of ITAs include lands, minerals, instream flows, water rights, and hunting and fishing rights. A defining characteristic of an ITA is that such an asset cannot be alienated, sold, leased, or used for easements without approval from the United States.

No ITAs have been identified within the project area, and no impacts are anticipated. Neither alternative would affect land, minerals, instream flows, water rights, or hunting and fishing rights.

1.4.5 Sacred Sites

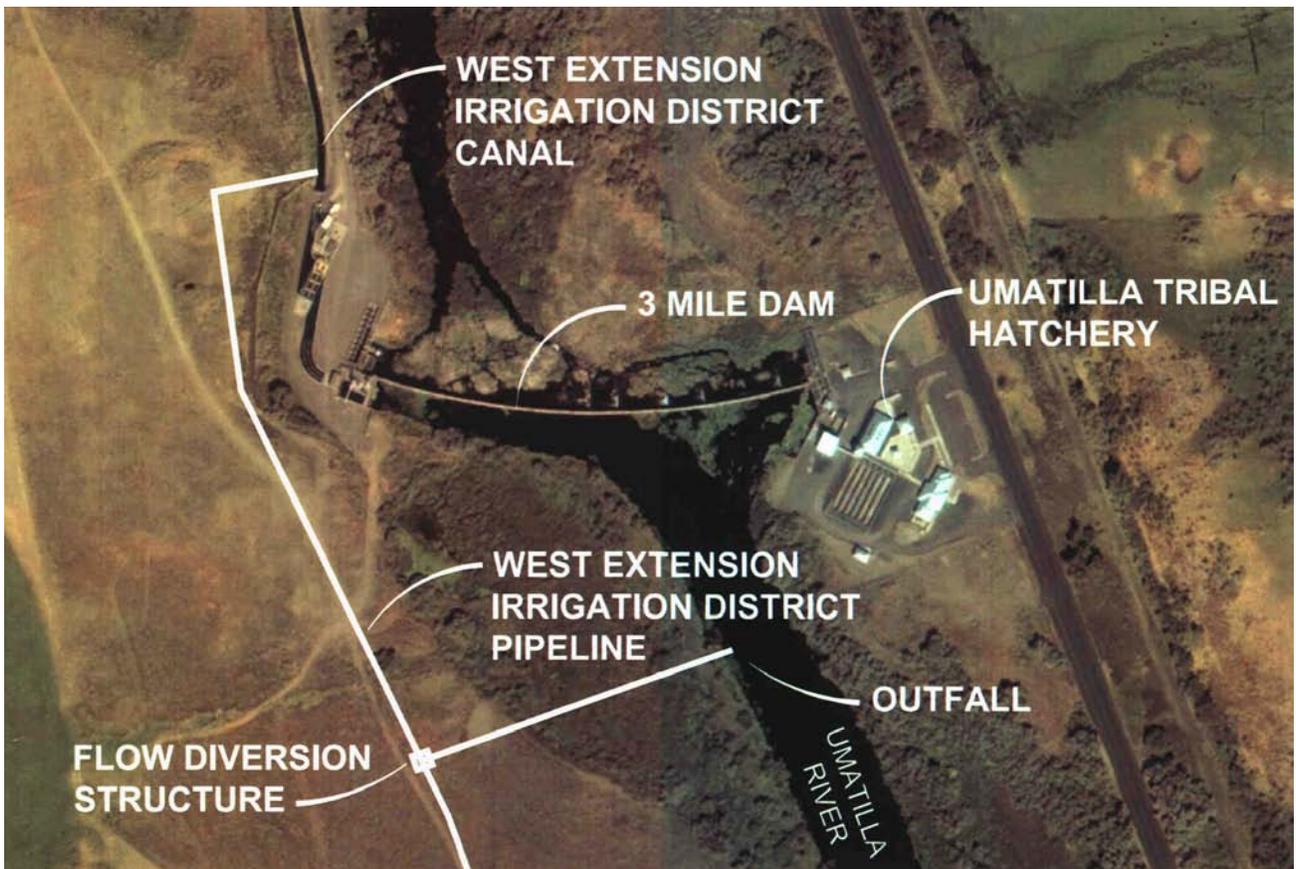
Executive Order 13007, dated May 24, 1996, instructs Federal agencies to promote accommodation of access to and protect the physical integrity of American Indian sacred sites. Sacred site means a specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to or ceremonial use by an Indian religion, provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site.

No sacred sites have been identified in the project area; also, neither alternative would have the potential to limit access to any known/unknown sacred site.

1.4.6 Environmental Justice

The Presidential Executive Order 12898 and the Departmental Environmental Justice Policy require that federal agencies consider the impacts of the Department of Interior's actions on minority and low-income populations and communities, as well as the equity of the distribution of benefits and risks of those decisions.

No minority or low-income populations or communities are located within the area impacted by this project.



2. ALTERNATIVES

2.1 Alternative No. 1 - No Action

Under the no action alternative, Reclamation will not grant a license agreement to the City to install, operate and maintain a recycled water pipeline and outfall structure on Reclamation fee title land. The City of Hermiston would continue to discharge into the Umatilla River from their existing outlet.

2.2 Alternative No. 2 – Issuance of License Agreement to the City of Hermiston for Modifications to Existing Water Treatment Facilities

The City of Hermiston proposes to upgrade an existing water treatment facility to create an RWP, complete with a new outfall pipeline with three discharge locations. Even though the existing treatment plant was constructed in 1980 it still meets existing water quality limits of its NPDES permit. However, upgrades are required in order to meet new total maximum daily load (TMDL) limits and accommodate for future growth in the urban growth boundary. For this EA and under this alternative, Reclamation would grant a license agreement to the City to install, operate and maintain a recycled water pipeline and one outfall structure located on Reclamation fee title land. The pipeline and outfall structure will be used by the City to transport and deliver high quality (Class A) recycled water from the City's municipal Recycled Water Plant to the WEID canal during the summer season for irrigation agricultural purposes.

The pipeline portion of the project involves installing a 7,500-ft long, 18-inch diameter main pressure pipeline from an existing 18-inch diameter water pipeline currently located under the Umatilla River. This portion of the pipeline under the river connects to the City's RWP and will not need to be modified as part of this project.

The 7,500 feet of pipeline will then connect to a concrete Flow Distribution Structure (FDS) with valves to allow flow to either be directed to the river outfall or the WEID main canal depending on seasonal need. A 550-ft pipeline segment from the FDS will terminate at the outfall into the Umatilla River pool upstream of Three-Mile Dam. The outfall will discharge Class A Recycled Water during the winter (November through March).

From the FDS, an additional 1,500-ft of 18-inch diameter pipeline will be installed ending at the WEID main canal. Class A Recycled Water will be delivered to the WEID canal during the summer (March through October).

3. Affected Environment and Environmental Consequences

3.1 Resources Not Affected By the Proposed Alternatives

For both the no action and the action alternative there will be no effects on the following resources: cultural resources/Historic Properties, environmental justice, Indian Trust Assets (ITA), and sacred sites. Reclamation determined that the proposed project would have no potential to cause affect to cultural resources or historic properties. No minority communities are known to depend on the affected stretch of the Umatilla River. Neither alternative will affect ITAs, nor will access to sacred sites be restricted.

3.2 Water Quality

3.2.1 Affected Environment

The State of Oregon manages the water quality of the Umatilla River under the authority of the Clean Water Act (CWA). Section 303(d) of the CWA requires states and tribes to identify water bodies that do not meet water quality standards and publish a list of these impaired waters every 2 years. The most recent approved 303(d) list for the State of Oregon is the 2004/2006 Integrated Report approved by the EPA on February 26, 2007 (DEQ 2007). Once a water body is identified on the 303(d) list, states and tribes must develop an improvement plan known as total maximum daily loads (TMDLs). The TMDLs defines the amount of a pollutant that can be present in a water body and still meet water quality standards. The Oregon Department of Environmental Quality (DEQ) developed a TMDL in 2001 for the Umatilla River that set waste load allocations for sediment, temperature, algae, aquatic weeds, pH, ammonia, nitrate, and bacteria (DEQ 2001).

The City of Hermiston is upgrading their wastewater facility to comply with the waste load allocations given in the TMDL. The wastewater treatment facility improvements will allow for the City to meet Class A recycled water quality standards. The Class A water quality standards are given in Table 1.

Table 1 Class A Recycled Water Quality Standards

Parameter	Class A Water Quality Standard
Biochemical Oxygen Demand (BOD), mg/l	< 2
Total Suspended Solids (TSS), mg/l	< 2
Ammonia, mg/l	< 1
Turbidity, NTU	< 2
Total Coliform, organisms per 100 ml	< 2

3.2.2 Environmental Consequences

Alternative No. 1 - No Action

Under the No Action alternative, Reclamation would not grant the City of Hermiston a right of way or license to install a pipeline across Reclamation lands or discharge wastewater from its wastewater treatment plant into the WEID Main Canal. The City of Hermiston would continue to discharge into the Umatilla River from their existing outlet.

Alternative No. 2 – Issuance of License Agreement to the City of Hermiston for Modifications to the Recycled Water Plant

Under Alternative 1, Reclamation would grant the City of Hermiston a right of way and license to install a buried pipeline across Reclamation property for the transport of Class A recycled wastewater from the city’s wastewater treatment plant to the WEID Main Canal. The Class A recycled wastewater will be accepted and mixed with irrigation water and used for agricultural irrigation purposes. Class A recycled water is approved by ODEQ for human contact and for use to irrigate food crops. The water would be annually discharged into the canal during the irrigation season (April to October). The discharge of the recycled water into the canal during the irrigation season could have a beneficial effect on the water quality in the Umatilla River if the use results in less flow being diverted from the river. The discharge of effluent to the canal would improve water quality in the Umatilla River by eliminating the discharge of warm water to the Umatilla River during the summer months.

4.0 Bibliography

DEQ 2007 2004/2006 Integrated Report Assessment Database. Oregon State Department of Environmental Quality, Water Quality Program, Portland, Oregon.
<http://www.deq.state.or.us/wq/assessment/rpt0406/search.asp>.