



— BUREAU OF —  
RECLAMATION

# Final Environmental Assessment Stanfield Irrigation District Conjunctive Use Contract

**Umatilla Basin Project, Oregon**  
**Columbia-Pacific Northwest Region**

CPN EA-19-02



## **Mission Statements**

The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated Island Communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Cover photograph: Reclamation's Columbia River Pumping Plant (Reclamation photo)

# Acronyms and Abbreviations

Acronym or Abbreviation	Definition
Agreement	Stanfield Irrigation District Exchange Agreement 3-07-10-W0953
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
cfs	Cubic feet per second
CTUIR	Confederated Tribes of the Umatilla Indian Reservation
DOI	Department of the Interior
EA	Environmental Assessment
EFH	Essential Fish Habitat
EID	East Irrigation District
EO	Executive Order
ESA	Endangered Species Act
FONSI	Finding of No Significant Impacts
GHG	Greenhouse gas
HID	Hermiston Irrigation District
ITAs	Indian Trust Assets
MOA	Memorandum of agreement
MSA	Magnuson-Stevens Fishery Conservation and Management Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
ODFW	Oregon Department of Fish and Wildlife
OWRD	Oregon Water Resources Department
PBF	Essential physical and biological feature
POD	Point of diversion
Project	Umatilla Basin Project
Reclamation	Bureau of Reclamation
RM	River mile
SID	Stanfield Irrigation District
U.S.C.	U.S. Code

Acronym or Abbreviation	Definition
USFWS	U.S. Fish and Wildlife Service
WEID	West Extension Irrigation District
WID	Westland Irrigation District

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# Chapter 1 Purpose and Need

## 1.1 Introduction

Stanfield Irrigation District (SID) has an existing exchange agreement (Agreement) with the U.S. Department of the Interior, Bureau of Reclamation (Reclamation) and has applied for a new water right through the State of Oregon. SID has requested that Reclamation supplement their exchange agreement to include a Conjunctive Use Contract. The current exchange contract allows SID to divert 34,700 acre-feet from the Umatilla River or the Columbia River. SID's water right application was updated to include an additional point of diversion (POD). The new POD would allow SID to pump water from the Columbia River Pumping Plant and/or the East Irrigation District (EID) Pumping Plant. In addition to their current exchange agreement, SID proposes to use up to an additional 3,000 acre-feet of water during years when certain precipitation-based triggers are met. Per this agreement, conjunctive use means the pumping of non-Project surface water using Umatilla Basin Project (Project) facilities. The power and operations and maintenance cost to pump the water are reimbursed by SID.

This additional water would be used to pre-saturate irrigated lands from February 15 to February 28 in years with little snowpack or exceptionally low soil moisture content. This is further defined as years when November, December, and January each receive less than 1.18 inches of precipitation—an approximate 5-year return period. Figure 1 presents precipitation data for November, December, and January for water years 1994-2018. Figure 1 shows that conjunctive use would have been triggered in 1994, 2001, 2005, and 2014 for use in the following February. Other factors to consider for conjunctive use would be freezing temperatures and days without snow cover; however, these factors are not easily quantified without easily available historical data to define a trigger point.

Water is expected to be pumped at 60 cubic feet per second (cfs) for approximately 13 days, resulting in the use of approximately 1,550 acre-feet.

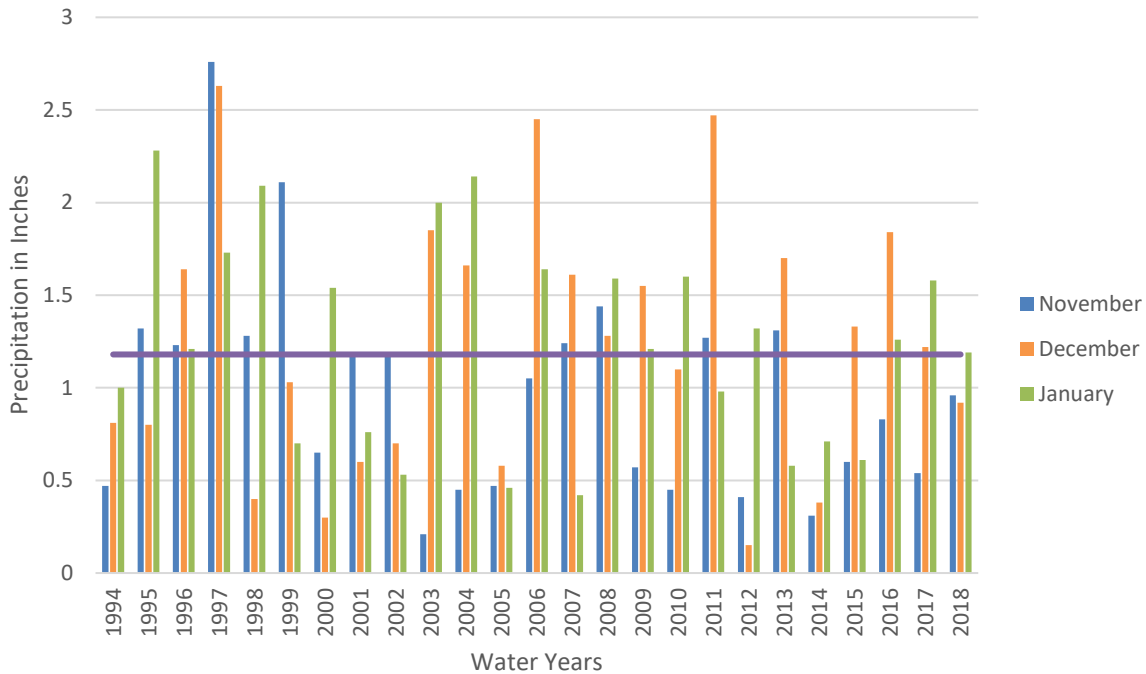


Figure 1. Precipitation received November through January for water years 1992-2018. The trigger for preseason conjunctive use is shown in purple (1.18 inches).

Conjunctive use is also proposed for end of irrigation season supplement. SID could use the additional water to end their season, after September 30, if the prior winter/spring was exceptionally dry and the current irrigation season is exceptionally hot and dry, and if SID’s current water right for 34,700 acre-feet has been exhausted. This is further defined as years where the sum of precipitation in November through April is less than 4 inches (Figure 2). According to the precipitation data shown, conjunctive use would have been triggered in 1994, 2002, 2005, and 2015.

It is anticipated that 60 cfs would be delivered for up to 12 days in October, resulting in withdrawal of approximately 1,400 acre-feet.



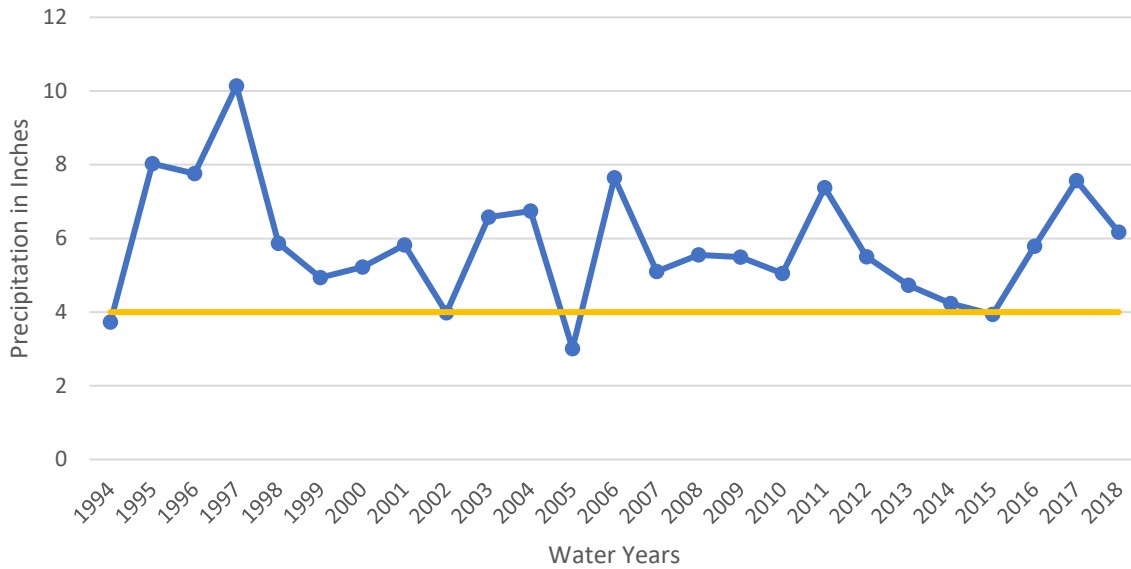


Figure 2. Total precipitation from November through April for water years 1994 to 2018. The trigger for conjunctive use is shown in gold (4 inches).

Reclamation prepared this Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA) and Council on Environmental Quality’s (CEQ) final rule (Federal Register 2020) to document and disclose any potential effects to the quality of the human environment which would result from the proposed conjunctive use proposed by SID. Should a determination be made that conjunctive use will not result in significant environmental impacts, a Finding of No Significant Impact (FONSI) will be prepared to document that determination and provide a rationale for approving the selected alternative. If not, then a decision will be made to either select the No Action alternative or issue a notice of intent to prepare an Environmental Impact Statement.

## 1.2 Background, Location, and Action Area

In 1903, Reclamation began to investigate the possibility of irrigating lands on the lower Umatilla River by gravity flow from the Columbia and Snake Rivers. During 1903 and 1904, Reclamation surveyed the Umatilla River and its tributaries to map feasible reservoir sites. In 1905, the east and west divisions (West Extension Irrigation District (WEID) and Hermiston Irrigation District (HID)) of the project were authorized (Figure 3). Work began on Cold Springs Reservoir the next year, and water was first delivered in 1908. The construction of McKay Dam and Reservoir, which provides supplemental irrigation water to the south division SID and Westland Irrigation District (WID), was approved in 1923 and construction was completed in 1927.

The original Umatilla Project provides multipurpose benefits to the people of northeastern Oregon. The original Project furnished irrigation water to 13,679 acres and a supplemental supply to 12,499 acres. In addition, there are 3,568 acres not included in an irrigation district that are provided either a

full or supplemental water supply from McKay Reservoir under individual storage contracts. McKay and Cold Springs Reservoirs have created fish and wildlife habitat near two wildlife refuges, enhanced recreational opportunities, and provide flood control.

The 1906 Umatilla Project allowed large quantities of Umatilla River water to be removed for irrigation, and diversion dam structures created passage problems for migrating anadromous fish. Near or complete seasonal dewatering of the lower Umatilla River after construction of Three Mile Dam in 1914, the Hermiston Power and Light Dam in 1910, and other diversion dams caused dramatic declines in spring Chinook salmon populations. Indigenous spring Chinook salmon in the Umatilla River were considered extinct by about 1963.

At the request of the Confederated Tribes of the Umatilla Indian Reservation (CTUIR), the Oregon Department of Fish and Wildlife (ODFW), and other interested parties, Congress directed Reclamation to plan a project that would help resolve the conflict between fishery and irrigation water needs in the Umatilla River basin. Project planning to identify solutions to fishery problems was initiated in 1981 under authority of Public Law 89-561. Reclamation was assisted by CTUIR, Bonneville Power Administration, ODFW, U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), irrigation districts, and a citizens' steering committee in developing the necessary plan elements and mitigation commitments.

The Umatilla Basin Project authorized reconstruction and new construction of fish ladders and protective screens at major irrigation diversion sites in the basin. It also authorized construction of water exchange facilities (Phases I and II) to deliver irrigation replacement water from the Columbia River to WEID, HID, and SID, in exchange for forgone diversions of Umatilla River waters that legally they could divert.

The Umatilla Basin Project implemented a series of water exchanges. Through this project, Columbia River water is pumped and delivered for use by three irrigation districts in exchange for allowing natural Umatilla River flow and McKay Reservoir releases (to which they are entitled to divert) to remain instream for the benefit of anadromous fish. Up to an estimated annual average of 61,300 acre-feet of irrigation exchange water could be pumped from the Columbia River; alternatively, an equivalent amount of exchange water would be permitted to remain in the Umatilla River as live flow, or supplemented flow from McKay Reservoir.

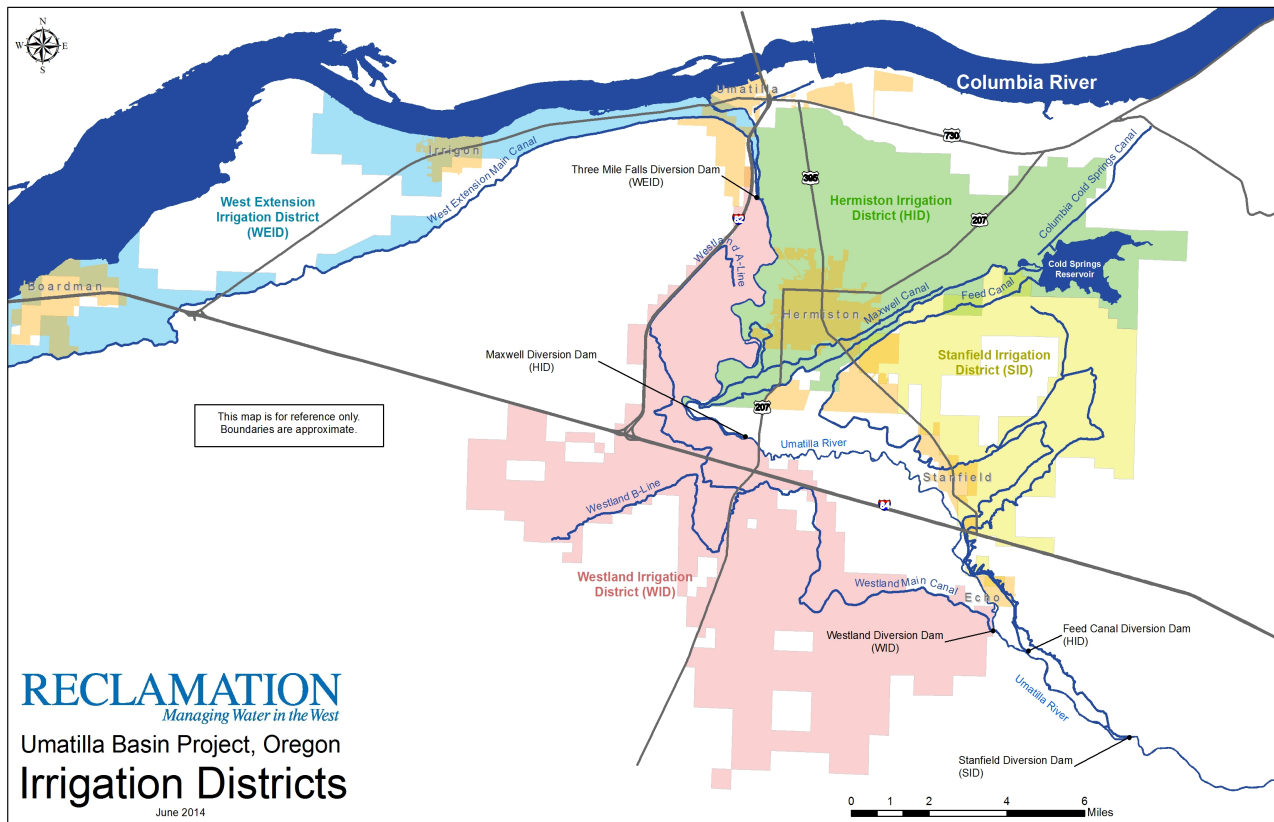


Figure 3. Umatilla Basin Project

Exchange flows in the Umatilla River are protected from further diversion to the Columbia River. Protected flows are blocks of water released from McKay Reservoir specifically for fishery habitat or Umatilla River flows not diverted (forgone) by SID, HID and WEID. The Act of October 28, 1988 (the Act; 102 Stat. 2791, Public Law 100-557) did not establish a separate instream flow right for fish, since this designation is under the authority of the State of Oregon. It only allowed for the exchange of McKay Reservoir water or water that carries senior live-flow rights.

Through the Project, target instream flows for the Umatilla River were established. Target flows for the Umatilla River were developed by CTUIR and the ODFW and are defined as streamflows believed to provide adequate migration conditions and habitat for anadromous fish runs. Flow targets for the lower 50 miles of the Umatilla River range from 250 to 300 cfs from August 16 to June 30 of each year (see Table 1). These flow targets are subject to modification by ODFW and CTUIR. ODFW and CTUIR have varied flow strategies for fish passage in specific reaches of the Umatilla River. The river reach below the Dillon Ditch diversion (as measured at the UMDO gaging station near river mile (RM) 24) would be allowed to drop below the relevant target flow (250 to 300 cfs), as adequate exchange water is not available for supplementation. The flow below Three Mile Dam is generally maintained at or above target.

Table 1. Current Umatilla Basin Project target flows, McKay Creek to mouth

Period	Target Flow (cfs)
October 1 - November 15	300
November 16 - June 30	250
July 1 - September 15	75
September 16 - September 30	250

### 1.2.1 Phase II Exchange Facilities

Water for Phase II is pumped from the Columbia River at the Columbia River Pumping Plant located approximately 8.5 miles above McNary Dam. Pump intakes are screened. Water is conveyed from the Columbia River Pumping Plant discharge line near Cold Springs Reservoir through the Columbia-Cold Springs Canal. A gated spillway allows water to spill from the canal into the reservoir for the IID exchange. The Cold Springs Pumping Plant is at the end of the Columbia-Cold Springs Canal near Cold Springs Dam and pumps water from that canal into the north branch of the Furnish Ditch, which is a major delivery facility for SID. Other Phase II facilities used in the exchange with SID include the Cold Springs Relift Pumping Plant and the Echo Pumping Plant and pipeline that lifts water higher into the SID canal system.

### 1.2.2 Stanfield Irrigation District

The Furnish Ditch Company started constructing facilities in 1905 to divert water from the Umatilla River. This entity eventually became the SID and contracted with Reclamation to augment its natural-flow water rights with supplemental storage water from McKay Reservoir. SID is entitled under Oregon State law to divert up to 34,700 acre-feet of water annually. As outlined in the permit, the 34,700 acre-feet was based on SID’s “historical average supply of Umatilla River and McKay Reservoir water.” Current operations include water delivered to SID. Annual records of water diversion at the SID canal since the issuance of the 2004 NMFS Umatilla Project Biological Opinion are provided in the 2006-2017 Umatilla Project Biological Opinion Annual Reports that have been submitted to NMFS each year (Reclamation 2006-2017).

In 2006, SID signed another supplemental contract in conjunction with the 1949 and 2003 contracts. This 2006 contract allows SID to irrigate the 3,089 acres included in the 2003 federal boundary adjustment with water from McKay Reservoir and the Columbia River. In recent years, SID has been delivering federal project water to about 7,844 acres within their federally-recognized boundaries.

McKay Reservoir water contracted to, or historically used by, SID (up to 27,330 acre-feet) is now exchanged with Columbia River water and used to augment streamflow in the Umatilla River during migration periods for anadromous salmonids. However, some of SID’s storage water from McKay Reservoir provides irrigation for a few water users on the Furnish Canal near the headgate who cannot be served by the exchange facilities. Approximately 8 cfs serves 606 acres not part of the Columbia River pump exchange.

Under Phase II of the Umatilla Basin Project, SID agreed to leave virtually all their annual allotment of McKay Reservoir water in storage (for anadromous fish target flow) and reduce their Umatilla River diversion of natural flows in exchange for Columbia River water. During the irrigation season, SID diverts water from the Umatilla River when instream flow in the river is above the established minimum target levels indicated in Table 1. When SID's water demand cannot be met by live-flow diversions (or live-flow exchange water), they call for Columbia River pumped water in exchange for their McKay Reservoir storage. SID's live-flow diversions from the Umatilla River are measured in the Furnish Canal gauge (FURO). Appendix A in the August 2001 final Umatilla Biological Assessment contains 1996-1999 records of this diversion and SID's exchange water from the Columbia River. The SBEO gauge measures Phase II exchange water coming from the Columbia River, and the CRSO gauge measures operational spill water and any requested exchange water for HID (delivered into Cold Springs Reservoir). If there is an outage at the Columbia River Pumping Plant and it cannot provide exchange water for SID's McKay storage, SID retains the right to receive water from McKay Reservoir.

Periods of water exchange are refined by calls made for fishery migration water (within the target-flow quantity) by CTUIR and ODFW. SID operates under 1992 and 1995 exchange agreements with Reclamation. The CTUIR and ODFW manage the timing and quantity of annual fish restoration water releases using SID's McKay Reservoir storage space. The Columbia River Pumping Plant will deliver water to canals and pumping facilities serving SID and to Cold Springs Reservoir for release to HID. During the summer, pumping will vary from about 50 to 240 cfs, using the full capacity only in years when both SID and HID are receiving exchange waters (when Cold Springs Reservoir cannot be filled due to exchange operations). SID's exchange water will be routed around Cold Springs Reservoir via the Cold Springs Pumping Plant through the Stanfield Relift Pumping Plant to SID lands.

Irrigation return flows from SID empty into the Umatilla River at the Stanfield Canal Drain near RM 21.9. This drain primarily carries return flow from SID and limited surface drainage from the intermittent Stage Gulch. Since 1996, the CTUIR has been monitoring the water quality of return flows in the Stanfield Canal Drain.

### **1.3 Proposed Federal Action**

SID has submitted a request to Reclamation to enter into a Conjunctive Use Contract between SID and Reclamation for two points of diversion from the Columbia River. The proposed Conjunctive Use Contract would provide SID with the ability to increase soil moisture during dry years as outlined above. SID applied for and received a water rights permit from the State of Oregon to use water from the Columbia River, as long as SID enters into a Conjunctive Use Contract with Reclamation. Reclamation's action, processing the water contract application, is needed for Reclamation to comply with applicable law governing applications for use of federal water and fulfill the State of Oregon's water right permit requirements. Ultimately, Reclamation's action may be issuance of a Conjunctive Use Contract with SID.

## **1.4 Purpose and Need**

The purpose of Reclamation’s action is to grant, to grant with conditions, or to deny the water service contract application. Reclamation’s need for action, to respond to SID’s water service contract request, arises from 43 CFR Part 429: Use of Bureau of Reclamation Land, Facilities, and Waterbodies, and Conjunctive Use is specifically authorized in the 1988 Umatilla Project Act specifically for Stanfield Irrigation District.

## **1.5 Authorities**

### **1.5.1 Legal Authority**

Reclamation received authorization for the Umatilla Basin Project from the Secretary of the Interior, who was authorized to construct, operate, and maintain the Project by the Act of October 28, 1988. The Secretarial authorization states the purposes to be served by each project. The primary purposes of the Umatilla Basin Project are for mitigating losses to anadromous fishery resources and continuing water service to HID, WEID, WID, and SID. For the project water exchange, the Secretary of the Interior, acting pursuant to the federal reclamation laws (Act of June 17, 1902, and Acts amendatory thereof and supplementary thereto), is authorized to construct, operate, and maintain the Umatilla Basin Project, Oregon, substantially in accordance with the report entitled: “Umatilla Basin Project, Oregon Planning Report.”

The principal facilities authorized for construction were: pumping plants and related diversion, conveyance, and distribution features; fish passage and protective facilities; and other necessary mitigation measures.

### **1.5.2 Laws, Executive Orders, and Secretarial Orders**

The various laws, executive orders, and secretarial orders that apply to the proposed action are summarized in this section.

#### ***Fish and Wildlife Coordination Act***

From the Fish and Wildlife Coordination Act, 16 United States Code (U.S.C.) 661-666:

The regional directors and the Director, Management Services Office, are delegated the authority pursuant to the Fish and Wildlife Coordination Act (16 U.S.C. 661-666c); Section 5 of the Endangered Species Act of 1973 (16 U.S.C. 1534); and Section 7(a) of the Fish and Wildlife Act of 1956 (16 U.S.C. 742f (a)) to take the following actions, either directly or by providing financial assistance to non-federal parties (255 DM 1.1.B). Authority to award financial assistance agreements for projects associated with off-site locations (Paragraph 6.F. (2) (b) is limited to the regional directors and Director, Management Services Office. The authority of the regional directors and Director, Management Services Office to award financial assistance agreements for all other projects authorized by this delegation can only be re-delegated to designated grants officers.

- (a) Conduct activities for the improvement of fish and wildlife habitat associated with water systems or water supplies affected by Reclamation projects, including but not limited to fish passage and screening facilities at any non-federal water diversion or storage project within the region;
- (b) Plan, design, construct, and monitor, including acquire lands or interest therein as needed, instream habitat improvements, including but not limited to fish passage screening facilities at off-site locations (as negotiated on privately owned lands and facilities not associated with a Reclamation project);
- (c) Acquire or lease water or water rights from willing sellers or lessors; and
- (d) Monitor and evaluate the effect of Reclamation actions on fish and wildlife resources including Endangered Species Act-listed species.

### ***National Environmental Policy Act***

Reclamation is responsible for determining if the proposed project might have significant effects to the environment under the NEPA. If Reclamation determines that effects are not significant, a FONSI would be prepared. A FONSI would allow Reclamation to proceed with the proposed action without preparation of an Environmental Impact Statement.

### ***Endangered Species Act***

The Endangered Species Act (ESA) requires federal agencies to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Section 7 of the ESA (16 U.S.C. Section 1536(a)(2)) requires all federal agencies to consult with National Oceanic and Atmospheric Administration (NOAA) Fisheries for marine and anadromous species or with the USFWS for freshwater and wildlife species, if an agency is proposing an action that may affect listed species or their designated habitat. If such species may be present, the federal agency must conduct a Biological Assessment for the purpose of analyzing the potential effects of the project on listed species and critical habitat in order to establish and justify an effect determination. Agencies must use their authorities to conserve listed species and make sure that their actions do not jeopardize the continued existence of listed species.

### ***Magnuson-Stevens Fishery Conservation and Management Act***

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) is a federal law that requires heightened consideration of fish habitat in resource management decisions. The MSA defines essential fish habitat and requires that federal agencies consult with NOAA Fisheries if an agency action may adversely affect essential fish habitat.

### ***National Historic Preservation Act***

The National Historic Preservation Act (NHPA) of 1966 (16 U.S.C. 470, Public Law 95-515), requires that federal agencies complete inventories and site evaluations to identify historic resources that may be eligible for listing on the National Register of Historic Places, and then ensure those

resources “are not inadvertently transferred, sold, demolished, substantially altered, or allowed to deteriorate significantly.” Regulations titled “Protection of Historic Properties” (36 CFR 800) define the processes for implementing requirements of the NHPA, including consultation with the appropriate State Historic Preservation Office and the Advisory Council on Historic Preservation.

#### ***Executive Order 13007: Indian Sacred Sites***

Executive Order 13007, dated May 24, 1996, instructs federal agencies to accommodate access to Indian sacred sites and to protect the physical integrity of such sites. A sacred site is a specific, discrete, and 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 a sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the Tribe or authoritative representative has informed the agency of the existence of such a site.

#### ***Executive Order 12898: Environmental Justice***

Executive Order 12898, dated February 11, 1994, instructs federal agencies, to the greatest extent practicable and permitted by law, to make achieving environmental justice part of its mission by addressing, as appropriate, disproportionately high and adverse human health or environmental effects on minority populations and low income populations. Environmental justice means the fair treatment of people of all races, income, and cultures with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment implies that no person or group of people should shoulder a disproportionate share of negative environmental impacts resulting from the execution of environmental programs.

#### ***Secretarial Order 3175: Indian Trust Assets***

Indian Trust Assets (ITAs) are legal interests in property held in trust by the United States, with the Secretary of the Interior acting as trust for Indian Tribes or Indian individuals. Examples of ITAs are lands, minerals, hunting and fishing rights, and water rights. In many cases, ITAs are on-reservation; however, they may also be found off-reservation.

The United States has an Indian trust responsibility to protect and maintain rights reserved by or granted to Indian Tribes or Indian individuals by treaties, statutes, and executive orders. These rights are sometimes further interpreted through court decisions and regulations. This trust responsibility requires that officials from federal agencies, including Reclamation, take all actions reasonable and necessary to protect ITAs when administering programs under their control.



# Chapter 2 Description of Alternatives

The alternatives presented in this chapter were developed based on the purpose and need for the project, as described in Chapter 1, and the issues raised during internal, external and Tribal scoping. The alternatives analyzed in this document include: the No Action alternative; and the Proposed Action – Execute a Conjunctive Use Contract with Stanfield Irrigation District. The No Action alternative is evaluated because it provides an appropriate basis by which the Proposed Action and any other alternatives are compared.

## 2.1 No Action

The No Action alternative presents continuation of current conditions associated with SID not being able to mitigate the effects of drought years. SID would not be allowed to use early season irrigation water to increase the soil moisture profile before the start of the irrigation season on March 1. This would put the full burden of trying to irrigate during a dry water year solely on SID's primary Umatilla River water rights and the Columbia River exchange water rights owned by SID. It would also put an increased strain on limited groundwater supplies with the State of Oregon's Stage Gulch Critical Groundwater Area, as some farmers that would have received conjunctive use water would be required to use their groundwater wells to supplement their water use.

No action would be taken by Reclamation under this alternative.

## 2.2 Proposed Action – Execute a Conjunctive Use Contract Between Reclamation and Stanfield Irrigation District

Under the Proposed Action, Reclamation would execute a conjunctive use contract with SID. This would provide SID with the ability to request that water be pumped from the Phase II system owned and operated by Reclamation and from the privately-owned EID Pumping Plant to deliver water for conjunctive use; such requests could be made when conditions warrant the delivery of this water, i.e., drought or extremely dry conditions.

## 2.3 Alternatives Considered but Eliminated from Further Study

All alternatives were considered through the State of Oregon Water Rights application process and the National Marine Fisheries Service Biological Opinion process. Reclamation was presented with one alternative as the Proposed Action and this is the only action alternative being considered.

# Chapter 3 Environmental Consequences

## 3.1 Introduction

The following sections discuss the existing conditions by resource and describe the potential effects of the Proposed Action on the resources. For each topic or resource category, the impact analysis follows the same general approach. First, the existing conditions are established for the affected areas, and then impacts of the Proposed Action and the No Action alternative are disclosed. The degree of impact intensity is based on quantifiable impacts, review of relevant scientific literature, previously prepared environmental documents, and the best professional judgment of resource specialists on the EA team.

Resources evaluated in this document were selected based on Reclamation requirements; compliance with laws, statutes, executive orders, and public and internal scoping; and their potential to be affected by the Proposed Action. Several resources that were determined to be unaffected by the Proposed Action are presented in Table 2. The resources addressed in more detail in this EA are: endangered species; hydrology and water quality; Indian Trust Assets; Indian sacred sites; and environmental justice and socioeconomics. A cumulative impacts discussion is included in Section 3.7.

Table 2. Resources eliminated from analysis

Resources	Rationale for Elimination from Further Analysis
Land use	The Proposed Action would not change the existing land use.
Floodplains	The Proposed Action would not modify or impact any floodplains.
Wildlife	The Proposed Action would have no impacts to wildlife.
Visual resources	The Proposed Action would not modify or impact visual resources, such as any modification in landforms, water bodies, vegetation, or any introduction of structures or other human-made visual elements that could provide visual contrasts in the basic elements of form, line, color, or texture.
Paleontology	No known paleontological resources exist within the SID lands.
Cultural resources	The Proposed Action would not have any impacts to cultural resources. All facilities are existing and were installed in the year 2000 or later. The Proposed Action is a Conjunctive Use Contract to allow pumping of water in October and/or February and March as allowed by the 1988 Umatilla Basin Project Act. Water will be placed on existing agricultural fields, and the Proposed Action will not result in a change of land use (e.g., non-farmland to farmland).
Public health and safety	The Proposed Action would not modify or impact public safety, access, and transportation.

Resources	Rationale for Elimination from Further Analysis
Recreation	Recreational use is not an authorization of the proposed facilities.
Topography, geology, and soils	The Proposed Action would not modify or impact topography, geology, or soils.
Noise	The Proposed Action would not modify current noise levels.
Vegetation	The Proposed Action would not modify existing vegetation. The Proposed Action would not contribute to the introduction, continued existence, or spread of noxious weeds or non-native species known to occur in the area or involve actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order (EO) 13112).
Wetlands	EO 11990 requires each agency to “avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands” and to “take action to minimize the destruction, loss or degradation of wetlands.” The Proposed Action would not be constructing, modifying, or adversely affecting wetlands within any lands proposed for transfer.
Air quality	The Proposed Action would not result in an alteration of air movement, moisture, or temperature patterns, nor would it create objectionable odors on a local or regional level.
Climate change	The Proposed Action would not result in new weather patterns that would remain in place for an extended period of time. The Proposed Action would increase SID’s climate change resiliency by allowing them to withdraw water for crop use, outside of their current contracted use window, to assist farmers during before and during the growing season.
Greenhouse gas (GHG) emissions	The Proposed Action would not result in new or increased GHG emissions by SID. The primary GHGs emitted through human activities are carbon dioxide (CO <sub>2</sub> ), methane, and nitrous oxide. These three gases are the GHGs produced through fuel combustion in on-road and off-road vehicles and equipment. The operation, maintenance, and replacement of the facilities will not change as a result of the Conjunctive Use Contract.
Migratory Birds	The Migratory Bird Treaty Act of 1918, in conjunction with EO 13186, requires agencies to ensure that NEPA analyses include an evaluation of potential effects on migratory birds. Many bird species migrate through north-central Oregon. Some nest in the area using trees or other habitat during the period from March 1 through August 31. The Proposed Action would not involve any relevant change from current operations. Therefore, Reclamation has determined that the Proposed Action would have no effect on migratory birds.

Resources	Rationale for Elimination from Further Analysis
NHPA	It has been determined by the Columbia-Cascades Area Office Archaeologist that NHPA is not applicable to this action. The Phase II facilities that will deliver the proposed water were completed in the year 2000 and do not meet the requirements of historical properties. The scope of the project is to deliver water to SID during the shoulder seasons of spring and fall. There will be no modifications to any facilities to accomplish the water delivery.

## 3.2 Endangered Species

### 3.2.1 Affected Environment

The Columbia River chum salmon is the only ESA-listed species that may be affected by the implementation of the Conjunctive Use Contract. Adult Columbia River chum salmon enter the Columbia River from mid-October through November and spawning occurs from early November through December. Adults from the Lower Gorge population make their redds around the Ives Island complex in the mainstem Columbia River and in Hamilton and Hardy Creeks, tributaries on the Washington side near Ives Island. Fry emerge from March through May and promptly migrate downstream to the Columbia River estuary.

### 3.2.2 Environmental Consequences

#### **No Action**

No impacts would occur since there would be no Conjunctive Use Contract issued.

#### **Proposed Action**

Reclamation sent a letter on December 11, 2018, requesting initiation of consultation with NMFS pursuant to section 7(a)(2) of the ESA (16 U.S.C. 1531 et. seq.) for the SID conjunctive use project in the Columbia River. This consultation was conducted in accordance with the 2019 revised regulations that implement section 7 of the ESA (950 CFR 402, 84 FR 45016).

Reclamation also requested consultation pursuant to the essential fish habitat (EFH) provisions in Section 305(b) of the Magnuson–Stevens Fishery Conservation and Management Act (16 U.S.C 1855(b)) for this consultation. NMFS determined, after reviewing the Proposed Action, that there are no adverse effects on EFH. Therefore, NMFS closed the EFH consultation.

In the Biological Opinion, NMFS concluded that the Proposed Action is not likely to jeopardize the continued existence of the Columbia River chum salmon or result in the destruction or adverse modification of their critical habitat.

To be exempt from the prohibitions of Section 9 of the ESA, Reclamation must fully comply with the following terms and conditions that implement the Reasonable and Prudent Measures; partial compliance with the terms and conditions may invalidate the take exemption.

In accordance with the BiOp, to implement Reasonable and Prudent Measures, Reclamation will not permit conjunctive use prior to February 15 or after October 16 without prior approval from NMFS. Reclamation will limit the frequency of irrigation use to no more than twice in any 5-year period beginning in 2024 and will limit the frequency of post-irrigation use to no more than twice in any 5-year period beginning in 2024.

Adult chum salmon enter the Columbia River concurrent with post-irrigation conjunctive use. However, given the small volume of water removed from the Columbia River, no change in migration behavior is anticipated. The tidal changes alone would overwhelm any effect from the Proposed Action. Some adults in some years may initiate spawning in late October, but most spawning does not occur until November, well after the post-irrigation conjunctive use has ceased. Effects on adult migration and spawning would be negligible in the years that conjunctive use occurs.

The proposed pumping of up to 60 cfs from the Columbia River during the post-irrigation season would take place for approximately 12 days in early to mid-October and is expected to occur on average about once every 5 years. The total volume of water, if fully used, would be approximately 1,428 acre-feet. Daily average discharges from 2001 through 2019 were evaluated at Bonneville Dam (about 2 miles upstream from Ives Island) for October 1-15 when conjunctive use for the post-irrigation season is proposed to occur. The lowest daily average during this period occurred in 2002 on October 12 and was 70,900 cfs. A withdrawal of 60 cfs would have reduced flow at the Ives Island complex by about 0.085 percent. Ten-year (2010–2019) average discharge from Bonneville Dam for the first 15 days in October is about 98,388 cfs and the conjunctive use withdrawal would reduce this average by roughly 0.061 percent. No change is expected in the conservation value of the essential physical and biological features (PBFs), both spawning and migratory, at the scale of the reach; thus, no change in the PBFs' conservation value is expected at the designation scale. The Proposed Action could cause minor affects to Columbia River chum salmon's critical habitat (NOAA 2020; ESA Section 7(a)(2) Biological Opinion).

Reclamation also proposes to permit SID to water lands in the pre-irrigation season, which again would occur in about one of every 5 years, on average, and is proposed to occur during the last 2 weeks of February. Columbia River chum salmon eggs would be incubating in the gravel at that time.

Daily average flows were analyzed for the period 2001-2019 in the Columbia River below Bonneville Dam for the pre-irrigation conjunctive use period of February 15-28. The lowest daily average for this period occurred on February 28, 2010, and was 110,167 cfs. A 60-cfs withdrawal on that day would have reduced flow by about 0.05 percent. The most recent 10-year (2010-2019) average for this period was 193,097 cfs, and a 60-cfs withdrawal would have resulted in a 0.03 percent reduction in flow volume. Also, the 10-year lowest daily average occurs on February 28 and was 182,710 cfs with the 60-cfs withdrawal, resulting in a 0.033 percent loss of flow volume around the Ives Island complex for that day.

Based on the most recent 10-year average, flow volumes below Bonneville Dam during pre-irrigation conjunctive use (February 15-28) are 96 percent higher than flows during the post-irrigation conjunctive use period. When conjunctive use occurs, the change in stage below Bonneville Dam in the last 2 weeks of February is likely insignificant and probably cannot be measured, even when the U.S. Army Corps of Engineers cannot maintain flow elevations set by the TMT. Therefore, we expect that conjunctive use, when it occurs, will have negligible, if any, effects (e.g., dewatering) on chum salmon egg incubation. However, conjunctive use in late February, combined with low winter flows, may serve to dewater some redds and suffocate chum fry still in the gravel. NMFS expects this to be a rare event.

### **3.3 Hydrology and Water Quality**

#### **3.3.1 Affected Environment**

SID applied for a new State of Oregon water right from the Columbia River, with the POD 8 miles upstream of McNary Dam. The primary POD is the Reclamation-owned Columbia River Pumping Plant; SID later added an additional POD which is just upstream of the Columbia River Pumping Plant and is called the East Irrigation District Pumping Plant. This is a privately owned and operated pumping plant; however, it is included in the proposed Conjunctive Use Contract between SID and Reclamation. The water right would allow SID to withdraw up to an additional 3,000 acre feet of water from the Columbia River in years that are extremely dry. The State of Oregon and NMFS allow for new Columbia River water withdrawals during the time SID has applied to use the water.

#### **3.3.2 Environmental Consequences**

##### ***No Action***

No impacts would occur since there would be no Conjunctive Use Contract issued.

##### ***Proposed Action***

Implementation of the Proposed Action may have very minor impacts to the water quantity in the Columbia River downstream of the PODs. The State of Oregon rules allow the withdrawal of water during the time period SID may need water during the dry and or drought conditions. The amount of water withdrawn is virtually non-measurable relative to the total flow in the Columbia River.

The proposed pumping of up to 60 cfs from the Columbia River during the post-irrigation season would take place for approximately 12 days in early to mid-October and is expected to occur on average about once every 5 years. The total volume of water, if fully used, would be approximately 1,428 acre-feet. Daily average discharge from 2001 through 2019 at Bonneville Dam (about 2 miles upstream from Ives Island) was evaluated for October 1-15, when conjunctive use for the post irrigation season is proposed to occur. The lowest daily average during this period occurred in 2002 on October 12 and was 70,900 cfs. The 10-year (2010–2019) average discharge from Bonneville Dam for the first 15 days in October is about 98,388 cfs, and the conjunctive use withdrawal would reduce this average by roughly 0.061 percent.

Daily average flows were analyzed for the period 2001-2019 in the Columbia River below Bonneville Dam for the pre-irrigation conjunctive use period of February 15-28. The lowest daily average for this period occurred on February 28, 2010, and was 110,167 cfs. A 60-cfs withdrawal on that day would have reduced flow by about 0.05 percent. The most recent 10-year (2010-2019) average for this period was 193,097 cfs, and a 60-cfs withdrawal would have resulted in a 0.03 percent reduction in flow volume. Also, the 10-year lowest daily average occurs on February 28 and was 182,710 cfs with the 60-cfs withdrawal, resulting in a 0.033 percent loss of flow volume around the Ives Island complex for that day.

There are no anticipated impacts to water quality under the Proposed Action.

### **3.4 Indian Trust Assets**

Under Secretarial Order 3175, ITAs are legal interests in property held in trust by the United States for federally recognized Tribes or individual Indians. An Indian trust has three components: (1) the trustee, (2) the beneficiary, and (3) the trust asset. ITAs include land, minerals, federally reserved hunting and fishing rights, federally reserved water rights, and instream flows associated with trust land. Beneficiaries of the Indian trust relationship are federally recognized Tribes with trust lands, with the United States acting as the trustee. ITAs cannot be sold, leased, or otherwise encumbered without approval of the United States. The characterization and application of the United States trust relationship have been defined by case law that interprets Congressional acts, EOs, and historic treaty provisions.

The federal government, through treaty, statute, or regulation, may take on specific, enforceable fiduciary obligations that give rise to a trust responsibility to federally recognized Tribes and individual Indians possessing trust assets. Courts have recognized an enforceable federal fiduciary duty with respect to federal supervision of Indian money or natural resources held in trust by the federal government, where specific treaties, statutes or regulations create such a fiduciary duty.

Reclamation assesses the effect of its programs on Tribal trust resources and federally recognized Tribes, which is consistent with President William J. Clinton's 1994 memorandum, Government-to-Government Relations with Native American Tribal Governments (Federal Register 1994). Reclamation is tasked to actively engage federally recognized Tribes and consult with them on a Government-to-Government level when its actions affect ITAs. The Department of the Interior (DOI) Department Manual, Part 512.2 (DOI 1995) ascribes the responsibility for ensuring protection of ITAs to the heads of bureaus and offices. The DOI is required to "protect and preserve ITAs from loss, damage, unlawful alienation, waste, and depletion" (DOI 2000).

The general policy of the DOI is to perform its activities and programs in a way that protects ITAs and avoids adverse effects whenever possible. Reclamation complies with procedures contained in the DOI Departmental Manual, Part 512.2 guidelines that protects ITAs.

Reclamation carries out its activities in a manner that protects trust assets and avoids adverse impacts when possible. When Reclamation cannot avoid adverse impacts, it would provide appropriate mitigation or compensation. Reclamation is responsible for assessing whether the Proposed Action has the potential to affect ITAs.

### **3.4.1 Affected Environment**

The area of the Proposed Action lies on or near traditional territories of the CTUIR. The CTUIR have treaty, cultural, and historical rights or interest in the area. These may include, but are not limited to, hunting, fishing, gathering, and other traditional activities. Using the existing Phase II facilities to deliver the conjunctive use water is not anticipated to have any negative impacts to ITAs.

## **3.5 Indian Sacred Sites**

EO 13007, dated May 24, 1996, instructs federal agencies to accommodate access to Indian sacred sites and to protect the physical integrity of such sites. A sacred site is a specific, discrete, and 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 authoritative representative has informed the agency of the existence of such a site. The Tribes have not identified any religious or ceremonial sites in the SID or the Columbia River Pumping Plant and other Phase II facilities; therefore, there would be no impacts to Indian sacred sites under either the No Action alternative or the Proposed Action.

## **3.6 Environmental Justice and Socioeconomics**

In August 1994, the Secretary of the Interior established an environmental justice policy based on EO 12898. This policy requires departmental agencies to identify and address any disproportionate environmental impacts of their proposed actions on minority and low-income populations and communities, as well as the equity of the distribution of benefits and risks of those decisions. Environmental justice addresses the fair treatment of people of all races and incomes with respect to actions affecting the environment. Fair treatment implies that no group should bear a disproportionate share of negative impacts. In February 2021, EO 14008 emphasized the United States' commitment to deliver environmental justice in communities all across America.

### **3.6.1 Affected Environment**

The project is located in rural Umatilla County. Table 3 provides numbers and percentages of population for racial categories in Umatilla County and the State of Oregon (U.S. Census Bureau 2022).



Table 3. Race and ethnicity for Umatilla County and the State of Oregon (2022)

Racial Category	Percent in Umatilla County	Percent in State of Oregon
White Alone	89.9	85.9
Black or African American	1.3	2.3
American Indian and Alaska Native	4.3	1.9
Asian	1.2	5.1
Native Hawaiian and Other Pacific Islander	0.2	0.5
Two or More Races	3	4.3
Hispanic or Latino	29.1	14.4
White alone, not Hispanic or Latino Percent	63.7	73.5

Source: U.S. Census Bureau QuickFacts, Umatilla County, Oregon

Table 4 provides income, poverty, unemployment, and housing information for Umatilla County and the State of Oregon (U.S. Census Bureau 2022).

Table 4. Socioeconomic characteristics for Umatilla County and State of Oregon (2022)

Socioeconomic Characteristic	Umatilla County	State of Oregon
Median family income	\$63,123	\$70,084
Per capita income	\$27,140	\$37,816
Individuals below poverty level	13.2%	12.2%
Percent unemployed	3.0%	3.7%

Data From U.S. Census Bureau QuickFacts: Umatilla County, Oregon

Low-income populations are identified by several socioeconomic characteristics. As categorized by the 2022 Census, specific characteristics include income (median family and per capita), percentage of the population below poverty (families and individuals), unemployment rates, and substandard housing.

Median family and per capita income for Umatilla County is \$62,123, less than the state average of \$70,084. When compared to the State of Oregon, Umatilla County has a greater percentage of individuals below the poverty level.

Table 5 and Table 6 provide information on employment by major industries in Umatilla County and on the economic impact of Oregon agriculture, respectively.

Table 5. Top five industry sectors, Umatilla County (Statistical Atlas 2021)

Sector	Number of Jobs	Share of Employment
Retail	4,395	13.7%
Manufacturing	3,462	10.8%
Healthcare	3,428	10.7%
Agriculture	2,921	9.1%
Education	2,518	7.9%

Table 6. Oregon agricultural economic contribution

Direct Effect	Data for 2021
Output (2021 dollars)	\$5.01 billion
Jobs	618,341
Labor income (2021 dollars)	\$30 billion

### 3.6.2 Environmental Consequences

#### **No Action**

If the Conjunctive Use Contract is not issued, SID would not be able to mitigate for drought years by allowing conjunctive use water to be pumped in the fall and late winter to offset the effects of low moisture content. This would continue to result in shorter growing seasons for SID during the fall, and soil moisture would be very low during the late winter conjunctive use season prior to the spring planting season; this could have a significant impact on crop yield and soil erosion from wind.

The loss of crop production due to lack of water in the fall would continue to result in lower farm incomes and less need for farm workers, reducing the wages in a county that already has a per capita income that is lower than the state average.

#### **Proposed Action**

Implementation of the Proposed Action would not disproportionately (unequally) affect any low-income or minority communities at the county level. SID will pay for the conjunctive use pumping, not individual irrigators. This would lead to a longer growing season and the need to employ farm workers longer through the growing season. There would be no adverse human health or environmental effects on minority or low-income populations as a result of the Conjunctive Use Contract.

### **3.7 Cumulative Impacts**

“Cumulative impact” is defined in CEQ’s 1978 NEPA implementing regulations (40 CFR 1508.7) as the “impact on the environment which results from the incremental impact of the Environmental Assessment; action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions.” CEQ issued updated NEPA implementing regulations on July 16, 2020, which eliminated the definition of “cumulative” impacts and sought to clarify the meaning of “effects,” consistent with the Supreme Court’s holding in *Public Citizen*, 541 U.S. at 767-68, as those reasonably foreseeable and having a reasonably close causal relationship to the proposed action or alternatives. This EA evaluated cumulative impacts consistent with both regulations.

Within the affected environment, SID proposes to withdraw an additional amount of water from the Columbia River during a time period for which the State of Oregon and NMFS allow water withdrawals without mitigation. NMFS has some higher standards for the withdrawal, especially in the fall to protect spawning chum salmon. The proposed additional withdrawal of water is such a small percentage of the total Columbia River flow that the amount of water is effectively immeasurable.

## **Chapter 4 Consultation and Coordination**

### **4.1 Public Involvement**

SID applied for a water right from the Columbia River through the State of Oregon in September of 2009. Through the State of Oregon process, there are multiple public comment periods during the period between the application being received and a water rights permit being issued. Individuals, organizations, and government entities have a chance to comment and protest the application during this period. The Oregon Department of Fish and Wildlife and Department of Environmental Quality had the opportunity to review the application and provide comments; through the state process, these agencies have agreed to let the application continue to be processed. The State of Oregon issued the Final Order of the water right on April 18, 2019. Reclamation did not reach out for further public comments.

### **4.2 Tribal Consultation and Coordination**

SID applied for Water Right S-87472 out of the Columbia River in 2009 to allow for conjunctive use pumping of water. The CTUIR filed a written objection with the Oregon Water Resources Department (OWRD) to SID Application S-87472, which resulted in additional time for processing the application. During the time period from 2009 to the present, SID and CTUIR have been

involved with Tribal Settlement meetings and both parties have reached a tentative agreement on the Settlement Proposal and SID Application S-87472 that fairly address the interests of both parties. A Memorandum of Agreement (MOA) has been signed by SID and CTUIR. Reclamation and the Federal Negotiation Team have been part of the discussions leading up to signing of the MOA and proposed Settlement Agreement.

Other Tribal consultation was offered, and coordination was completed in the spring of 2023. Reclamation reached out to upriver Tribes via email, including the Confederated Tribes of the Colville Reservation, the Confederated Tribes and Bands of the Yakama Nation, the Spokane Tribe of Indians, and the Nez Perce Tribe. None of Tribes responded with any concerns or objections to the proposed Conjunctive Use Contract.

### 4.3 Authorizations Needed

Authorizations, reviews, contracts and other processes required before implementation of the Proposed Action are identified in Table 7.

Table 7. List of authorizations required for the Proposed Action

Agency/Department	Purpose and Responsible Party for Securing Authorization
OWRD	Water rights application S 87472 submitted by SID. OWRD is responsible for an approval decision.
OWRD	State of Oregon water rights permit to appropriate public waters for a beneficial use. SID is responsible for the permit application process.
NMFS	Consultation pursuant to Section 7 of the ESA. Reclamation is the responsible agency.
Reclamation	FONSI decision; Conjunctive Use Contract if the Proposed Action is selected for implementation. Reclamation is the responsible agency.

## Chapter 5 References

Text Citation	Bibliographic Reference
DOI 1995	U.S. Department of the Interior (DOI). 1995. <i>Departmental Manual, Part 512.2, Departmental Responsibilities for Indian Trust Assets</i> . Office of the Secretary of the Interior. December 1, 1995.
DOI 2000	U.S. Department of the Interior (DOI). 2000. <i>Departmental Manual, Part 202, Indian Trust Responsibilities</i> . Office of the Secretary of the Interior. October 31, 2000.
Federal Register 1994	Federal Register. 1994. 59 FR 22951, <i>President William J. Clinton's Memorandum on Government-to-Government Relations with Native American Tribal Governments</i> . Document No. 94-10877 Published May 4, 1994. <a href="https://www.govinfo.gov/content/pkg/WCPD-1994-05-02/pdf/WCPD-1994-05-02-Pg936.pdf">https://www.govinfo.gov/content/pkg/WCPD-1994-05-02/pdf/WCPD-1994-05-02-Pg936.pdf</a>
Federal Register 2020	Federal Register. 2020. <i>Update to the Regulations Implementing the Procedural Provision of the National Environmental Policy Act</i> . Vol. 85, No. 137. Published July 16, 2020. <a href="https://www.govinfo.gov/content/pkg/FR-2020-07-16/pdf/2020-15179.pdf">https://www.govinfo.gov/content/pkg/FR-2020-07-16/pdf/2020-15179.pdf</a>
NOAA 2020	National Oceanic and Atmospheric Administration (NOAA). 2020. <i>Endangered Species Act Section 7(a)(2) Biological Opinion on the Stanfield Irrigation District Conjunctive Use Project, Columbia River, Umatilla, Oregon</i> . WCRO-2018-01265
Statistical Atlas 2021	Statistical Atlas. 2021. <i>Industries in Umatilla County, Oregon</i> . Available online at: <a href="https://statisticalatlas.com/county/Oregon/Umatilla-County/Industries">https://statisticalatlas.com/county/Oregon/Umatilla-County/Industries</a> (last accessed January 2, 2024).
U.S. Census Bureau 2022	U.S. Census Bureau. 2022. <i>Quickfacts</i> . Available online at: <a href="https://www.census.gov/quickfacts/umatillacountyoregon">https://www.census.gov/quickfacts/umatillacountyoregon</a> (last accessed September 22, 2022).

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