RECLAMATION
Managing Water in the West

Junction City Water Control District Long-Term Irrigation Water Service Contract

Finding of No Significant Impact
Environmental Assessment

Willamette River Basin, Oregon
Pacific Northwest Region

PN EA 13-02
PN FONSI 13-02

U.S. Department of the Interior
Bureau of Reclamation
Columbia-Cascades Area Office
Yakima, Washington

June 2013

MISSION STATEMENTS

U.S. Department of the Interior

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The Department of the Interior protects America's natural resources and heritage, honors our cultures and tribal communities, and supplies the energy to power our future.

Bureau of Reclamation

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.

FINDING OF NO SIGNIFICANT IMPACT

Long-Term Irrigation Water Service Contract, Junction City Water Control District

U.S. Department of the Interior
Bureau of Reclamation
Columbia-Cascades Area Office

PN FONSI 13-02

Decision: It is my decision to authorize the Preferred Alternative, Alternative B – Long-term Water Service Contract, identified in EA No. PN-EA-13-02.

Finding of No Significant Impact: Based on the analysis of potential environmental impacts presented in the attached Environmental Assessment, Reclamation has determined that the Preferred Alternative will have no significant effect on the human environment or natural and cultural resources. Reclamation, therefore, concludes that preparation of an Environmental Impact Statement is not required, and that this EA and FONSI satisfy the requirements of NEPA.

Recommended:

6/18/13

Candace McKinley
Environmental Programs Manager
Yakima, Washington

Date

Approved:

6/18/13

Gerald W. Kelso
Area Manager, Columbia-Cascades Area Office
Yakima, Washington

Date

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Background

Pursuant to Section 9(e) of the Reclamation Project Act of 1939 and Section 8 of the Flood Control Act of 1944, the Bureau of Reclamation (Reclamation) proposes to execute a 40-year water service contract with the Junction City Water Control District (District) to release up to 7,892.5 AF of surface water for irrigation use. This action is being undertaken in response to the needs to: 1) enhance efficiency in Reclamation's administration of water service contracts; and 2) improve forecasts of long-term demand and availability of water by Reclamation and other agencies having responsibilities related to the Long Tom River, the Willamette River Basin Project, and the overall Willamette River watershed.

Since 1953, Reclamation has administered a program to market the stored water in the Willamette River Basin Project (Project), Oregon. The District first contracted with Reclamation for water service in 1968 by entering into a 40-year contract that expired in 2008. The District requested contract renewal in accordance with their contract; however, due to the Willamette River Basin Project Endangered Species Act consultation, Reclamation was not in a position to renew the contract. In the years since the District's long-term contract expired it has held three temporary water service contracts with Reclamation for the 2008, 2011, and 2012 irrigation seasons. The 2012 temporary water service contract with the District expired in December 2012. That contract was for the release of up to 7,892.5 AF of stored water from Fern Ridge Dam to the lower Long Tom River. The contract water is diverted from the Long Tom River for irrigation use on up to 3,157 acres of land within the Hulbert Lake Sub-District of the larger Junction City Water Control District. The release of the contract water is ancillary to Project operations of the U.S. Army Corps of Engineers, and it has no impact on existing storage and release operations or on any other Project facilities.

The lowlands of the Willamette Valley within and adjacent to the Sub-District are devoted primarily to small farms, rural residences, and small incorporated communities. The designated land use for the area is predominantly Agriculture. Relatively low intensity agriculture is practiced in the Sub-District. Both land use and agricultural practices are anticipated to remain unchanged as a result of the proposed 40-year water service contract. The Sub-District boundary and the included lands authorized to receive irrigation water will not change as a result of this action. No new or modified facilities will be necessary to divert and distribute the contract water, and no new lands will be irrigated that have not previously been irrigated.

In July 2008, Reclamation completed consultation with the National Marine Fisheries Service (NMFS) on the effects of Reclamation's water marketing activities within the Willamette River Basin Flood Control Project. The resulting biological opinion considered the effects of water marketing activities for up to 95,000 AF. The consultation and biological opinion resulted in

several requirements for new water service contracts and renewals. The proposed 40-year water service contract is within the scope of the water marketing program NMFS considered in the 2008 biological opinion. The proposed action will not expand the scope of the water contracting program, and it will comply with the terms of all applicable conditions and requirements.

Findings

Reclamation prepared an Environmental Assessment (EA) on the proposed execution of a 40-year long-term water service contract with the District in June 2013, which is incorporated by reference. The EA identified Alternative B – Long-term Water Service Contract as the preferred alternative. The Columbia-Cascades Area Office of the Pacific Northwest Region of Reclamation has found that the proposed action is not a major Federal action that would significantly affect the quality of the human environment. Therefore, an Environmental Impact Statement is not required for carrying out the proposed action and preferred alternative.

Following are the reasons why the impacts of the proposed action and preferred alternative are not significant:

1. The proposed volume and use of contract water is the same as in prior water service contracts with the District.
2. The releases of stored water from Fern Ridge Dam are not influenced by the proposed action, and diversions from the lower Long Tom River will not change from on-going operations as a result of the proposed action.
3. No new or modified facilities would be necessary or are proposed to divert and distribute the contract water.
4. No new lands would be irrigated that have not previously been devoted to irrigated agriculture.
5. Land use and agricultural practices would not change as a result of the proposed action.
6. The tax base of local jurisdictions and counties would not change.
7. The hydrology of the Sub-District and surrounding lands would continue to be influenced by irrigated agriculture, unchanged from existing conditions.
8. The proposed action will have no effect on ESA-listed species including the Fender's blue butterfly (*Icaricia icarioides fenderi*), Willamette daisy (*Erigeron decumbens var. decumbens*), Bradshaw's desert parsley (*Lomatium bradshawii*), and Kincaid's lupine (*Lupinus sulphureus ssp. kincaidii*), or on designated critical habitat for these species. Neither individuals of these species, their designated critical habitat, nor the type of habitats on which these species are known to rely occupy the sub-district. Further, because this action will not change existing water management activities or disturb native upland prairie habitats, this action is not of the type that may affect these species. In July 2008,

Reclamation completed consultation with the National Marine Fisheries Service (NMFS) on the effects of Reclamation's water marketing activities within the Willamette River Basin Flood Control Project. The proposed 40-year water service contract is within the scope of the water marketing program NMFS considered in the 2008 biological opinion. The proposed action will not expand the scope of the water contracting program, and it will comply with the terms of all applicable conditions and requirements.

9. There will be no effect on cultural, archaeological, or historic resources.
10. The proposed action will not affect the physical integrity of Indian sacred sites, and access to, or ceremonial use of, such sites will not be restricted.
11. The proposed action will not affect any Indian Trust Assets.
12. Implementing the proposed action will not disproportionately affect minorities or low-income populations and communities since there will be no change in land use or irrigated agriculture.

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Acronyms and Abbreviations

AF	acre-feet
BiOp	2008 Willamette River Basin Flood Control Project Biological Opinion
cfs	cubic feet per second
District	Junction City Water Control District
EA	Environmental Assessment
ESA	Endangered Species Act
Fern Ridge	Fern Ridge Lake reservoir
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
Project	Willamette River Basin Project
Reclamation	Bureau of Reclamation
RPA	reasonable and prudent alternative
Service	U.S. Fish and Wildlife Service
Sub-District	Hulbert Lake Sub-District of Junction City Water Control District
USACE	U.S. Army Corps of Engineers

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PURPOSE AND NEED FOR ACTION

Background

The Junction City Water Control District (District) is located in Benton and Lane counties Oregon, surrounding Junction City. It is organized under the laws of the State of Oregon to control flood water throughout the District's boundaries. The District has created a sub-district, the Hulbert Lake Sub-District of Junction City Water Control District (Sub-District), which is organized for the purpose of delivering stored surface water for irrigation to its constituents within the smaller Sub-District boundary. The Sub-District encompasses 3,157 acres of land located within the northern portion of the District surrounding Hulbert Lake, about three miles north-northwest of Junction City.

The District has contracted in the past with the Bureau of Reclamation (Reclamation) to use a supply of stored water from Fern Ridge Lake (Fern Ridge) reservoir within the Willamette River Basin Project (Project), Oregon. The Project consists of 11 storage and 2 reregulating reservoirs constructed on tributary streams of the Willamette River in western Oregon. See Figure 1. These reservoirs were constructed by the U.S. Army Corps of Engineers (USACE) between 1938 and 1962 pursuant to Congressional authorizations under a series of Flood Control Acts. Although the primary function of the Project's reservoir system is flood control, the Project also is authorized for the purposes of fish and wildlife, hydropower, irrigation, municipal and industrial use, navigation, recreation, and water quality.

Total storage volume in the Project usable for irrigation is approximately 1.64 million acre-feet (AF). The State of Oregon issued certificates of water right to Reclamation to store water for irrigation use in the 11 Project reservoirs. Since 1953, Reclamation has administered a program to market the stored water under the authority granted to the Secretary of the Interior in Section 8 of the Flood Control Act of 1944 (58 Stat. 887, 891). Water service contracts are executed pursuant to Section 9(e) of the Reclamation Project Act of 1939 (43 U.S.C. § 485h(e)). Through Reclamation's application process individuals or irrigation districts can apply for water service contracts. At present, there are approximately 216 contracts in force within the Project that provide for the annual use of up to approximately 64,286 AF of stored water to irrigate 35,235 acres of land.

The District first contracted with Reclamation for water service in 1968 by entering into a 40-year contract that expired in 2008. The District requested contract renewal in accordance with their contract; however, due to the Willamette River Basin Project Endangered Species Act (ESA) consultation, Reclamation was not in a position to renew the contract. In the years since the District's long-term contract expired it has held three temporary water service contracts with Reclamation for the 2008, 2011, and 2012 irrigation seasons. The 2012 temporary water service contract with the District expired in December 2012. That contract provided for the release of

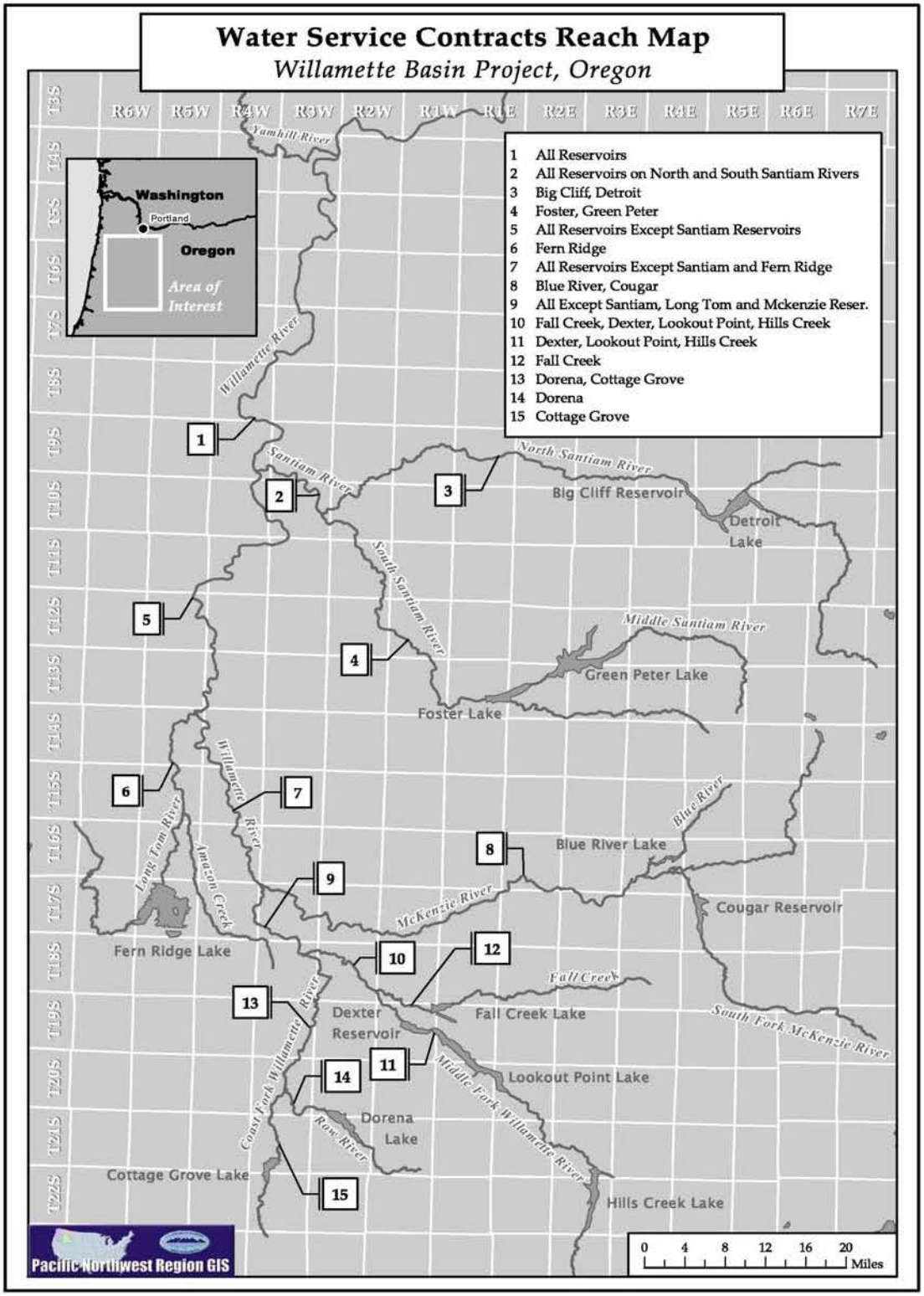

Figure 1. Willamette River Basin Project and Reaches

up to 7,892.5 AF of stored water from Fern Ridge Dam to the Long Tom River with diversion of the contract water from the river for irrigation use on up to 3,157 acres located within the Sub-District boundary.

This Environmental Assessment (EA) has been prepared to comply with the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA). It evaluates the potential for significant adverse impacts to the human environment or natural and cultural resources from the proposed execution of a 40-year water service contract with the District.

Proposed Federal Action

The proposed Federal action (proposed action) is to execute a 40-year water service contract with the District to release up to 7,892.5 AF of surface water for irrigation use on up to 3,157 acres of land within the Sub-District boundary.

Purpose and Need for the Action

The purpose of the proposed action is to execute a long-term water service contract to release storage water from the Willamette River Basin Project to the District for irrigation use. This is in response to the needs to: 1) enhance efficiency in Reclamation's administration of water service contracts; and 2) improve forecasts of long-term demand and availability of water by Reclamation and other agencies having responsibilities related to the Long Tom River, the Willamette River Basin Project, and the overall Willamette River watershed.

Authority

Reclamation is authorized to contract with the District to provide surface irrigation water pursuant to Section 9(e) of the Reclamation Project Act of 1939 (43 U.S.C. § 485h(e)) and Section 8 of the Flood Control Act of 1944 (43 U.S.C. § 390).

ALTERNATIVES

Introduction

The following three alternatives are considered within this EA for the Junction City Water Control District, Long-Term Irrigation Water Service Contract:

- Alternative A – Temporary Water Service Contract
- Alternative B – Long-term Water Service Contract
- Alternative C – No Water Service Contract

Alternative B is the only alternative that would achieve the purpose of the proposed action, that is, to execute a long-term water service contract to release storage water from the Willamette River Basin Project to the District for irrigation use. Alternative B is the Preferred Alternative because it would reduce the administration expenses incurred with repetitive negotiation, execution, and administration of a series of temporary contracts; it would provide greater long-term predictability of water demand for Reclamation and the USACE; and it lessens the uncertainty associated with temporary water supply contracts for irrigators.

Alternative A – Temporary Water Service Contract

Under Alternative A, upon the District's request, Reclamation would execute a temporary water service contract to release up to 7,892.5 AF of stored water annually from Fern Ridge Dam to the lower Long Tom River. The contract water would be diverted from the Long Tom River for irrigation use on up to 3,157 acres of land located within the Sub-District boundary. At the end of each temporary contract term and upon request by the District, another temporary water service contract could be negotiated and executed with agreed upon terms and conditions.

These temporary water service contracts are ancillary to operation of the Willamette River Basin Project. The contracts would have no impact on existing storage operations of Fern Ridge reservoir, on releases from Fern Ridge Dam to the Long Tom River, or on any other Project facilities. The Sub-District boundary and the included lands authorized to receive irrigation water would not change as a result of this action. No new or modified facilities would be necessary to divert and distribute the water, and no new lands would be irrigated that have not previously been irrigated.

For the purposes of analyzing Alternative A, it is assumed that Reclamation and the District would continue to execute temporary water service contracts to ensure release of water for irrigation into the foreseeable future. This alternative would be consistent with existing law, Reclamation authority, and the interest that both parties have in continuing release of water for irrigation use. However, this alternative does not meet the purpose and need for the proposed action because of its reliance on a series of consecutive short-term water service contracts.

Alternative B – Long-term Water Service Contract

In response to a request from the District, Reclamation would execute a 40-year long-term water service contract for up to 7,892.5 AF of stored water annually for irrigation use on up to 3,157 acres located within the Sub-District boundary. The contract water would be released from the Willamette River Basin Project's Fern Ridge Dam to the lower Long Tom River and diverted from the river to the Sub-District.

The release of contract water is ancillary to Project operations and would have no impact on existing storage and release operations or on any other Project facilities. The Sub-District boundary and the included lands authorized to receive irrigation water would not change as a result of this action. No new or modified facilities would be necessary to divert and distribute the water, and no new lands would be irrigated that have not previously been irrigated. The proposed water service contract would be executed pursuant to Section 9(e) of the Reclamation Project Act of 1939 (43 U.S.C. § 485h(e)) and Section 8 of the Flood Control Act of 1944 (43 U.S.C. § 390).

Alternative C – No Water Service Contract

In this alternative, Reclamation would not enter into a water service contract with the District. The water released from Fern Ridge Dam to the lower Long Tom River would not be diverted for irrigation within the Sub-District. This alternative does not meet the purpose and need for the proposed action, thus it is eliminated from further consideration.

There are no other known actions or activities that are related to the proposed action.

AFFECTED ENVIRONMENT

Overview

The Sub-District comprises 3,157 acres of lowlands in the southwestern portion of the Willamette Valley in Benton and Lane counties. The Sub-District is located in a portion of the valley floor surrounding Hulbert Lake, about three miles north-northwest of Junction City. It lies west of the Willamette River, east of the Long Tom River, and north of Fern Ridge. The Sub-District is contained within the watershed of the lower Long Tom River, a low-gradient tributary of the Willamette River downstream from Fern Ridge.

The Long Tom River watershed encompasses approximately 410 square miles originating on the east side of the Coast Range. The upper and lower Long Tom watersheds are divided by Fern Ridge. Coyote Creek and Amazon Creek drain the southern and eastern portions of the upper basin before flowing into Fern Ridge reservoir. From Fern Ridge Dam, the lower Long Tom River flows north about 24 miles to its confluence with the Willamette River.

The contract water is released from Fern Ridge reservoir, which is located on the valley floor against the east foothills of the Coast Range, about seven miles west of the city of Eugene. Fern Ridge Dam, located on the Long Tom River, was constructed by the USACE in 1942. It was the first component of the Willamette River Basin Project and is operated for the primary purpose of flood control, with irrigation being one of several secondary purposes. Total storage in the reservoir is about 116,800 AF. Irrigation water is released from the reservoir into

the lower Long Tom River, diverted from the river by the District, and then delivered to the Sub-District which distributes it to its constituents through a network of ditches maintained by the Sub-District. The Sub-District's constituents purchase water through annual assessments pursuant to individual irrigation contracts with the Sub-District. Neither the District nor the Sub-District provides municipal, industrial, or other non-irrigation water to other entities or individuals.

Hydrology

The area's hydrology has been significantly altered over the past century due to natural processes and human intervention. In the 1940's, the entire reach of the lower Long Tom River was channelized as a project augmentation to Fern Ridge. This was done to better evacuate flood control releases and contain flows in the low gradient channel. The river was straightened from its many meander curves and former side-channel braids. Currently, the river is confined by levees on one or both banks in most places and contains three velocity control drop structures. Its banks are armored with riprap blankets along substantial stretches. Re-routing, straightening, and subsequent down-cutting of many valley bottom streams has disconnected these streams from their floodplains. The old channels now form numerous oxbows and remnant side channels, and drainage ditches are interspersed among the well-defined and drained upland agricultural lands.

Flows on the lower Long Tom River in the vicinity of the Sub-District are controlled by releases at Fern Ridge Dam. River levels are governed primarily by flood season operations and flow targets set for the river near the town of Monroe, north and downstream from the Sub-District. The release of contract water is ancillary to Project operations, and irrigation withdrawals have a de minimis effect on Project and river operations. Stored water is released when reservoir capacity is met, or to augment stream flows during the dry months of summer and early fall. In the summer it is common for flows near Monroe to be 100 cubic feet per second or less. The Long Tom River below Fern Ridge is identified by the state of Oregon as water quality limited and included on the 303(d) list for temperature, dissolved oxygen, bacteria, and turbidity (ODEQ 2012).

Water Use

Most of the water used in the lower Long Tom River watershed is surface water, with a large percentage of this stored in Fern Ridge and small, private reservoirs and ponds within the watershed. There are no instream water rights in the Long Tom Watershed; thus, no minimum flow is required for the protection of fish and other aquatic organisms. The existence of the reservoir results in more summer flows being available for irrigated agriculture than would naturally occur (NMFS 2008).

Approximately 98% of the water rights are used for irrigation of crops and pastures, 1.5% for industrial purposes, and the remaining fraction for rural residential landowners. These percentages do not include drinking water for the cities of Monroe, Junction City, or Veneta, which acquire their drinking water from municipal wells. In 2004, the Oregon Department of Environmental Quality declared a Groundwater Management Area for a 230-square-mile area of the Southern Willamette Valley that encompasses portions of three counties, including the communities of Junction City and Monroe, because of high nitrate concentrations.

Aquatic Habitats and Species

The lower Long Tom River watershed is home to a variety of aquatic species that rely on its network of streams, lakes, and wetlands. Several of these species are particularly sensitive to water quality conditions such as water temperature, dissolved oxygen, and sediment levels. Native fish that are sensitive to water quality include cutthroat trout, paiute, torrent and riffle sculpin, mountain whitefish, Pacific lamprey, and spring Chinook. Native amphibian species that are sensitive to water quality include red legged frog, southern seep salamander, and tailed frog. The watershed's population of introduced warm-water fishes is generally less sensitive to the water quality conditions.

The Long Tom River and its tributaries are home to three life histories of the native Willamette coastal cutthroat trout (resident, fluvial, adfluvial), the anadromous Pacific lamprey, resident brook lamprey, and other native aquatic species. Resident cutthroat are found in Coyote Creek, which flows into Fern Ridge, and in Bear and Ferguson Creeks, both of which are tributaries to the lower Long Tom River in the lower portion of the watershed. A fluvial population of cutthroat trout spends most of the year in the Willamette River and migrates into the Bear and Ferguson Creek sub-basins to spawn. Adfluvial cutthroat trout in the Long Tom watershed inhabit Fern Ridge for parts of the year before migrating upstream into Coyote Creek or other tributaries to the upper Long Tom River to spawn. Surveys performed by the Bureau of Land Management in 1998 found Pacific lamprey in both the Bear and Ferguson Creek sub-watersheds. The Long Tom watershed also contains large populations of introduced warm-water fishes.

Currently, no ESA-listed fish species inhabit the Long Tom watershed. Historically, Oregon chub did inhabit the watershed. Thirteen ESA-listed species of salmon and steelhead are present in the mainstem Willamette and Columbia Rivers (NMFS 2008, p 1-9). Southern distinct population segment of the North American green sturgeon occur in areas negligibly affected by the Willamette Basin Project, (*Id*., p. B-7). Southern Resident Killer Whales may also experience indirect effects from Project operations due to changes in prey productivity in the Willamette basin (*Id.*, p. A-18).

Upland Habitats and Species

For decades, the USACE conducted maintenance activities along the lower Long Tom River to keep riparian vegetation from establishing on the modified and armored river banks. However, many locations today are developing substantial riparian plant communities. The lower Long Tom River watershed and larger Willamette River watershed are host to a wide diversity of upland habitats and are considered anchor areas by the U.S. Fish and Wildlife Service (Service) for the recovery of species dependent on wetland prairie, oak woodland, and savannah. Wetland prairie historically covered an estimated 34,500 acres in the Long Tom River watershed. Over the past 150 years these wetlands have been converted and filled, overgrown by wetland trees and shrubs due to fire suppression, or altered to other wetland types. Today there are approximately 1,000 acres of remnant wetland prairie in the watershed. Upland prairie and oak savannah are the rarest habitat types in the Long Tom River watershed, yet historically were significant components within the ecosystem. The loss of this habitat type is mainly due to fire suppression, which has allowed colonization by shrubs, trees, and nonnative invasive species.

ESA-listed, upland species that may occur in Benton and Lane counties include Fender's blue butterfly (endangered, critical habitat designated), Willamette daisy (endangered, critical habitat designated), Bradshaw's desert parsley (endangered, no critical habitat designated), and Kincaid's lupine (threatened, critical habitat designated). The distribution of Fender's blue butterfly is restricted to the Willamette Valley, where it currently occupies sites located almost exclusively on the western side of the valley on upland prairies characterized by forage grasses (USFWS 2010). No critical habitat for these species has been designated in the vicinity of the Sub-District (USFWS 2013).

Land Use

The lowlands of the Willamette Valley within and adjacent to the Sub-District are devoted primarily to small farms, rural residences, and small incorporated communities. The designated land use for the area as identified in both the Benton County Comprehensive Plan and Lane County Comprehensive Plan is predominantly Agriculture, with zoning typically "Exclusive Farm Use," "Exclusive Farm Use – 30-acre Minimum," or "Exclusive Farm Use – 40-acre Minimum." Relatively small areas zoned "Rural Residential – 2-acre Minimum" or "Rural Residential – 5-acre Minimum" are dispersed within the valley lowlands. Oregon law significantly restricts the development of designated farmland such as found in most of the Sub-District.

The combination of a long growing season, mild winters, warm summers, and fertile soils makes the Willamette Valley one of the most diverse and economically valuable agricultural areas in the state. About 3,157 acres within the Sub-District have been irrigated pursuant to recent temporary water service contracts between Reclamation and the District. Relatively low

intensity agriculture is practiced in the Sub-District, with many small and family-oriented farms. Irrigators currently grow grass seed, sugar beet seed, some wheat and mint, and small amounts of forage, including mostly corn, hay, and pasture grasses. Incidental water use for lawn and gardens also occurs. Like many other traditionally rural and agricultural Oregon counties that are experiencing population growth and industry transition away from agriculture, the long term future of farming in the larger area of Lane County is uncertain.

Cultural Resources

Cultural resources are historic and traditional cultural properties that reflect a group's heritage. Federal law and regulations define historic properties to include prehistoric and historic sites, buildings, structures, districts, and objects that are included in, or eligible for, inclusion in the National Register of Historic Places (National Register). Traditional cultural properties are locations that have special heritage value to contemporary communities because they are associated with the historical practices or beliefs needed to maintain cultural identity, and are eligible to the National Register.

Numerous laws and regulations require agencies to identify cultural resources that are on Federal land or that will be impacted by a Federal undertaking, and to take action to address the effects of undertakings on properties eligible for inclusion in the National Register. The National Historic Preservation Act (NHPA) is the principal law defining Federal cultural resource management responsibilities. Section 106 of the NHPA and its implementing regulation (36 CFR Part 800) define a phased, consultative process to implement responsibilities for Federal undertakings.

Cultural resource inventories aimed at identifying and documenting cultural sites around or within the boundaries of the Sub-District are primarily the result of the realignment of State Highway 99W, and channel improvements or wetland mitigation associated with the Willamette River. Identified archaeological sites are limited to lithic scatters, some of which were subjected to testing for site evaluation. No traditional cultural properties were identified within, or near the Sub-District.

Numerous historic properties are present within the Sub-District boundary, as identified in the Oregon State Historic Preservation Office Historic Sites on-line database and Benton County historic sites listing. These sites are historic (turn-of-the-century to mid-1930s) farmsteads or buildings related to agricultural pursuits.

ENVIRONMENTAL CONSEQUENCES

Alternative A – Temporary Water Service Contract

Under Alternative A, upon the District's request, Reclamation would execute a temporary water service contract to release of up to 7,892.5 AF of stored water annually from Fern Ridge to the lower Long Tom River. The water would be diverted from the Long Tom River and used to irrigate up to 3,157 acres of land within the Sub-District boundary. At the end of each temporary contract term and upon the request of the District, another temporary water service contract could be negotiated and executed with agreed upon terms and conditions.

The effects of Alternative A – Temporary Water Service Contract would be the same as have existed for the past several years. No new or modified facilities would be necessary or are proposed to divert and distribute the water, and no new lands would be irrigated that have not previously been devoted to irrigated agriculture. There would be no impact on existing storage and release operations of Fern Ridge reservoir or other Project facilities or operations.

Neither archaeological nor above-ground, built environment sites would be affected by issuance of a temporary water service contract; there would be no change in operation of the Sub-District, or use of irrigation water that has not been experienced under the previously issued temporary water contracts.

Alternative B - Long-term Water Service Contract

If a 40-year long-term water service contract is executed by Reclamation, up to 7,892.5 AF of stored water would be released into the lower Long Tom River annually from Fern Ridge Dam and diverted for irrigation of up to 3,157 acres of land located within the Sub-District boundary. No new or modified facilities would be necessary or are proposed to divert and distribute the water, and no new lands would be irrigated that have not previously been devoted to irrigated agriculture.

All other effects would be the same as would occur under Alternative A - Temporary Water Service Contract assuming that Reclamation and the District maintain a series of temporary water service contracts to continue releases of irrigation water to the Sub-District. There would be no impact on existing storage and release operations of Fern Ridge reservoir or other Project facilities or operations.

Neither archaeological nor above-ground, built environment sites would be affected by issuance of a long-term water service contract; there would be no change in operation of the Sub-District, or use of irrigation water that has not been experienced under the previously issued temporary water service contracts.

	EVALUATION OF SIGNIFICANT CRITERIA	No	Yes	Uncertain
1.	This action would have a significant effect on the quality of the human environment (40 CFR 1502.3).	X		
2.	This action would have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources (NEPA Section 102(2)(E) and 43 CFR 46.215(c)).	X		
	EVALUATION OF ENVIRONMENTAL ISSUES			
1.	This action would have significant impacts on public health or safety (43 CFR 46.215(a)).	X		
2.	This action would have significant impacts on such natural resources and unique geographical characteristics as historic or cultural resources; parks, recreation, and refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (EO 11990); flood plains (EO 11988); national monuments; migratory birds; and other ecologically significant or critical areas (43 CFR 46.215 (b)).	X		
3.	This action would have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks (43 CFR 46.215(d)).	X		
4.	This action would establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects (43 CFR 46.215 (e)).	X		
5.	This action would have a direct relationship to other actions with individually insignificant but cumulatively significant environmental effects (43 CFR 46.215 (f)).	X		
6.	This action would have significant impacts on properties listed, or eligible for listing, on the National Register of Historic Places as determined by Reclamation (in coordination with a Reclamation cultural resources professional, LND 02-01)(43 CFR 46.215 (g)).	X		
7.	This action would have significant impacts on species listed, or proposed to be listed, on the List of Endangered or Threatened Species, or have significant impacts on designated critical habitat for these species (43 CFR 46.215 (h)).	X		
8.	This action would violate a Federal, tribal, State, or local law or requirement imposed for protection of the environment (43 CFR 46.215 (i)).	X		
9.	This action would affect ITAs (to be completed by Reclamation official responsible for ITAs) (512 DM 2, Policy Memorandum dated December 15, 1993).	X		
10.	This action would limit access to, and ceremonial use of, Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (EO 13007, 43 CFR 46.215 (k), and 512 DM 3)).	X		
11.	This action would have a disproportionately high and adverse effect on low income or minority populations (EO 12898) (43 CFR 46.215 (j)).	X		
12.	This action would contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act, EO 13112, and 43 CFR 46.215 (l)).	X		

CONSULTATION AND COORDINATION WITH OTHERS

During development of the proposed action, Reclamation coordinated with representatives for the District and Sub-District, including Steve Cornacchia, Esq. and John Reerslev.

Cultural resources data collection was conducted by appointment with the Oregon State Historic Preservation Office in Salem, Oregon.

Endangered Species Act

In July 2008, Reclamation completed consultation with the National Marine Fisheries Service (NMFS) on the effects of Reclamation's water marketing activities within the Willamette River Basin Flood Control Project on 13 species of ESA-listed salmon and steelhead, southern resident killer whale, and the southern distinct population segment of North American green sturgeon (See Table 1). The resulting biological opinion considered the effects of water marketing activities for up to 95,000 AF (NMFS 2008, p. 2-53). At the time of consultation, approximately 80,430 AF was under existing or pending contracts, while 14,569 AF remained available for new contract needs.

Table 1. Species Evaluated in the Willamette Project Biological Opinion (NMFS 2008).

- UWR Chinook salmon (*O. tshawytscha*)
- UWR steelhead (*O.mykiss)*
- Lower Columbia River (LCR) Chinook salmon,
- LCR coho salmon (*O. kisutch*)
- LCR steelhead
- Middle Columbia River (MCR) steelhead
- Columbia River (CR) chum salmon (*O.keta*)
- Snake River (SR) spring/summer Chinook salmon
- SR fall Chinook salmon
- SR sockeye salmon (*O.nerka*)
- SR steelhead
- Upper Columbia River (UCR) spring Chinook salmon
- UCR steelhead
- Southern resident killer whale
- Southern DPS North American green sturgeon

The consultation and biological opinion resulted in several requirements for new water service contracts and renewals. First, water service contracts now contain: 1) a sub-article that allows for review and modification of the terms and conditions of the water service contract by Reclamation, at any time, to avoid or minimize impacts to endangered species or other valuable resources; and 2) language requiring the contractor to comply with state and Federal fish screening and passage standards.

Second, reasonable and prudent alternative 3 (RPA 3) requires:

- compliance with NMFS fish protection criteria;
- surface water diversions with lockable headgates that are capable of easily starting, adjusting, and stopping the flow of water;
- instantaneous measurement devices for diversions over 3 cubic feet per second (cfs); and
- curtailment provisions if flow is needed to protect listed species and critical habitats (NMFS 2008 p. 9-26).

Alternatives A and B are both within the scope of the water marketing program NMFS considered in the 2008 biological opinion. Because the District water service contract was one of the existing contracts considered in the biological opinion, the execution of either a temporary or long-term water service contract is within the 80,430 acre feet of contracted supplies at the time of consultation and will not expand the scope of the water service contracting program.

Because no ESA listed species inhabit the Long Tom River, and due to downstream barriers to fish passage, the District is exempt from the NMFS fish screening criteria. The following language will be included in any water service contract executed with the District:

> "As a result of barriers to fish passage on the Long Tom River, the Contractor is exempt from current requirements for National Marine Fisheries Service (NMFS) compliant fish screens at the point of diversion described above. However, if in the future the subject barriers are removed, the Contractor shall install NMFS compliant fish screen(s) and/or fish passage structure(s), which shall be approved by NMFS or its designee, installed, operated, and maintained in good operating condition by and at the expense of the Contractor, and which shall remain at all times available for inspection by the United States and the State of Oregon, whose representatives may at all times have access to them over any lands of the Contractor."

Reclamation has determined that the proposed action will have no effect on ESA-listed species including the Fender's blue butterfly (*Icaricia icarioides fenderi*), Willamette daisy (*Erigeron decumbens var. decumbens*), Bradshaw's desert parsley (*Lomatium bradshawii*), and Kincaid's lupine (*Lupinus sulphureus ssp. kincaidii*) or on designated critical habitat for these species. Neither individuals of these species, their designated critical habitat, nor the type of habitats on which these species are known to occur occupy the sub-district. Further, because this action will not change existing water management activities or disturb native upland prairie habitats, this action is not of the type that may affect these species.

LITERATURE CITED

NMFS 2008 — National Marine Fisheries Service. 2008. Endangered Species Act Section 7(a)(2) Consultation, Biological Opinion & Magnuson-Stevens Fishery Conservation & Management Act Essential Fish Habitat Consultation. NOAA Fisheries Log Number FINWRl2000/02117. July 11, 2008. Portland, Oregon.

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