

State of Washington  
 Department of Ecology  
 Office Of Columbia River  
 Report of Examination for  
 New Secondary Use Water Right

File No. S4-33091 WR Doc ID 5684618
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**PRIORITY DATE**  
 May 16, 1938

**APPLICATION NUMBER**  
 S4-33091

**MAILING ADDRESS**  
 US Bureau of Reclamation – Boise  
 US Department of Interior  
 1150 North Curtis Road, Suite 100  
 Boise, ID 83706-1234

**SITE ADDRESS (IF DIFFERENT)**  
 US Bureau of Reclamation  
 Columbia Basin Project  
 Adams, Franklin, Grant and Lincoln Counties, WA

**Quantity Authorized for Withdrawal or Diversion**

<b>WITHDRAWAL OR DIVERSION RATE</b>	<b>UNITS</b>	<b>ANNUAL QUANTITY (AF/YR)</b>
2,700	CFS	164,000

**Purpose**

PURPOSE	WITHDRAWAL OR DIVERSION RATE			ANNUAL QUANTITY (AF/YR)		PERIOD OF USE (mm/dd)
	ADDITIVE	NON-ADDITIVE	UNITS	ADDITIVE	NON-ADDITIVE	
Irrigation	2,700		CFS	164,000		01/01 - 12/31*

ADDITIVE	IRRIGATED ACRES	
	ADDITIVE	NON-ADDITIVE
70,000		

REMARKS: Delivery of Columbia River water under this secondary use permit will replace groundwater supplied to 70,000 acres of irrigated agricultural lands within the Odessa Subarea of the Columbia Basin Project.

\* The period of use for refilling Banks Lake is limited to October 1 thru March 31; the period of use for water deliveries from Banks Lake to Columbia Basin Project lands for irrigation within the Odessa Subarea is limited to March 1 thru October 31.

**Source Location**

COUNTY	WATERBODY	TRIBUTARY TO	WATER RESOURCE INVENTORY AREA
GRANT	Columbia River – Franklin D. Roosevelt Reservoir	Pacific Ocean	42 – Grand Coulee

SOURCE FACILITY/DEVICE	PARCEL	TWP	RNG	SEC	QQ Q	LATITUDE	LONGITUDE
Grand Coulee Dam	Gov't Lots 3 & 4	28N	30E.W.M.	1	SW¼		

**Place of Use**

**LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE**

70,000 acres capable of being served by the Columbia Basin Project distribution system and associated facilities within Adams, Franklin, Grant and Lincoln Counties AND within the boundaries of the Odessa Groundwater Subarea defined under WAC 173-128A (see Figure 1).

**Proposed Works**

Delivery of Columbia River water under this secondary use permit will replace groundwater supplied to 70,000 acres of irrigated agricultural lands within the Odessa Subarea of the Columbia Basin Project. Water delivered to the Odessa Groundwater Subarea will be routed to the area using existing Columbia Basin Project distribution system and associated facilities. Some alteration of existing infrastructure, including East Low Canal and wasteway facilities, along with the upgrading and/or the addition of new siphons will occur. Some alteration of existing infrastructure and construction of new canals and/or laterals will be required to deliver water to individual farms in the Odessa Subarea. Irrigators may also have to alter and/or construct conveyance systems on their land to deliver water from the canals to their individual farms.

## Development Schedule

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
April 1, 2014	April 1, 2024	November 1, 2034

## Measurement of Water Use

How often must water use be measured?	Daily
How often must water use data be reported to Ecology?	Annually (Jan 31)
What volume should be reported?	Total Annual Volume
What rate should be reported?	Annual Peak Rate of Withdrawal (cfs)

## Provisions

### Measurements, Monitoring, Metering and Reporting

An approved measuring device must be installed and maintained for each of the sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", WAC 173-173, which describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements.

Recorded water use data shall be submitted via the Internet. To set up an Internet reporting account, contact the Central Regional Office. If you do not have Internet access, you can still submit hard copies by contacting the Central Regional Office for forms to submit your water use data.

### General

For regulation purposes, the effective priority date of this secondary use authorization shall be the same as the existing reservoir (storage) right, Certificate No. 11793, May 16, 1938.

The total combined withdrawal under S4-33091, S3-01622, S3-28586P and S3-30486 shall not exceed 17,593 cfs and 3,307,973 acre-feet per year and no more than 720,000 acres shall be irrigated.

In accordance with RCW 90.44.510, when water authorized under this permit is applied to Columbia Basin Project lands with existing state-issued groundwater rights, Ecology shall issue superseding state-issued groundwater rights. The superseding state-issued groundwater right(s) shall designate the portion of the water right(s) being replaced by federal Columbia Basin Project water under this permit as a standby/reserve water right(s). The secondary use authorization under this permit is **not** intended to be additive to those previously existing state-issued groundwater rights. As water service contracts are recommended for approval of water service that will be provided under this permit, Ecology will issue superseding state-issued standby/reserve groundwater rights.

### Department of Fish and Wildlife Requirement(s)

The intake(s) shall be screened in accordance with Department of Fish and Wildlife screening criteria (pursuant to RCW 77.57.010, RCW 77.57.070, and RCW 77.57.040). Contact the Department of Fish and Wildlife, 600 Capitol Way N, Olympia, WA 98501-1091. Attention: Habitat Program, Phone: (360) 902-2534 if you have questions about screening criteria. See: <http://wdfw.wa.gov/about/contact/>.

### 2013 Biological Opinion (Bi-Op) Requirement(s)

The diversion of water under this secondary use authorization shall comply with requirements of the Biological Opinion that has been issued for this project under the federal Endangered Species Act (ESA). Parameters related to the timing and rate of refilling Banks Lake are needed to avoid adverse affects to ESA listed salmon and steelhead as explained in the National Oceanic Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS) Biological Opinion (2013); titled *Endangered Species Act Section 7(a) Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for the U.S. Bureau of Reclamation's Odessa Subarea Modified Partial Groundwater Replacement Project (NWR-2012-9371)*.

The timing and parameters for refilling Banks Lake are as follows:

- Fall Diversion (October). In average water years, up 2,700 cfs and 164,000 acre-feet can be pumped from Lake Roosevelt from October 1 thru October 31.
- Winter Diversion (November thru March). If the full 164,000 acre-feet diversion from Lake Roosevelt to refill Banks Lake is not satisfied by November 1, additional diversion of up to 21,000 acre-feet per month could occur from November thru March if chum salmon flow targets are met below Bonneville Dam. If chum salmon flow targets are NOT met, Reclamation will limit additional diversions to 6,000 acre-feet per month from November thru March. When diversions are proposed during this winter period under either scenario, Reclamation will coordinate with NMFS prior to any diversion during the November thru March period.
- Spring/Summer Diversion. NO additional diversions shall occur from Lake Roosevelt to refill Banks Lake from April thru September to meet the 164,000 acre-feet of deliveries from Banks Lake to CBP lands within the Odessa Subarea.

Reclamation shall provide annual notice to Ecology of the timing and extent of water diversions under this secondary use permit. Reclamation shall: (1) no later than September 1, provide the timing and extent of all projected water diversions under this permit through the following June 30; and (2) no less than ten days prior to the commencement of water diversions, provide notice of the date(s) that Reclamation intends to commence diversions under this permit and the projected duration and extent of such diversions. In addition, if the full quantity of water is not diverted during the month of October, then, by November 1, Reclamation shall provide a projection of the time(s) when it will make further diversion(s) of water.

Reclamation shall monitor and report to Ecology and NMFS the timing and extent of water withdrawals from the Columbia River attributable to this secondary use permit. Reclamation shall monitor the daily flows out of Grand Coulee Dam, the net amount of water pumped from the Columbia River to Lake Roosevelt and the elevation of Banks Lake. Each year Reclamation shall provide a written annual record of last complete water year's diversion from Lake Roosevelt.

Reclamation shall also comply with all other requirements that are specified in the 2013 NOAA/NMFS Biological Opinion, or in any modified or new version of this biological opinion for this project that may be issued in the future.

#### **Schedule and Inspections**

Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the project location, and to inspect at reasonable times, records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.

#### **Proof of Appropriation**

The water right holder shall file the notice of Proof of Appropriation of water (under which the certificate of water right is issued) when the permanent distribution system has been constructed and the quantity of water required by the project has been put to full beneficial use. The certificate will reflect the extent of the project perfected within the limitations of the water right. Elements of a proof inspection may include, as appropriate, the source(s), system instantaneous capacity, beneficial use(s), annual quantity, place of use, and satisfaction of provisions. The water right holder may obtain the services of a certified water rights examiner (CWRE) to carry out proof of appropriation.

Upon Proof of Appropriation of this permit, specific legal descriptions as to the place of use shall be required in order to address the previously issued groundwater rights, and the total diversionary uses associated with this permit shall be reduced to the actual quantities that are put to beneficial use.

**Findings of Facts**

Upon reviewing the investigator's report, I find all facts, relevant and material to the subject application, have been thoroughly investigated. Furthermore, I concur with the investigator that water is available from the source in question; that there will be no impairment of existing rights; that the purpose(s) of use are beneficial; and that there will be no detriment to the public interest.

Therefore, I ORDER approval of Application No. S4-33091 and that a permit issue, subject to existing rights and the provisions specified above.

**Your Right To Appeal**

You have a right to appeal this Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by RCW 43.21B and WAC 371-08. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of the Order.

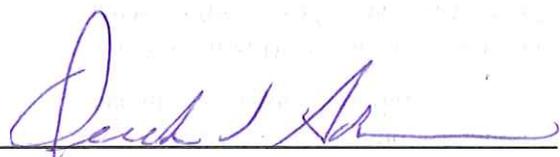
File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.

- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.
- You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Street Addresses	Mailing Addresses
<b>Department of Ecology</b> Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	<b>Department of Ecology</b> Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
<b>Pollution Control Hearings Board</b> 1111 Israel RD SW, Ste 301 Tumwater, WA 98501	<b>Pollution Control Hearings Board</b> PO Box 40903 Olympia, WA 98504-0903

For additional information visit the Environmental Hearings Office Website: <http://www.eho.wa.gov>. To find laws and agency rules visit the Washington State Legislature Website: <http://www1.leg.wa.gov/CodeReviser>.

Signed at Yakima, Washington, this 18th day of March 2014.



Derek I. Sandison, Director  
Office of Columbia River

INVESTIGATOR'S REPORT  
 Application for Water Right – US Bureau of Reclamation  
 Water Right Control Number S4-33091  
 Melissa Downes, Department of Ecology

**BACKGROUND**

Description and Purpose of Proposed Application

The Washington State Department of Ecology (Ecology) accepted Water Right Application Number S4-33091 submitted by the US Bureau of Reclamation (Reclamation) on April 5, 2013. Reclamation's application was amended on May 17, 2013. Reclamation proposes to release up to 2,700 cfs, 164,000 acre-feet per year from storage under Reservoir Certificate No. 11793C. Attributes of Reclamation's application for a secondary use water right permit are presented below in Table 1.

Table 1 Application Summary

<b>Name</b>	US Bureau of Reclamation
<b>Application Filing Date</b>	April 5, 2013
<b>Instantaneous Rate</b>	2,700 cubic feet per second (cfs)
<b>Annual Quantity</b>	164,000 acre-feet per year (afy)
<b>Purpose(s) of Use</b>	Irrigation of 70,000 acres
<b>Period of Use</b>	Year-round
<b>Point of Diversion</b>	Franklin D. Roosevelt Reservoir, Columbia River; being within Gov't lots 3 & 4, Section 1, T 28 N, R 30 E.W.M.
<b>Place(s) of Use</b>	Lands within the Columbia Basin Project being within Adams, Grant, Lincoln and Franklin Counties.

The Odessa Groundwater Replacement Project will result in implementation of the preferred alternative for delivery of surface water from the Columbia Basin Project to irrigated lands that currently rely on declining groundwater supplies located in the Odessa Subarea<sup>1</sup> defined under Washington Administrative Code (WAC) 173-128A.

The State of Washington (State), Reclamation, and the Columbia Basin Irrigation Districts<sup>2</sup> (CBIDs) signed a Memorandum of Understanding (MOU)<sup>3</sup> in December 2004 as part of the Columbia River Initiative (CRI). The MOU encompassed many water supply issues in the Columbia River Basin; including exploring options for delivering surface water (Columbia River) to existing irrigated lands that are located within the Columbia Basin Project (CBP) and currently rely on declining groundwater supplies from the Odessa Subarea aquifer. Similarly, the State and the Confederated Tribes of the Colville Reservation (Colville Tribes) signed an Agreement in Principle (AIP)<sup>4</sup> in January 2005 that covered some of the same issues as the 2004 MOU.

In the summer of 2005, the CRI became the Columbia River Partnership that continued negotiations on legislation and implementation of the 2004 MOU and 2005 AIP. In February 2006, the Washington State Legislature passed the Columbia River Water Management Act, RCW 90.90<sup>5</sup>, relating to water management in the Columbia River Basin. The Act directed Ecology "to aggressively pursue the development of water supplies to benefit both instream and out-of-stream uses." The Act also directed Ecology to focus its water supply

<sup>1</sup> In 1967 Ecology closed an area experiencing declining groundwater levels known as the Odessa Ground Water Management Subarea, commonly referred to as the Odessa Subarea.

<sup>2</sup> The Columbia Basin irrigation districts are the East Columbia Basin Irrigation District (ECBID), Quincy Columbia Basin Irrigation District (QCBID) and South Columbia Basin Irrigation District (SCBID).

<sup>3</sup> 2004 MOU [http://www.ecy.wa.gov/programs/wr/cri/Images/PDF/cri\\_mou121704.pdf](http://www.ecy.wa.gov/programs/wr/cri/Images/PDF/cri_mou121704.pdf)

<sup>4</sup> 2005 AIP <http://www.ecy.wa.gov/programs/wr/cri/Images/PDF/colvilletribeagreement.pdf>

<sup>5</sup> RCW 90.90 <http://apps.leg.wa.gov/rcw/default.aspx?cite=90.90&full=true>

development efforts on:

- (a) Alternatives to groundwater for agricultural users in the Odessa subarea aquifer;
- (b) Sources of water supply for pending water right applications;
- (c) A new uninterrupted supply of water for the holders of interruptible water rights on the Columbia River mainstem that are subject to instream flows or other mitigation conditions to protect stream flows; and
- (d) New municipal, domestic, industrial, and irrigation water needs within the Columbia River basin.

Congress and the State Legislature authorized funding for Ecology and Reclamation to undertake the Odessa Subarea Special Study (Study) which began in 2006. The study examined the feasibility, acceptability, and environmental consequences of alternatives to replace groundwater currently used for irrigation of approximately 102,600 acres in the Odessa Subarea with surface water supplied by Reclamation via the CBP. Stages of the Study included; environmental scoping, appraisal study, public hearings, alternative evaluation, economic analysis, and feasibility design and cost estimates. The Study culminated in 2012 with Ecology and Reclamation issuing the Odessa Subarea Special Study Final Environmental Impact Statement (FEIS) and the Final Feasibility-Level Special Study Report.

Reclamation and Ecology have identified a preferred alternative that would serve lands both north and south of Interstate-90 (totaling 70,000 acres) by enlarging the East Low Canal and developing a distribution system to deliver water from the canal to farmlands. The water supply for the alternative would come from the Columbia River by way of Banks Lake.

Further background and study details are available at the following websites:

- Washington State Department of Ecology Office of Columbia River, Odessa Subarea Special Study: [http://www.ecy.wa.gov/programs/wr/cwp/cr\\_odessa.html](http://www.ecy.wa.gov/programs/wr/cwp/cr_odessa.html).
- Reclamation's Pacific Northwest Region, Columbia-Cascades Area Office, Odessa Subarea Special Study: [http://www.usbr.gov/pn/programs/ucao\\_misc/odessa/](http://www.usbr.gov/pn/programs/ucao_misc/odessa/).

### Legal Requirements for Approval of Appropriation of Water

RCW 90.03 authorizes the appropriation of public water for beneficial use and describes the process for obtaining water rights. The subject application is for a secondary use permit associated with existing Reservoir Certificate No. 11793, which authorizes a right to store 6,400,000 acre-feet of water annually in Lake Roosevelt. RCW 90.03.370 describes the statutory framework for issuing reservoir (storage) permits and secondary use permits. RCW 90.03.370(1)(a) states:

*"...the party or parties proposing to apply to a beneficial use the water stored in any such reservoir shall also file an application for a permit, to be known as the secondary permit, which shall be in compliance with the provisions of RCW 90.03.250 through 90.03.320."*

Laws governing the water right permitting process are contained in RCW 90.03.250 through 90.03.340. In accordance with RCW 90.03.290, determinations must be made on the following four criteria in order for an application for a water right permit to be approved:

- Water use must be beneficial
- Water must be available
- There must be no impairment of existing rights, and
- Water use must not be detrimental to the public interest.

### *Public Notice*

RCW 90.03.280 requires that notice of a water right application be published once a week, for two consecutive weeks, in a newspaper of general circulation in the county or counties where the water is to be stored, diverted and used. Notice of this application was published in the following 5 newspapers:

- Tri-City Herald published in Benton and Franklin Counties on June 6<sup>th</sup> and June 13<sup>th</sup>, 2013; AND
- Ritzville Adams County Journal published in Adams County on June 6<sup>th</sup> and June 13<sup>th</sup>, 2013; AND
- Othello Outlook published in Adams County on June 13<sup>th</sup> and June 20<sup>th</sup>, 2013; AND
- Columbia Basin Herald published in Grant County on June 6<sup>th</sup> and June 13<sup>th</sup>, 2013; AND
- Wilbur Register published in Lincoln County on June 6<sup>th</sup> and June 13<sup>th</sup>, 2013.

No comments were received during any of the public notice periods.

### *State Environmental Policy Act (SEPA)*

Environmental review was jointly performed and prepared by Ecology and Reclamation, to comply with both SEPA<sup>6</sup> and the National Environmental Policy Act (NEPA). Reclamation and Ecology held a joint scoping process from August 21, 2008, to September 19, 2008.

The Draft Environmental Impact Statement (EIS) examined the feasibility, acceptability and environmental consequences of alternatives to replace groundwater currently used for irrigation on approximately 102,600 acres of land in the Odessa Groundwater Management Area and within the CBP. The Draft EIS was issued on October 26, 2010, and comments were accepted through January 31, 2011, for inclusion in the Final EIS. Additionally, public meetings were held in Coulee Dam and Moses Lake to receive comments on the Draft EIS.

A no action alternative (1), two partial replacement alternatives (2A & 2B), two full replacement alternatives (3A & 3B) and two modified partial replacement alternatives (4A & 4B) were evaluated in the Final EIS. Water supply options evaluated for all 6 action alternatives include additional drawdown of Banks Lake (A), and use of additional water from both Banks Lake and Lake Roosevelt (B). Two diversion scenarios were evaluated for each of the action alternatives; these scenarios are referred to as the spring diversion and limited spring diversion and they differ on the timing of when the water is diverted from the Columbia River and Lake Roosevelt into Banks Lake. The Final EIS was issued on August 31, 2012. The Final Odessa Subarea Special Study Environmental Impact Statement Documents can be viewed at Reclamation's website.<sup>7</sup>

The modified partial replacement alternatives were developed in response to a number of comments and concerns regarding the Draft EIS. The modified partial replacement alternatives combine components of the partial and full replacement alternatives to fully utilize existing irrigation infrastructure. Water would be conveyed by the expanded (widened) East-Low Canal only and serve approximately 70,000 acres of land located both north and south of I-90. Alternative 4A: Modified Partial Replacement from Banks Lake with Limited Spring Diversion, has been identified by Reclamation and Ecology as the preferred alternative in the Final EIS. Under the preferred alternative, Banks Lake would be refilled between October through March, with most pumping occurring in October and limited pumping from November through March.

Reclamation issued a Record of Decision (ROD) for the Odessa Subarea Special Study Final EIS on April 2, 2013, documenting the Federal action to implement Alternative 4A: Modified Partial Replacement from Banks Lake with Limited Spring Diversion Scenario. Reclamation issued an Amended Record of Decision for the Odessa Subarea Special Study Final EIS on September 27, 2013. The amended ROD provided minor clarifications and corrections to the original ROD and did not alter the effect of Reclamation's decision analyzed in the EIS. The amended ROD states that Alternative 4A is the environmentally preferable action alternative, with more benefits to the Odessa Subarea aquifer and less overall impacts to other environmental resources as compared

<sup>6</sup> The State of Washington Environmental Policy Act (SEPA) is codified in RCW 43.21C, and Ecology's SEPA rules are codified in WAC 197-11.

<sup>7</sup> <http://www.usbr.gov/pn/programs/eis/odessa/index.html>

to the partial- and full- replacement alternatives. The amended ROD provides a list of environmental impacts and commitments as a result of implementing the preferred action alternative 4A.

Reclamation and Ecology expect that some projects or actions advanced out of this first tier EIS, as a result of implementing the preferred alternative (4A), may be subject to subsequent second tier project-level environmental review under NEPA and SEPA. Reclamation and Ecology expect that decisions relative to the general scope of the preferred action alternative (4A), which include, but are not limited to, the total acreage to be irrigated with surface water, water supply, canal expansion, and general site locations, will not be subject to additional second tier environmental review.

*Consultation with the Washington Department of Fish and Wildlife*

Ecology must give notice to the Washington Department of Fish and Wildlife (WDFW) of applications to divert, withdraw or store water (RCW 77.57.020). WDFW provided a response to Ecology on December 10, 2013. In addition, WDFW was a signatory to the 2004 MOU between the State, Reclamation and the Columbia Basin Irrigation Districts (CBIDs) and was consulted during the State’s negotiations with Reclamation and the CBIDs prior to signing the 2004 MOU.

**INVESTIGATION**

**Columbia River Operations**

Lake Roosevelt is impounded behind Grand Coulee Dam and has an active storage capacity of 6.4 million acre-feet during normal reservoir operations. Reclamation currently operates the dam and reservoir for flood control, navigation, hydropower generation, irrigation, municipal and industrial use, recreation, and fish and wildlife. The reservoir is operated in coordination with the U.S. Army Corps of Engineers (Corps) for flood control and the Bonneville Power Administration (BPA) for power production. Reclamation also coordinates with state and federal fish and wildlife agencies to release flows for fish in the Columbia River and to store water in the reservoir for resident fish.

The Columbia River has been developed into a highly regulated river system. A number of federal and state agencies and private utilities operate dams on the river for a variety of uses. In addition, there are international and tribal interests involved in managing the river. Several treaties, statutes and management agreements guide river management and operations (Federal Columbia River Power System (FCRPS), 2001).

The major owners and/or operators of water developments in the Columbia River Basin and their primary roles are show in Table 1-1. Other agencies that act in regulatory or advisory capacities are presented in Table 1-2.

Table 1-1 Columbia River Water Managers

Owner/Operator	Primary Role
U.S. Army Corps of Engineers	Federal project operator Power generation, flood control, navigation Operates Columbia River Treaty reservoirs
U.S. Bureau of Reclamation	Federal project operator Power generation, irrigation Columbia Basin Project
Bonneville Power Administration	Power marketing, transmission facilities Funds fish and wildlife mitigation programs under the Northwest Power and Planning and Conservation Act
British Columbia Hydro and Power Authority	Flood control, power generation
Irrigation Districts	Irrigation
Public and Private Utilities	Power generation and distribution

**Table 1-2 Agencies with Regulatory or Advisory Capacities**

<b>Agency</b>	<b>Primary Role</b>
Federal Energy Regulatory Commission	Regulates interstate activities of electric and natural gas utilities and non-Federal hydropower producers
National Marine Fisheries Service and U.S. Fish & Wildlife Service	Enforces Endangered Species Act and implements recovery plans
Environmental Protection Agency	Regulates water quality
U.S. Department of State	Interacts with Canada on international treaty matters
State Resource Agencies	Water rights, land use, fish and wildlife management

Several native tribes have reservations and historic use areas in the Columbia River Basin. The native tribes have historic and treaty rights to take fish from the Columbia River and its tributaries, and have treaty rights to fish, hunt, and gather in usual and accustomed places. The federal government has a trust responsibility to provide services that protect and enhance the treaty rights of native people. The tribes implement fish and wildlife management programs in the Columbia River Basin and participate in river governance decisions.

Operation of the federal reservoirs is regulated by the authorizing legislation, which specifies the purpose of each reservoir. Federal flood control statutes also regulate uses of reservoirs authorized for flood control. Other laws and agreements that influence Columbia River water management are shown in Table 1-3.

**Table 1-3 Laws and Agreements Influencing the Columbia River Management**

<b>Law or Agreement</b>	<b>Effect on River Management</b>
Endangered Species Act (ESA)	A Biological Opinion has been developed to recover listed salmon and other fish species by the Federal Caucus. On May 5, 2008 NOAA issued the FCRPS Biological Opinion <sup>8</sup> (2008 BiOp). This BiOp was supplemented in 2010.
Columbia River Treaty <sup>9</sup>	The treaty between the United States and Canada affects flood control, hydropower, and water supply.
Pacific Northwest Coordination Agreement	The Coordination Agreement establishes a coordinated planning process to implement the Columbia River Treaty. It coordinates Canadian storage operations with federal and non-federal project operations.
Columbia Storage Power Exchange and the Canadian Entitlement Allocation Agreements	The Agreements divide the power benefits from the Columbia River Treaty between the federal and non-federal power generators in the United States.
Non-Treaty Storage Agreement	The Agreement allocates the additional power generated at Mica Dam that is not part of the Columbia River Treaty.
Pacific Northwest Electric Power Planning and Conservation Act, 1980	The Northwest Power and Conservation Council composed of representatives appointed by the governors of Idaho, Montana, Oregon and Washington, developed a Fish and Wildlife Program and a Regional Electric Power and Conservation Plan that changed how the Coordinated Columbia River System is operated.

To implement these varied management objectives, the river system is operated as the Coordinated Columbia River System. Implementation of many of the components of the Columbia River Water Management Act require coordination with the various managing agencies to avoid conflicting with the Coordinated Columbia River System, including initiating cooperative agreements with federal and local partners.

The operation of the Columbia River dams and reservoirs are governed by a complex system of international treaty, federal and state laws and management agreements. The river and dams are managed as the Federal Columbia River Power System (FCRPS) and regulated by Bonneville Power Administration (BPA), Reclamation,

<sup>8</sup> Federal Caucus & Federal Columbia River Power System (FCRPS) Biological Opinion documents are found here: <http://www.salmonrecovery.gov/BiologicalOpinions/FCRPSBiOp.aspx>

<sup>9</sup> Additional information on the Columbia River Treaty can be found here: <http://www.crt2014-2024review.gov/>

and the Army Corps of Engineers (Corps). These agencies coordinate to develop and meet the rule curves for the various reservoir purposes. In addition, a number of other organizations have management responsibilities related to specific purposes. The FCRPS Federal Caucus consists of eight federal agencies that have natural resource responsibilities related to the Endangered Species Act (ESA). In addition to BPA, the Corps, and Reclamation, the Federal Caucus includes National Oceanic and Atmospheric Administration (NOAA) Fisheries, U.S. Fish and Wildlife Service (Service), Environmental Protection Agency (EPA), Bureau of Land Management (BLM), and U.S. Forest Service (USFS). The major responsibility of the Federal Caucus is to coordinate activities related to Biological Opinions (Bi-Op) for the hydropower system.

Reclamation and the Corps currently operate Grand Coulee Dam and Franklin D. Roosevelt Reservoir for flood control, hydropower generation, irrigation, recreation and fish and wildlife. Reclamation coordinates with BPA on hydropower production. Reclamation also coordinates with state and federal agencies to release flows for fish in the Columbia River or to store water in the reservoir for multiple purposes.

Additional diversions from the Columbia River and changes in mainstem flow releases may require approvals in addition to those of Ecology or modifications to existing river operation plans, laws, and agreements with other agencies or governments.

### Description of Odessa Groundwater Subarea

The Odessa Subarea is located within the Columbia Plateau in Eastern Washington. Many groundwater wells in the area are drilled to a depth of 800 to 1,000 feet, with some over 2,000 feet deep, and are completed into Columbia River Basalt aquifers. Regionally, the Columbia River Basalt aquifers discharge to the Columbia River. Precipitation, applied irrigation water and leakage from irrigation canals are the primary sources for aquifer recharge.

The Federal Columbia Basin Project (CBP), located in central Washington, was first authorized in 1935 and later amended in 1943. The 1945 feasibility report anticipated development of the CBP would occur in phases over 70 years and ultimately provide irrigation to 1,029,000 acres. Currently the CBP serves approximately 671,000 acres in Adams, Franklin, Grant and Lincoln counties. There are approximately 170,000 groundwater irrigated acres in the Odessa Subarea, of which 102,600 acres are eligible to receive CBP project water.

In the 1960s and 1970s the State permitted the use of irrigation wells in the Odessa Subarea as a temporary stop gap to provide water to undeveloped CBP lands, anticipating CBP project water would eventually be delivered to these lands. In 1967, the Washington State Legislature designated the Odessa Subarea as a groundwater management area due to groundwater level declines resulting from large scale pumping from these wells and closed approximately 1,100 square miles to drilling of large production wells (WAC 173-128A).

For over 40 years, farmers have relied on deep basalt groundwater wells for irrigation, all the while groundwater levels in the Odessa Subarea aquifer have progressively declined, with some areas experiencing 100 to 200 feet declines. The groundwater is being withdrawn unsustainably, at a rate faster than the aquifer's capacity to recharge. Consequently groundwater users must pump from greater and greater depths, with some wells drying up and others require deepening. Over pumping the aquifer has led to decreased water quality as well (ie. increased salinity and temperature). As water levels continue to decline, irrigators have been seeking alternate water sources.

The Odessa Subarea special study investigated the possibility of continued phased development of the CBP to deliver Project surface water to some, all or none of the approximately 102,600 acres of CBP lands currently using groundwater in the Odessa Subarea. Six action alternatives were advanced as part of the special study (described in more detail in the SEPA section above) evaluating groundwater replacement by providing surface water to CBP lands and maintain economic viability to the region's agricultural, industrial, municipal and wildlife sectors. Providing CBP project water to these lands will help reduce demands on the aquifer.

## Existing Water Rights for the U.S. Bureau of Reclamation's Columbia Basin Project

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Pursuant to RCW 90.40.030, the United States has withdrawn from further appropriation all unappropriated waters of the Columbia River for development of the Columbia Basin Project by a notice from the First Assistant Secretary of the Interior dated January 4, 1934, as amended on February 16, 1934, as modified by the notice of release of waters dated August 13, 1934, and a notice dated May 10, 1938, and supplemented by Certificates of Feasibility dated December 14, 1934 and April 20, 1939. The withdrawals were extended by orders of the State Supervisor of Hydraulics and the State Supervisor, Division of Water Resources, Department of Conservation and Development dated March 15, 1938, December 14, 1940, April 20, 1942, December 14, 1943, February 11, 1947, December 13, 1949, April 20, 1952, February 10, 1960, December 24, 1969 and May 28, 1980, granting an extension through December 14, 1989.

An amendment to RCW 90.40.100 enacted in 1987 states: "Any water withdrawn from appropriation pursuant to RCW 90.40.030 associated with the Columbia Basin Project shall continue as withdrawn from appropriation, without need for periodic renewal, until the project is declared completed or abandoned by the United States acting by and through the Secretary of the Interior or such other duly authorized officer of the United States."

The portfolio of water rights for the Columbia Basin Project is highly diverse and complex, consisting of "reserves" of water, reservoir (storage) certificates, secondary use permits and certificates, and traditional diversionary rights. This section summarizes the existing rights associated with Reclamation's Columbia Basin Project. This section is divided into two sub-sections. The first sub-section describes those reservoir and diversionary rights (consumptive and non-consumptive) that are associated with the May 16, 1938 reserve of water for the project under the federal withdrawal of water from further appropriation. This is the same reserve of water associated with the subject application for a secondary use permit. The second sub-section describes those reservoir and diversionary rights (consumptive and non-consumptive) associated with post-1938 reserves for the Columbia Basin Project and/or different sources of water.

The waters involved in this secondary use application are described as a portion of the 100,000 cfs originally withdrawn for the Columbia Basin Project pursuant to RCW 90.40 in 1934 with a subsequent notice of withdrawal having been filed on May 10, 1938. Through agreement<sup>10</sup> between the United States Department of the Interior and the State of Washington, any water rights that may be perfected for the Columbia Basin Project under this withdrawal will have a priority date of May 16, 1938.

### ***Water Rights Subject to the 1938 Withdrawal:***

#### *Reservoir Storage Rights*

Reservoir Certificate No. 11793, with a priority date of **May 16, 1938**, confirms a right to store 6,400,000 acre-feet annually in Lake Roosevelt. The authorized place of use is described as Lands within the boundaries of the Columbia Basin Project. This authorization was intended to cover the active storage capacity in the Franklin D. Roosevelt Reservoir. This right was subject to the withdrawal notice dated **May 16, 1938**.

#### *Diversions and Consumptive Rights*

Surface Water Certificate No. S3-01622C with a priority date of **May 16, 1938**, confirms a right of 13,450 cfs, 2,910,000 acre-feet per year for the irrigation of 590,000 acres, non-consumptive low-head hydroelectric power generation, municipal, industrial and recreational supply. The authorized point of diversion is from the Columbia River in Section 1, T. 28 N., R. 30 E.W.M. The authorized place of use is described as the area served by the Columbia Basin Irrigation Project distribution system and associated facilities within Lincoln, Okanogan, Douglas, Grant, Adams and Franklin Counties.

Surface Water Permit No. S3-28586P with a priority date of **May 16, 1938**, authorizes a use of up to 1,140 cfs, 214,000 acre-feet per year; 204,000 acre-feet for the irrigation of 50,000 acres, non-consumptive hydroelectric

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<sup>10</sup> Reflected in Memorandum to Bureau of Reclamation dated October 20, 1969.

power generation and recreational supply, and not to exceed 10,000 acre-feet per year each year for municipal and industrial supply. The authorized point of diversion is from the Columbia River in Section 1, T. 28 N., R. 30 E.W.M. The authorized place of use is described as the area served by the Columbia Basin Irrigation Project distribution system and associated facilities within Lincoln, Okanogan, Douglas, Grant, Adams and Franklin Counties.

Permit S3-28586P is provisioned so the total combined withdrawal under S3-01622 and S3-28586P shall not exceed 14,590 cfs and 3,113,973 acre-feet per year and no more than 640,000 acres shall be irrigated. The Report of Examination for S3-28586P also contains a provision that states should water authorized by S3-28586P be applied to lands with existing state issued water rights, those state-issued rights would become reserve/standby. This authorization was not intended to be additive to those underlying state-issued water rights. Upon Proof of Appropriation, specific legal descriptions as to the place of use should be required in order to address underlying state-issued water rights and the total diversionary uses associated with the permit should be reduced to the actual quantities put to beneficial use.

Surface Water Permit No. S3-30486P with a priority date of **May 16, 1938**, authorizes a total of 303 cfs, 45,000 acre-feet per year; 30,000 acre-feet for irrigation of 10,000 acres, 15,000 acre-feet for instream flow purposes. The authorized point of diversion is from the Columbia River in Section 1, T. 28 N., R. 30 E.W.M. The authorized place of use for irrigation is described as lands lying within the CBP boundaries and the Odessa Subarea and for instream flow on the Columbia River mainstem downstream of Grand Coulee Dam to the Pacific Ocean.

Trust Water Certificate No. S3-30556 with a priority date of **May 16, 1938**, authorizes a total of 305 cfs, 37,500 acre-feet per year for instream flow purposes from April 1 to October 31; 25,000 acre-feet of instream flow mitigation for new state-issued municipal and industrial uses and 12,500 acre-feet solely for instream flow purposes. The place of use is the mainstem of the Columbia River in Lake Roosevelt and below Grand Coulee Dam, beginning at the north line of Lake Roosevelt in Section 4, T. 40 N., R.41 E.W.M to the Pacific Ocean.

The diversionary and consumptive rights are summarized in Table 1-4 below. This table only represents consumptive uses for irrigation, municipal and industrial uses. The table does **not** include non-diversionary, consumptive uses for instream flows.

**Table 1-4: Diversionary and consumptive rights subject to the 1938 Withdrawal.**

Document	Qi, cfs	Qa, acre-feet	Acres	Purpose
S3-01622C	13,450	2,910,000	590,000	Irrigation, Municipal, Industrial Recreational and Power
S3-28586P	1,140	214,000	50,000	Irrigation, Municipal, Industrial Recreational and Power
Subtotal	14,590	3,113,973*	640,000	
S3-30486P	303	30,000	10,000	Irrigation
Subtotal	14,893	3,143,973	650,000	
S4-33091 (this application)	2,700	164,000	70,000	Irrigation in the Odessa Subarea
<b>Total</b>	<b>17,593</b>	<b>3,307,973</b>	<b>720,000</b>	

\*The total annual diversion is listed in the provision of Permit S3-28586 as 3,113,973 acre-feet per year and should be evaluated at the proof examination.

*Hydro Power – Non Consumptive Rights*

Surface Water Certificate No. 11543, with a priority date of **May 16, 1938**, confirms a right of 75,000 cfs from the Columbia River for non-consumptive hydroelectric power generation. The authorized place of use and point of diversion is listed as Section 1, T. 28 N., R. 30 E.W.M., and Section 6, T. 28 N., R. 31 E.W.M. within

Grant and Okanogan Counties and intervening course of the Columbia River. This right is subject to the withdrawal notice dated **May 16, 1938**.

***Water Rights Not Subject to the 1938 Withdrawal:***

In addition to the diversionary rights from the Columbia River that are associated with the 1938 withdrawal, Reclamation holds the following water rights associated with the Columbia Basin Project.

*Reservoir Storage Rights*

Reservoir Certificate No. 11794, with a priority date of **August 12, 1970**, confirms a right to store 3,162,000 acre-feet annually in Lake Roosevelt. The authorized place of use is described as the area inundated by Franklin D. Roosevelt Lake, lying within Grant, Ferry, Lincoln, Okanogan and Stevens Counties. This authorization was intended to cover the dead storage capacity in the reservoir.

Reservoir Certificate R3-00013C, with a priority date of **April 22, 1943**, confirms a right to store 200,000 acre-feet annually during November 1 to April 15 in the Potholes Reservoir for supplemental supply (non-additive) seasonal irrigation of 234,000 acres and for municipal, industrial, recreational, and non-consumptive low head hydro-electric power generation authorized under Surface Water Certificate No. S3-01622C and Surface Water Permit No. S3-28586P. The source is described as the unappropriated waters of Moses Lake, Rocky Ford Creek, and the Crab Creek drainage in the amount of 180,000 acre-feet and 20,000 acre-feet from Lind Coulee. The authorized place of use is described as the area served by the Columbia Basin Project distribution system and associated facilities in Grant, Adams and Franklin Counties. The storage of water was described as used under Surface Water Certificate No. S3-00019C. This right was subject to the withdrawal notice dated April 22, 1943.

*Diversions and Consumptive Rights*

Surface Water Certificate No. S3-00019C with a priority date of **April 22, 1943**, confirms a right of 212 cfs, 70,000 acre-feet per year from April 15 to October 31 each year for the partial irrigation of 160,000 acres. The authorized point of diversion is from Rocky Ford Creek in Section 12, T. 17 N., R. 28 E.W.M. This authorization is expressly issued as a supplemental supply to Certificate S3-01622C (Surface Water Permit 15994), the total withdrawal under this certificate shall not exceed 70,000 acre-feet per year, less any amount in excess of 3,130,000 acre-feet per year utilized under existing rights. The diversion from the Columbia River should be proportionally reduced to correspond with the amount of water stored and diverted under Certificates S3-00019C and R3-00013C. The authorized place of use includes portions of the Columbia Basin Project in Grant, Adams, and Franklin Counties. A more detailed description of the place of use is contained within the file. This right was subject to the withdrawal notice dated April 22, 1943.

Three additional water rights were issued for Block 2 and 3 of the Columbia Basin Project and adjacent lands described as follows:

Surface Water Certificate No. 9252 with a priority date of **December 24, 1941**, confirms a right of 40 cfs, 8,850 acre-feet per year for the irrigation of 1,319 acres. The authorized point of diversion is from the Columbia River, McNary Pool being within Section 30, T. 9 N., R. 31 E.W.M. Walla Walla County. The authorized place of use is described as Irrigation Block 2 Columbia Basin Project within Sections 30 and 31, T. 9 N., R. 31 E.W.M., and Section 6, T. 8 N., R. 31 E.W.M; Section 1, T. 8 N., R. 30 E.W.M. and Section 30, T. 9 N., R. 30 E.W.M. This right was subject to the withdrawal notice dated December 24, 1941.

Surface Water Certificate No. 10703 with a priority date of **October 27, 1958** confirms a right of 80 cfs, 23,121 acre-feet per year for the irrigation of 3,303 acres. The authorized point of diversion is from the Columbia River, McNary Pool within Section 20, T. 8 N., R. 31 E.W.M. Walla Walla County. The authorized place of use is described as Irrigation Block 3 Columbia Basin Project and the  $S\frac{1}{2}S\frac{1}{2}SE\frac{1}{4}$  of Section 5,  $NE\frac{1}{4}$  of Section 8,

W½W½NW¼ of Section 9, W½ of Section 34, lying southerly of Irrigation Block 3. This right was subject to the withdrawal notice dated October 27, 1958.

Surface Water Certificate No. S3-25062 with a priority date of **October 27, 1958**, confirms a right of 8.5 cfs, 1,834 acre-feet per year for the irrigation of 350 acres. The authorized point of diversion is from the Columbia River, McNary Pool, within Section 20, T. 8 N., R. 31 E.W.M. Walla Walla County. The authorized place of use is described as portions of T. 8 N., R. 31 E.W.M. lying adjacent to Irrigation Block 3. A more specific legal description is contained within the file.

*Hydro Power – Non Consumptive Rights*

Surface Water Certificate No. S3-01606C, with a priority date of **October 16, 1969**, confirms a right of 21,700 cfs from the Columbia River for non-consumptive hydroelectric power generation. The authorized place of use and point of diversion is listed as Section 1, T. 28 N., R. 30 E.W.M. and Section 6, T. 28 N., R. 31 E.W.M. Grant and Okanogan Counties and intervening course of the Columbia River. This right was subject to the withdrawal notice dated October 16, 1969.

Surface Water Certificate No. S3-26258C, with a priority date of **October 16, 1969**, confirms a right of 184,000 cfs from the Columbia River for non-consumptive hydroelectric power generation. The authorized place of use and point of diversion is listed as the NE¼ of Section 1, T. 28 N., R. 30 E.W.M. and the NW¼ of Section 6, T. 28 N., R. 31 E.W.M. This right was subject to the withdrawal notice dated October 16, 1969.

Surface Water Certificate No. S3-26257C, with a priority date of **May 9, 1975**, confirms a right of 22,000 cfs from the Columbia River for non-consumptive hydroelectric power generation. The authorized place of use and point of diversion is listed as the NE¼ of Section 1, T. 28 N., R. 30 E.W.M. and the NW¼ of Section 6, T. 28 N., R. 31 E.W.M. This right was subject to the withdrawal notice dated May 9, 1975.

Surface Water Certificate No. S3-27615C, with a priority date of **October 14, 1969**, confirms a right of 7,400 cfs from the Columbia River for non-consumptive hydroelectric power generation. The authorized place of use and point of diversion is listed as the W½ of Section 1, T. 28 N., R. 30 E.W.M. This right authorized the diversion of waters into Banks Lake typically in December and January, to be released back into the Columbia River in February and March, depending on the weather, for power generation.

These hydropower and non-consumptive rights are summarized in Table 1-5 below.

**Table 1-5 Hydropower and non-consumptive rights NOT subject to the 1938 Withdrawal**

Certificate	CFS	Priority Date	Purpose
11543	75,000	5-16-38	Power Generation
S3-01606	21,700	10-16-69	Power Generation
S3-26258	184,000	10-16-79	Power Generation
S3-26257	22,000	5-9-75	Power Generation
<b>Sub-Total</b>	<b>302,700</b>		
S3-27615*	7,400	10-14-69	Power Generation
<b>Total</b>	<b>310,100</b>		

\*This right authorized the diversion of waters into Banks Lake typically in December and January, to be released back into the Columbia River in February and March, depending on the weather, for power generation.

**ANALYSIS FOR EVALUATION OF PERMIT APPLICATIONS UNDER RCW 90.03.290 CRITERIA**

**Beneficial Use**

Beneficial use encompasses two principal elements of a water right:

1. Beneficial use refers to the purpose for which water may be used.

2. Beneficial use determines the measure of a water right. The owner of a water right is entitled to the amount of water necessary for the purpose to which it is used.

The use of water for irrigation purposes is defined in statute as a beneficial use (RCW 90.54.020(1)).

To determine the amount of water necessary for a beneficial use, courts have developed the principle of "reasonable use". Reasonable use of water is determined by analysis of the factors of water duty and waste.

Through current CBP operations, efficiencies, recapture and reuse measures, the total water estimated to be delivered to 70,000 acres will be 216,300 acre-feet (3.09 acre-feet per acre); however only 164,000 acre-feet is requested under this secondary use permit application. The quantity and pumping rate requested by Reclamation are reasonable estimates of use in keeping with their existing use projections of delivering approximately 3 acre-feet per acre of replacement water to 70,000 acres in the Odessa Subarea.

The Washington State Irrigation Guide for Potatoes or Alfalfa grown at Othello suggests that about 1.0 to 1.1 feet of water is required in July. Assuming all 70,000 acres was in a maximum crop use with approximately 3 acre-feet per acre delivered on-farm, this equates to approximately 210,000 acre-feet of beneficial use. Reclamation is only seeking 164,000 acre-feet (out of 216,300 acre-feet) via this secondary use permit from storage to meet the on-farm demand with the difference of 52,300 acre-feet being met through current CBP operations, efficiencies, recapture and reuse measures. This water duty comports with the principle of "reasonable use."

Water use will be documented through metering and evaluated at that time that a Proof of Appropriation examination is completed prior to the issuance of a certificate. Quantification of the water right in the certificate will be based on the actual amount of water put to beneficial use.

In summary, this application meets RCW 90.03.290's requirement that the proposed use of water must be beneficial because irrigation qualifies as a beneficial use, and the quantity of water proposed to be used for irrigation is reasonable.

## Water Availability

For water to be available for appropriation, it must be both physically and legally available.

### *Legal Availability*

An initial finding of water availability was made by Ecology when it issued Reservoir Certificate No. 11793. Certificate 11793 issued with a priority date of May 16, 1938, and confirms a right to store 6,400,000 acre-feet annually for irrigation and power generation. The authorized place of use is described as "Lands within the boundaries of the Columbia Basin Project." Since Ecology issued Certificate 11793, Reclamation has stored 6,400,000 acre-feet for the purposes of the Columbia Basin Project. Water is stored each year with approximately half of this storage volume awaiting secondary use permits for out-of-stream uses associated with the reservoir. For this subject application, by releasing water consistent with the adaptive management strategy and recommendations outlined in the NOAA/NMFS Bi-Op (2013), water will be made available so that it can be used for irrigation purposes.

The listing of "irrigation and power generation" as purposes of use under Reclamation's storage right documented by Certificate No. 11793 does not impose any limitations on the purposes of use or place of use that Reclamation may seek authorization for as secondary uses after the water is removed from storage in the reservoir. Under RCW 90.03.370, Certificate No. 11793 only authorizes storage, and not secondary uses. Thus, with respect to potential secondary uses of the stored water, Reclamation is not limited to the purposes of use or places of use specified on the reservoir certificate. Therefore, water is legally available to support the use of water proposed by Reclamation in this application.

### *Physical Availability*

Reclamation is required under RCW 90.03.370 to apply to Ecology pursuant to RCW 90.03.250 thru .320 for authorization for secondary uses of the stored water, as done with this application, and can request any purpose of use or place of use. The water identified for secondary release out of Lake Roosevelt, is not secured through the development of new storage facilities, but made available under the 2004 MOU between the State, Reclamation and the CBIDs by modifying operations related to already existing storage facilities: Grand Coulee Dam and Lake Roosevelt. The subject secondary use application requests authorization to pump water from storage in Franklin D. Roosevelt Reservoir to Banks Lake, and to convey the water from Banks Lake to areas capable of being served by the Columbia Basin Project: more specifically, replacement water for Odessa Subarea groundwater users. The proposed water right is for 2,700 cfs and 164,000 acre-feet for use on 70,000 acres within the CBP and the Odessa Subarea and will be a permanent secondary use water right. It will authorize Reclamation to release water from Lake Roosevelt, which it stores under its Reservoir Certificate No. 11793C, priority date May 16, 1938.

Lake Roosevelt receives large amounts of runoff from its tributaries with enough runoff to fill the reservoir approximately seven times in an average year. The subject application proposes to release an additional 164,000 acre-feet of water from Lake Roosevelt (Columbia River) at Grand Coulee Dam to refill Banks Lake in October and if needed at a much lower rate after the irrigation season (November thru March). Reclamation would pump additional water from Lake Roosevelt using the existing Keys Pumping Plant. Keys Pumping Plant has a combined capacity of 22,000 cfs and pumps water from Lake Roosevelt into the Feeder Canal, which has a capacity of approximately 16,000 cfs and then flows into Banks Lake for later delivery to lands within the CBP.

Pumping from Lake Roosevelt to Banks Lake for existing CBP operations takes place during March thru October. Additional pumping from Lake Roosevelt to Banks Lake, under this permit, to supply water to 70,000 acres of Odessa Subarea lands within the CBP will occur primarily in October. These parameters and additional details are outlined in the NOAA/NMFS 2013 Biological Opinion (BiOp) titled *Endangered Species Act Section 7(a) Biological Opinion and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for the U.S. Bureau of Reclamation's Odessa Subarea Modified Partial Groundwater Replacement Project (NWR-2012-9371)*.<sup>11</sup> The timing constraint and rate of refilling Banks Lake is needed to avoid adverse affects to ESA listed salmon and steelhead as noted in the NOAA/NMFS BiOp (2013).

The timing and parameters of refilling Banks Lake are as follows:

- **Fall Diversion (October):** In average water years, up 2,700 cfs and 164,000 acre-feet can be pumped from Lake Roosevelt from October 1 thru October 31.
- **Winter Diversion (November thru March):** If the full 164,000 acre-feet diversion from Lake Roosevelt to refill Banks Lake is not satisfied by November 1, additional diversion of up to 21,000 acre-feet<sup>12</sup> per month could occur from November thru March if chum salmon flow targets are met below Bonneville Dam. If chum salmon flow targets are NOT met, Reclamation will limit additional diversions to 6,000 acre-feet<sup>13</sup> per month from November thru March. When diversions are proposed during this winter period under either scenario, Reclamation will coordinate with NMFS prior to any diversion during the November thru March period.
- **Spring/Summer Diversion:** NO additional diversions would occur from Lake Roosevelt to refill Banks Lake from April thru September to meet the 164,000 acre-feet of deliveries from Banks Lake to CBP lands within the Odessa Subarea.

<sup>11</sup> NOAA/NMFS Bi-Op (2013) <http://www.usbr.gov/pn/programs/esa/wash/odessa/biopodessa.pdf>.

<sup>12</sup> 21,000 acre-feet calculates to an average monthly instantaneous rate of approximately 350 cfs.

<sup>13</sup> 6,000 acre-feet calculates to an average monthly instantaneous rate of approximately 100 cfs.

### *Water Use Analysis*

As explained above, Reclamation is seeking 164,000 acre-feet (out of 216,300 acre-feet) via this secondary use permit from storage to meet the on-farm demand with the difference of 52,300 acre-feet being met through current CBP operations, efficiencies, recapture and reuse measures. The demand graph for water deliveries from Banks Lake to Odessa subarea lands within the CBP will be dependent on the delivery infrastructure available, delivery schedule, crops and lands served. The instantaneous quantity of 2,700 cfs is the peak rate needed to refill Banks Lake from Lake Roosevelt in October.

Storage water would be diverted from Lake Roosevelt between October thru March to provide water to replace up to 70,000 acres of ground water rights within the Odessa Subarea of the CBP. The water for the Odessa Subarea would be diverted to Banks Lake and transported through Reclamation's existing canal system to the Odessa Subarea. Some alteration of existing infrastructure, including East Low Canal and wasteway facilities, along with upgrading and/or the addition of new siphons will occur. Some alteration of existing infrastructure and construction of new canals and/or laterals will be required to deliver water to individual farms in the Odessa Subarea. Irrigators may also have to alter and/or construct conveyance systems on their land to deliver water from the canals to their individual farms.

Reclamation will have a future contract(s) to deliver water to water users in the Odessa Subarea who currently hold ground water permits and certificates that authorize them to withdraw ground water. In accordance with RCW 90.44.510, water right holders in a groundwater management area who receive project water will be issued a superseding permit or certificate from Ecology for their ground water right. The superseding permit or certificate will identify the ground water right as a standby/reserve water right to be used only in times when CBP water is not available. Thus the project water will only be an alternate source of supply for the ground water right holders; there will be no quantities of water added to the existing ground water rights. The water rights will thereby be exempt from relinquishment during the times that ground water is not used as the source of supply [RCW 90.14.140(2)(b)].

Reclamation will enter into a future contract(s) with East Columbia Basin Irrigation District and/or an existing irrigation district and/or a future water delivery entity, who will then likely enter into individual contracts with irrigators for water deliveries to meet irrigation needs on farm. It is not known at this time which individual irrigators will receive the water or how the water will be distributed within the Odessa Subarea. However Reclamation will determine the steps necessary for NEPA compliance on the contract(s) at the time they are issued.

In summary, this application meets the second criterion of RCW 90.03.290 that the requested water must be available for appropriation. Reclamation holds a perfected right for storage of water in Lake Roosevelt under Reservoir Certificate No. 11793 and 6,400,000 acre-feet of water has been appropriated and stored. The water requested for secondary uses in this application is available to be released from storage for secondary uses as part of the Columbia Basin Project. The analysis provided above demonstrates that the water can be released from storage by Reclamation as proposed under this secondary permit application, and that it is available for the proposed secondary uses under RCW 90.03.290.

### Impairment Considerations

Analysis of whether this application meets the requirement under RCW 90.03.290 that Reclamation's proposed use of water will not impair other existing water rights involves comparison of the current regime related to storage of water under Reservoir Certificate No. 11793 with what will occur if the proposed secondary uses are approved, and how the difference from the present status quo will affect other existing water rights. The analysis must consider impacts to existing water right holders and the State's adopted Columbia River Instream Flow Rule, WAC 173-563.

In considering impacts to existing water right holders and the instream flow rule, one must consider actual river operations, particularly in drought years when water availability issues are most acute. In the context of this application, there are four classes of water uses that must be considered:

- Water right holders with priority dates senior to May 16, 1938.
- Uninterruptible water right with priority dates junior to May 16, 1938.
- Interruptible water right with priority dates junior to May 16, 1938.
- Instream flows established in the State's June 24, 1980 Instream Flow Rule.

Numerous private water right holders on the Columbia River exist with priority dates senior to May 16, 1938. In every year (wet, average, dry, or drought), water is available to meet their uses. Under this application, diversion of water for irrigation in the Odessa Subarea will not prevent those users from exercising their full water right each year.

Native tribes assert that they have rights to Columbia River instream flows based on their treaty fishing rights, with priority dates of "time immemorial," which would be senior to May 16, 1938. However, such claimed rights have not been confirmed or quantified in any federal or state court adjudication. Notwithstanding the unconfirmed and unquantified nature of these claimed rights, protection of fish resources is ensured through the 2008 FCRPS BiOp and the State's adopted instream flow rule, which form bookends on the amount of water necessary for fish.

As stated previously, the waters involved in this secondary use application are described as a portion of the 100,000 cfs originally withdrawn for the Columbia Basin Project pursuant to RCW 90.40 in 1934 with a subsequent notice of withdrawal having been filed on May 10, 1938. Any water rights perfected for the CBP under this withdrawal, including the subject secondary use permit, would have a priority date of May 16, 1938. Numerous water right holders on the Columbia River exist with priority dates between 1938 and 1980 (the date when interruptible water rights were first issued). Therefore, according to the State's priority system, the water under this application is entitled to be fully fulfilled before rights junior to it.

There are two groups of out-of-stream water right holders on the Columbia River who do not receive a full supply some years. The first are those that are interruptible to the 1980 instream flow rule, and this has only occurred approximately once every 26 years. The second is the Quad Cities Permit (S4-30976P), which is subject to the 2008 BiOp flows. However, because these rights are junior to the priority date of this application, they are not subject to an impairment analysis.

Instream flows established under WAC 173-563 (6/24/1980) are not met approximately once every 26 years based on a flow forecast at the Dalles (60 million acre-feet). This rule is junior to the 1938 withdrawal and also not subject to an impairment analysis. Note that the flows in the 2008 Federal Columbia River Power System (FCRPS) BiOp are not a water right, but rather a public interest consideration that will be discussed in the next section. Any impacts to the 2008 FCRPS BiOp flows associated with diversions out of storage from Lake Roosevelt to refill Banks Lake were considered in the NOAA/NMFS 2013 BiOp.

In summary, this proposal meets the requirement of RCW 90.03.290 that the proposed secondary use will not impair any existing water rights because there will be no injury to existing water rights with priority dates senior to the May 16, 1938 priority date associated with this application.

### Public Interest Considerations

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Analysis of whether this application meets the requirement under RCW 90.03.290, that the proposed use of water will not be detrimental to the public welfare, involves comparison of the current regime related to storage of water under Reservoir Certificate No. 11793 with how the approval of the proposed secondary use of water would affect the range of values that are encompassed by the public interest.

Several sections of statute list the legislative policies that guide the consideration of the public interest during the allocation of water, including sections of the 1971 Water Resources Act (Chapter 90.54 RCW) and Chapter 90.90 RCW titled "Columbia River Basin Water Supply".

The public interests associated with this secondary new water right are specifically cited in several sections of RCW 90.90.

- RCW 90.90.005(1) states "The legislature finds that a key priority of water resource management in the Columbia river basin is the development of new water supplies that includes storage and conservation in order to meet the economic and community development needs of people and the instream flow needs of fish".
- RCW 90.90.005(2) directs Ecology to "aggressively pursue the development of water supplies to benefit both instream and out-of-stream uses".
- RCW 90.90.020(3)(a) instructs Ecology to focus on finding "Alternatives to groundwater for agricultural users in the Odessa subarea aquifer".

RCW 90.54, provides the most comprehensive list of legislative policies that guide the consideration of public interest in the allocation of water. These policies generally require a balancing of protection of the state's natural resources with the promotion of economic well-being. Specifically, the policies require allocation of water in a manner that preserves instream resources, protects the quality of the water, provides adequate and safe supplies of water to serve public need, and makes water available to support the economic well-being of the state and its citizens. The public interest criteria provide for the greatest level of discretion afforded to Ecology in the permit application process and invoke the general environmental and water management policies enacted by the Legislature.

Agriculture is an important and essential component of the state's economy. Many of the human modifications to the mid-Columbia drainage system were made specifically to promote agricultural and economic development of the mid-Columbia area. Washington agricultural products currently are traded worldwide. The applicant's proposed use of water for irrigation is consistent with regional and historic land use in the proposed diversion area. The need is particularly acute in the Odessa Subarea, where allocation of surface water to replace declining groundwater is necessary to prevent significant economic losses to the region's agricultural sector. As groundwater levels continue to decline, farmers would transition from higher value irrigated crops to dry land crops and/or no crops, resulting in negative impacts to farm income, employment, sales and the regional economy. Maintaining the economic viability of the region and sustaining and/or increasing the reliability of agricultural development of the mid-Columbia is consistent with existing public policy and public interest, provided that such development is not detrimental to other viable public interests.

Additionally, by removing 164,000 acre-feet of demand for groundwater from Odessa Subarea aquifer, it is hoped that the acute groundwater declines will lessen, and that the aquifer may possibly even start to recover. This may provide a more reliable source for the remaining Odessa Subarea aquifer groundwater users, which include irrigators, industry, and municipalities. Providing a more reliable supply by reducing declining groundwater levels is in the public interest.

It is not known at this time which individual irrigators will receive the water or how the water will be distributed within the Odessa Subarea. The selected alternative 4A did not propose to expand the number of irrigated acres within the Odessa Subarea. However as a result of newly constructed irrigation delivery infrastructure, some presently irrigated acres may move closer to the canal system to achieve water supply efficiencies. If this occurs, there will be no net increase in irrigated acreage in the Odessa Subarea that would result from this project. The requirement that the project will cause no net increase in the total number of

irrigated acres is a major factor to ensure that approval of this application will not be detrimental to the public interest.

Another expression of public interest can be found in public input received over a 5 year period from the public and stakeholders during the NEPA process. Reclamation published a Notice of Intent to Prepare an EIS and Conduct Public Scoping Meetings in the *Federal Register* on August 21, 2008. Two public scoping meetings were held in September 2008. Additionally, approximately 65 collaborative meetings were held with interested parties throughout the course of the Study and EIS development. Comments received after releasing the Draft EIS in 2010 led to the development of action alternatives 4A & 4B. The final EIS addressed more than 1,000 comments received from the public, various agencies, local governments, and Tribes. The Final EIS was filed on August 28, 2012 with the Environmental Protection Agency (EPA) and notice published in the *Federal Register* and released to the public on August 31, 2012.

Reclamation consulted with National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (Service) regarding ESA threatened and listed species. Any impacts to the 2008 FCRPS BiOp flows associated with diversions out of storage from Lake Roosevelt to refill Banks Lake were considered in the NOAA/NMFS 2013 BiOp. As a result of federal consultation, Reclamation concluded in the Record of Decision (ROD) for the FEIS that implementing the Preferred Alternative 4A (the modified partial replacement, Banks Lake alternative with limited spring diversion) is not likely to jeopardize any listed species or adversely modify any critical habitat. Potential effects on listed salmon and steelhead are reduced by limiting the timing of refilling of Banks Lake from Lake Roosevelt to October (and November thru March in rare circumstances). As stated above, in average water years, up 2,700 cfs and 164,000 acre-feet can be pumped from Lake Roosevelt from October 1 thru October 31. If the full 164,000 acre-feet diversion from Lake Roosevelt to refill Banks Lake is not satisfied by November 1, additional diversion of up to 21,000 acre-feet per month could occur from November thru March if chum salmon flow targets are met below Bonneville Dam. If chum salmon flow targets are NOT met, Reclamation will limit additional diversions to 6,000 acre-feet per month from November thru March.

The Odessa Groundwater Replacement project is needed to address declining groundwater levels in the Odessa Subarea and avoid economic loss to the region's agricultural sector. Many of the adverse impacts associated with implementation of the preferred alternative 4A (the modified partial replacement, Banks Lake alternative with limited spring diversion) can be minimized with a suite of environmental commitments and mitigation measures as discussed in the Final EIS, and Reclamation will continue to further explore opportunities to reduce adverse effects.

In summary the economic benefits, slowing the decline in aquifer levels, public input preserving 70,000 acres of irrigated farmland in the Columbia Basin, and reducing or avoiding adverse social consequences on rural communities in the Odessa Subarea, as detailed above, provide evidence that the benefits from the proposed secondary use of water would outweigh the negative consequences and that approval of this application will not be detrimental to the public interest.

## Other Considerations

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### *Family Farm Act*

The Family Farm Act was approved by voter Initiative Measure No. 59 on November 8, 1977, and codified in RCW 90.66. RCW 90.66.020 provides that "nothing in this chapter shall affect any right to withdraw and use public waters if such rights were in effect prior to the effective date of the act, and nothing herein shall modify the priority of any such existing right."

This application requests a secondary use right for 164,000 acre-feet for agricultural irrigation of 70,000 acres in the Odessa Subarea. However, the priority date associated with this application is May 16, 1938, consistent with Reclamation's withdrawal of water for the Columbia Basin Project. Thus, under RCW 90.66.020, the application for use of this water pre-dates the Family Farm Act and its provisions do not apply.

## Conclusions

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### *Beneficial Use*

The proposed use of irrigation is considered to be a beneficial use. Further, the quantity of water proposed to be used for irrigation is reasonable. Therefore this application meets the first criterion of RCW 90.03.290 that the water be put to beneficial use.

### *Water Availability*

The analysis provided above demonstrates that water is physically and legally available for the proposed secondary use of water.

### *Impairment*

As explained above, the proposed beneficial use of water will not impair any existing water rights.

### *Public Interest*

Also as explained above, the proposed use of water would not be detrimental to the public welfare.

## RECOMMENDATIONS

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Based on the above investigation and conclusions, I recommend that this request for a water right be approved and a permit be issued in the amounts and within the limitations listed below and subject to the provisions listed above.

### Purpose of Use and Authorized Quantities

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The amount of water recommended is a maximum limit and the water user may only use that amount of water within the specified limit that is reasonable and beneficial:

#### *Quantities*

2,700 cfs  
164,000 acre-feet per year

#### *Purpose of Use*

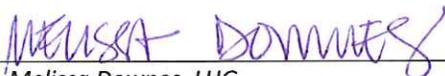
Irrigation

#### *Points of Withdrawal*

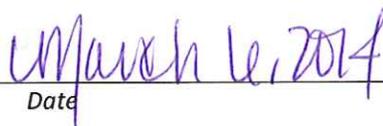
Grand Coulee Dam, Government Lots 3 & 4, SW ¼ of Section 1, T. 28 N., R. 30 E.W.M.

#### *Place of Use*

70,000 acres capable of being served by the Columbia Basin Project distribution system and associated facilities within Adams, Franklin, Grant and Lincoln Counties AND within the boundaries of the Odessa Groundwater Subarea defined under WAC 173-128A (see Figure 1).



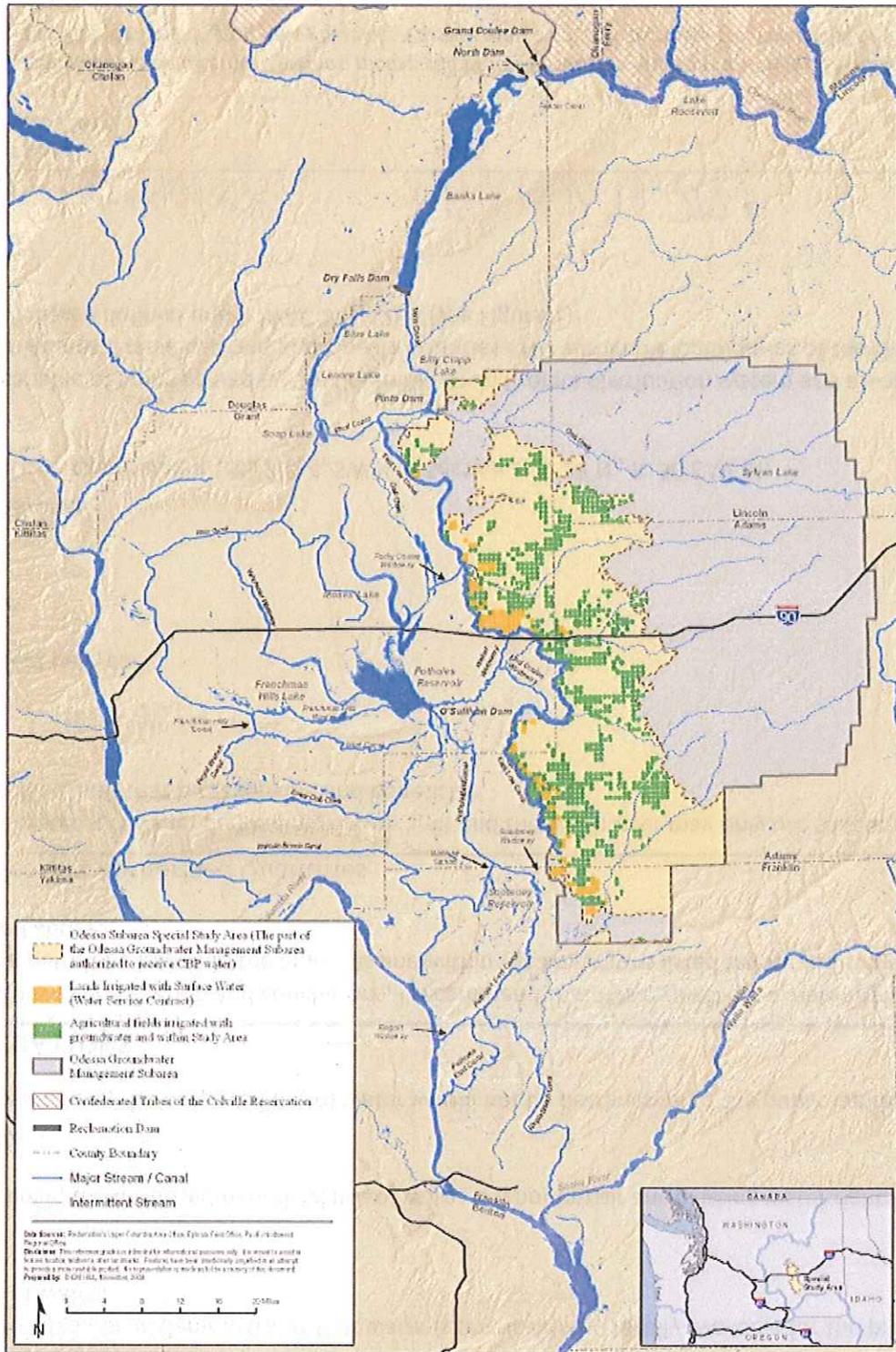
Melissa Downes, LHG  
Office of Columbia River



Date

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Figure 1 – US Bureau of Reclamation Map<sup>14</sup>; Odessa Subarea Special Study Area, Columbia Basin, Washington



<sup>14</sup> Odessa Subarea Special Study Final EIS; Figure 2 Location Map – August 2012