STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
IRRIGATION EFFICIENCIES PROGRAM
TRUST WATER RIGHT
REPORT OF EXAMINATION
Change of Point of Diversion, Purpose and Place of Use

PRIORITY DATE	CLAIM NO.	PERMIT NO.	CERTIFICATE NO.
1892 (Class 30)			Walla Walla River Adjudicated Certificate No. 429

Agency:
Department of Ecology
Eastern Regional Office
4601 North Monroe
Spokane, WA 99205-1295

Applicants:
Helen Self
157 Marshall Street
Touchet, WA 99360

NAMES OF PARTIES CONVEYING RIGHT TO TRUST WATER RIGHTS PROGRAM
Helen Self

TRUST WATER RIGHT ATTRIBUTES

SOURCE
Walla Walla River

TRIBUTARY OF (IF SURFACE WATERS)
Columbia River

MAXIMUM CUBIC FEET PER SECOND (cfs)	MAXIMUM GALLONS PER MINUTE	MAXIMUM ACRE FEET PER YEAR
0.001		0.58

QUANTITY, TYPE OF USE, PERIOD OF USE

0.001 cfs April 1 – July 1; 0.001 cfs July 1 – October 1; 0.001 cfs October 1 – April 1 and 0.58 acre-feet annually for the purpose of instream flows within the Walla Walla River, permanently

PLACE OF USE and AFFECTED REACHES
[See Attachment for map of the trust water right location.]

LOCATION OF HISTORIC DIVERSION
Primary Reach
Beginning:
Old Lowden Ditch Diversion
Approximately River Mile 29.2
GPS location in Decimal Degree: Latitude 46.04833°, Longitude -118.5572° (Datum WGS 84)
Parcel No. 340733510018

LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION)	SECTION	TOWNSHIP	RANGE [E. or W.] W.M.	WRIA	COUNTY
NE¼NE¼	33	7 N.	34 E.	32	Walla Walla

Ending:
Approximately River Mile 22.5 at the Touchet-Gardena Road Bridge

PROJECT SUMMARY

The Bergevin-Williams/Old Lowden (BWOL) ditch diversion consolidation and piping project is located on the Walla Walla River about half-way between the City of Walla Walla and the Town of Touchet. The purpose of the project is to consolidate two existing points of diversion for irrigators on the Bergevin-Williams and Old Lowden irrigation ditch systems into one point of diversion, and to replace the two existing open ditch systems with buried pipelines that will deliver water to 30 individual irrigators.

The new BWOL diversion structure will be located on the south side of the Walla Walla River at river mile 30.9, adjacent to the existing diversion structure for the Lowden 2/Garden City irrigation ditch systems, which consists of an inflatable diversion dam, a fish ladder, and a fish screen with an air blast debris removal system. River water will be diverted into a pipeline and pumped to the north side of the river for delivery to individual BWOL irrigators.

There are a total of 20 water rights on the Old Lowden ditch and 10 water rights on the Bergevin-Williams ditch. There will be a total of 17 outlets (including eight (8) flood irrigation outlets) and 15 pump stations for the Old Lowden irrigators and 10 outlets (including one (1) flood irrigation outlet) and 13 pump stations for the Bergevin-Williams irrigators that will be updated and modified through this project. Pumping stations throughout the system will be constructed and modified to the pipeline. Individual measuring devices will meter the quantity of water discharged to each of the existing on-farm distribution systems.

Non-consumptive conveyance water previously required for the two open ditch systems will no longer be required for the new on-demand pipeline system. The former conveyance water will be left in the Walla Walla River and will be permanently placed in the Washington State Trust Water Rights Program to augment instream flows in the Walla Walla River. The total instantaneous quantity of water put into trust for all 20 water rights on the Old Lowden ditch system will be 2.25 cfs during April 1 – July 1, 1.943 cfs during July 1 – October 1, and 2.25 cfs during October 1 – April 1. The total annual quantity of water put into trust for all 20 Old Lowden water rights will be 1,012.28 acre-feet per year.

TRUST WATER RIGHT TERM

BEGIN DATE	END DATE
May 16, 2012	Permanent

PORTION OF WATER RIGHT NOT PLACED INTO TRUST

PRIORITY DATE	CLAIM NO.	PERMIT NO.	CERTIFICATE NO.
1892 (Class 30)			Walla Walla River Adjudicated Certificate No. 429

NAME		
Helen Self		
ADDRESS/STREET	CITY/STATE	ZIP CODE
157 Marshall St	Touchet, WA	99360

WATER RIGHT ATTRIBUTES

SOURCE
Walla Walla River

TRIBUTARY OF (IF SURFACE WATERS)
Columbia River

MAXIMUM CUBIC FEET PER SECOND	MAXIMUM GALLONS PER MINUTE	MAXIMUM ACRE FEET PER YEAR
0.011		1.97

QUANTITY, TYPE OF USE, PERIOD OF USE

0.007 cfs April 1 – July 1; 0.005 cfs July 1 – October 1; 0.011 cfs October 1 – April 1 and 1.97 acre-feet per year for the irrigation of 0.51 acres

LOCATION OF DIVERSION

SE¼NW¼ of Sec. 35, T. 7 N., R. 34 E.W.M.
Approximately River Mile 30.9
GPS: Latitude 46.04303°, Longitude -118.52535° (Datum WGS 84)

LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION)	SECTION	TOWNSHIP	RANGE [E. or W.] W.M.	WRIA	COUNTY
SE¼NW¼	35	7 N.	34 E.	32	Walla Walla

PARCEL NUMBER
340735220002

RECORDED PLATTED PROPERTY

LOT	BLOCK	OF (GIVE NAME OF PLAT OR ADDITION)
10	2	Town of Lowden

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS USED

[See Attachment for map of the place of use and point of diversion.]

Lot 10, Block 2 of the Town of Lowden, according to the official plat on file in the office of the auditor of Walla Walla County. Also, commencing 60 feet north from the northeast corner of Block 2 in the said Town of Lowden and running thence north 150 feet, thence at right angles west 180 feet, thence south 150 feet, thence east 180 feet to the place of beginning; all within the SE¼NW¼ of Section 29, T. 7 N., R. 34 E.W.M.

DESCRIPTION OF WATER SYSTEM

A new diversion point structure and pipeline will be installed to replace the existing open ditch system. It will serve 20 Old Lowden Ditch water users. There is one turnout from the mainline for this water right.

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE	COMPLETE PROJECT BY THIS DATE	WATER PUT TO FULL USE BY THIS DATE
September 1, 2012	September 1, 2014	September 1, 2016

PROVISIONS

TRUST WATER RIGHT provisions:

INSTREAM FLOW
Consistent with 90.42.080(1)(a), this trust water right shall be managed by Ecology as an instream flow right for the Walla Walla River, as described in this trust water report.

Provisions related to PORTION OF WATER RIGHT NOT PLACED INTO TRUST:

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

WATER AVAILABILITY
Water is limited to the authorized quantities of the water right less the amounts placed into the trust program.

METER INSTALLATION
An approved measuring device shall be installed and maintained at the turnout point from the pipeline from the source authorized by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", chapter 173-173 WAC. http://www.ecy.wa.gov/programs/wr/measuring/measuringhome.html Ecology will also require metering at the point of diversion from the Walla Walla River, but it will be the responsibility of the system operator, not individual water right holders, to perform the required metering at the POD and to submit metering data for the diversion. An administrative order will be issued to compel the operator to conduct the POD metering.

RECORD WEEKLY, REPORT ANNUAL TOTALS
Water use data shall be recorded weekly for the total diversion at the headworks of the pipeline and monthly for this individual water right. The maximum rate of diversion/withdrawal and the annual total volume shall be submitted to Ecology by January 31st of each calendar year.

AUTHORITY TO ACCESS DATA AND MEASURING DEVICE
Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the records of water use that are kept to meet the above provisions, and to inspect at reasonable times any measuring device used to meet the above provisions.

AUTHORITY TO ACCESS PROJECT
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 wells or diversions and associated distribution systems for compliance with water law.

CONSERVATION
Use of water under this authorization shall be contingent upon the water right holder's maintenance of efficient water delivery systems and use of up-to-date water conservation practices consistent with established regulation requirements and facility capabilities.

FINDINGS OF FACT AND ORDER

Upon reviewing the investigator's report, I find all facts relevant and material to the subject application have been thoroughly investigated. Furthermore, I find the change of water right as recommended will not be detrimental to existing rights or detrimental to the public interest.

Therefore, I ORDER the requested change of point of diversion, change of place and purpose of use for a portion of Walla Walla Adjudicated Surface Water Certificate No. 429 under Trust Water Application No. CS3-*28429J be approved, 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 Hearing Board (PCHB) within 30 days of the date of receipt of this document. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "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 this document:

- 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.) Email 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
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503 Pollution Control Hearings Board 1111 Israel Road SW Suite 301 Tumwater, WA 98501	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608 Pollution Control Hearings Board 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 Spokane, Washington, this 16th day of May, 2012.

Keith L. Stoffel, Section Manager
Water Resources Program
Eastern Regional Office

BACKGROUND

Application: A Trust Water Application for Walla Walla Adjudicated Surface Water Certificate No. 429 (WWRAC No. 429) was submitted by Rick Jones of the Walla Walla County Conservation District (WWCCD) on behalf of water right holder Helen Self to the Department of Ecology on October 30, 2009 as Draft and on August 25, 2010 as Final. The application number was assigned as CS3-*28429J in the Water Right Tracking System. The applicants propose to permanently place a portion of the water right into the state's Trust Water Rights Program (TWRP) for the purpose of instream flow to be used exclusively for instream flows within the Walla Walla River and to change the point of diversion (POD) upstream to a consolidated point for five (5) ditch systems: Bergevin-Williams, Old Lowden, Garden City, Lowden No. 2 and Mud Creek No. 7.

Water right change applications may be processed prior to applications submitted at an earlier date when the proposed water use, if approved, would substantially enhance or protect the quality of the natural environment (WAC 173-152-050(3)(a)). This application has been determined to meet WAC 173-152-050(3)(a) criteria and has therefore been afforded priority processing.

Description and Purpose of Proposed Changes for the Irrigation Efficiencies Project

This irrigation efficiencies project proposal, referred to as the Bergevin-Williams/Old Lowden project (BWOL), has been a cooperative effort between the WWCCD, Confederated Tribes of the Umatilla Indian Reservation (CTUIR), Bonneville Power Administration (BPA), Washington Department of Ecology (ECY), Washington Department of Fish and Wildlife (WDFW), National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service (USFWS) and the local irrigators served by Old Lowden and Bergevin-Williams Ditches. The Old Lowden Ditch serves multiple landowners that are covered by 20 water rights. The Bergevin-Williams Ditch serves multiple landowners that are covered by 10 water rights. Funding for the project has been approved from BPA and ECY and administered by the WWCCD.

The project area is located on a two and one-half (2.5) mile reach of the Walla Walla River approximately three (3) miles southeast of Lowden, Washington.

The purpose of the BWOL project is to consolidate two (2) existing points of diversion for irrigators on the Bergevin-Williams and Old Lowden ditch systems into one (1) point of diversion, and to replace the two (2) existing open ditch systems with buried pipelines. The new consolidated BWOL diversion structure will be located on the south bank of the Walla Walla River at river mile 30.9, adjacent to the existing diversion structure for the Lowden2/Garden City (L2GC) irrigation ditch systems. This new point of diversion will be 1.7 miles upstream of the existing Old Lowden ditch point of diversion and 0.6 miles downstream of the existing Bergevin-Williams ditch point of diversion. The BWOL diversion will utilize the existing bladder dam and fish passage structure of the L2GC structure. A new fish screen will be constructed for the BWOL diversion, which will meet state and federal fish screening criteria. Water diverted into the new BWOL structure on the south bank of the Walla Walla River will be directed into a new pipeline that will run under the river to the north bank and beyond. The pipeline will replace the existing Bergevin-Williams and Old Lowden ditch systems. Water will be discharged from the pipeline at numerous turnouts for individual irrigators. A flow measuring device will be installed at the headworks of the BWOL diversion structure on the Walla Walla River, as well as at each irrigator's turnout.

Non-consumptive conveyance water previously required for the two (2) open ditch systems will no longer be required for the new on-demand pipeline. One hundred percent (100%) of the conveyance water savings will be placed into trust in perpetuity to increase flows and habitat restoration within the Walla Walla River, identified as a priority stream for instream flow restoration. Trust water will benefit Mid-Columbia Steelhead and Bull Trout, species currently listed as "threatened" under the ESA. Potential short-term impacts during the construction phase of the project include water quality issues of sedimentation and turbidity as well as affected habitat availability. To limit fish impacts, the time-frame of construction will be during periods of lower stream flows when fish are not migrating.

For further information see the Biological Assessment, August 2008 located in project file at Eastern Regional Office, ECY.

After the Old Lowden ditch is piped, there will be an instantaneous quantity savings from all 20 Old Lowden water rights combined of 2.25 cfs during October 1 – July 1 and 1.943 cfs during July 1 – October 1. The cfs savings is the difference between the historical amount diverted and the new system requirements. The cfs savings for each water right is calculated proportionately for each water right that will continue to be authorized for irrigation. *See spreadsheet of calculations located in the project file at Eastern Regional Office, ECY.*

The acre-feet savings for the piping project is the quantity of conveyance water that was historically lost to the ditch system. Because water rights along the ditch were not issued according to actual conveyance loss that occurs from the POD to each individual water right turnout, the amount of water available to place into trust is less than what has historically been lost to the system and not accounted for. The conveyance loss that can be calculated for the 20 Old Lowden Ditch water rights for the piping project is 1,012.28 acre-feet per year. The quantity available

to place into trust from each of the 20 individual water rights varies. It is calculated by deducting the quantity of water beneficially used in the past from the total authorized annual quantity per acre for each right. *See spreadsheet of calculations located in the project file at Eastern Regional Office, ECY.*

Attributes of the Certificate and Proposed Changes for the Irrigation Efficiencies Project

The following table summarizes the attributes of WWRAC No. 429 and the proposed quantities to place into the Trust Water Right Program. The application reflects annual quantities of 1.97 acre-feet for irrigation and 0.657 acre-feet into trust based on an initial evaluation of beneficial use. Through a more thorough analysis of the water right and ditch system dynamics the findings for beneficial use changed to 0.58 acre-feet available for trust. *See History of Water Use section in this report.* The quantity change was not transferred to the final application from the draft application by error and by further water right investigation findings. This change is however reflected in this Report of Examination.

Table 1 Summary of Attributes and Proposed Changes to WWRAC No. 429

	Existing Attributes of Certificate	**Proposed Changes for Trust**	**Proposed Changes for Irrigation**
Name	George Hailston	WWCCD on behalf of Helen Self	
Priority Date | Date of Final Application for Trust	1892 Class 30	August 25, 2010	
Instantaneous Quantity (Qi)	0.008 cfs 4/1 – 7/1 0.006 cfs 7/1 – 10/1 0.012 cfs 10/1 – 4/ 1	0.001 cfs 4/1 – 7/1 0.001 cfs 7/1 – 10/1 0.001 cfs 10/1 – 4/ 1	0.007 cfs 4/1 – 7/1 0.005 cfs 7/1 – 10/1 0.011 cfs 10/1 – 4/ 1
Annual Quantity (Qa)	5 acre-feet/acre	0.58 acre-feet	1.97 acre-feet
Period of Use	Year Round	Year Round	
Source	Walla Walla River	Walla Walla River	
Point of Diversion	NE¼NE¼ of Section 33, T. 7 N., R. 34 E.W.M.	N/A	SE¼NW¼ of Section 35, T. 7 N., R. 34 E.W.M.
Purpose of Use	Irrigation of 0.61 acres	Instream Flow	Irrigation of 0.51 acres
Place of Use	*See Certificate for legal description*	Approximately 6.7 mile primary reach extending from the existing POD on the Walla Walla River to River Mile 22.5 within Section 3, T. 6 N., R. 33 E.W.M.	*No change requested*

Statement of Authorities

Trust water rights are governed state-wide by Chapter 90.42 RCW. The statute[1] limits the portion of a water right eligible for transfer to the TWRP to the extent the water right was exercised in the five years prior to submittal of the trust application. A water right accepted into the TWRP may not be enlarged. When a portion of a water right is accepted in the TWRP, the portion remaining with the landowner and the portion in trust combined may not exceed the greatest amount exercised within the last five years before application. Any trust water right found to impair an existing water right will be modified to prohibit impairment.

Department of Fish and Wildlife and National Marines Fisheries Service Project Evaluation

The following is a list of the required documents completed for the project:

- A Joint Aquatic Resources Permit Application (JARPA) was submitted to the Corps of Engineers by the WWCCD and a copy was provided to Ecology on April 5, 2011.

[1] RCW 90.42.080(4) and 90.42.080(8)

- A Hydraulic Project Approval (HPA) was issued on June 3, 2009 by WDFW with provisions for instream work and pump diversion screening requirements.

- A Biological Assessment (BA) was prepared in August 2008 by WDFW, which describes the project, watershed, environment, fish species, potential effects, conservation measures and determination of effect to species.

- Two Biological Opinions (BIOP) were completed by NMFS and USFWS. The following are excerpts from each report:

  A BIOP was issued on November 12, 2009 by NMFS. It describes the effect on the environmental baseline and cumulative effects in the area of the proposed project on the Middle Columbia River (MCR) steelhead. The BIOP describes mitigation required to avoid impact to out-migrating juvenile MCR steelhead. The BIOP states that "While there will be a short-term, seasonal reduction in water quantity over a 1.7 mile reach, the long-term gains when all the associated ditch piping is completed will address one of the limiting factors outlined in the Recovery Plan and provide a significant benefit to the MCR steelhead population." A conclusion of the BIOP is that the "proposed action will result in short-term degradation of benthic prey by disturbing the substrate, water quality because of an increase in turbidity during in-water construction, and the water quantity during the time it takes to complete ditch piping. The proposed action will improve migratory passage conditions by eliminating two obstructions and resulting in a net increase in instream flows through the action area". The terms and conditions to be exempt from the prohibitions of section 9 of the ESA in an effort to minimize incidental take of bull trout are outlined in a list of Reasonable and Prudent Measures (RPMs).

  A BIOP was issued on May 14, 2010 by USFWS. It summarizes the effects of the project on bull trout in accordance with the ESA and concluded that the project "is not likely to jeopardize the continued existence of the bull trout in its coterminous range." The terms and conditions to be exempt from the prohibitions of section 9 of the ESA in an effort to minimize incidental take of bull trout are outlined in a list of RPMs.

Legal Requirements for Proposed Change for the Irrigation Efficiencies Project

The following is a list of requirements that must be met prior to authorizing the proposed change in purpose of use and point of diversion:

- **Public Notice**

  RCW 90.42.040(5) 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. A notice of application was duly published in the Walla Walla Union-Daily Bulletin on December 5th and 12th, 2010. No protests or objections were received.

- **Water Resources Statutes and Case Law**

  Tentative Determination/Extent and Validity

  Ecology cannot adjudicate a claim to a water right; only the Superior Courts have this authority. However, the Washington Supreme Court has held that Ecology, when processing an application for change to a water right, is required to make a tentative determination of extent and validity of the claim or right. This is necessary to establish whether the claim or right is eligible for change. *R.D. Merrill v. PCHB* and *Okanogan Wilderness League v. Town of Twisp.*

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

  A water right application is subject to a SEPA threshold determination (i.e., an evaluation whether or not there is likely to be significant adverse environmental impacts) if any one of the following conditions is met:

  (a) It is a surface water right application for more than one (1) cubic foot per second, unless that project is for agricultural irrigation, in which case the threshold is increased to 50 cubic feet per second, so long as that irrigation project will not receive public subsidies;
  (b) It is a groundwater right application for more than 2,250 gallons per minute;
  (c) It is an application that, in combination with other water right applications for the same project, collectively exceed the amounts above;
  (d) It is a part of a larger proposal that is subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA);
  (e) It is part of a series of exempt actions that, together, trigger the need to do a threshold determination, as defined under WAC 197-11-305.

This application is not exempt from the requirements of SEPA, because the cumulative quantity of water required for the BWOL consolidation and piping project under all water rights constitute a diversion of more than one (1) cubic foot per second.

On March 2, 2012, the Walla Walla County Conservation District submitted a SEPA Environmental Checklist for the proposed BWOL project. The SEPA checklist cited numerous studies previously completed that are relevant to the proposed project, including a programmatic environmental impact statement (EIS) completed by the Bonneville Power Administration (BPA) in February 2007 and a National Environmental Policy Act (NEPA) threshold determination made in December 2009.

The EIS and NEPA determination analyzed projects in the Walla Walla basin that had the potential to affect flows and fish passage on the Walla Walla River and its tributaries. However, those documents did not specifically address impacts the proposed BWOL project would have on flows of the Walla Walla River.

The EIS and NEPA documents were adopted to meet some of the SEPA requirements for the proposed BWOL consolidation and piping project. Additional environmental analyses were completed to meet remaining SEPA requirements.

The SEPA checklist and supporting data submitted for the BWOL project document that flows in a reach of the Walla Walla River will be reduced by approximately 4.54 cfs as a result of moving the point of diversion for 20 Old Lowden ditch irrigators to a new diversion structure 1.7 miles upstream. Without mitigation, the decreased flows in that reach of the Walla Walla River will negatively impact mid-Columbia steelhead and bull trout, both of which are listed as "threatened" under the federal ESA. According to the National Oceanic and Atmospheric Administration (NOAA) Fisheries Biological Opinion prepared for the BWOL project in November 2009, the period of greatest concern is the spring migration period of these two species, which occurs during the months of March, April, and May.

On April 2, 2012, the Department of Ecology, acting as lead agency, issued a SEPA Mitigated Determination of Nonsignificance (MDNS) for the BWOL consolidation project. Ecology determined that the proposed project will not have a probable significant adverse impact on the environment if a mitigation plan proposed by the project proponent is implemented. That mitigation plan requires the existing points of diversion for five (5) water rights to be moved downstream from March 1 through May 31 each year, to offset the potential 4.54 cfs flow reduction in the 1.7 mile reach of the Walla Walla River during those months. Implementation of the mitigation plan will provide full instream flow mitigation during the months when outmigration of juvenile steelhead and bull trout occurs. The mitigation plan will be in perpetuity or until such time as other mitigation water is available to offset the flow reduction.

The mitigation plan for the BWOL project also addresses the potential for negative impacts to fish as a result of project construction activities that will temporarily increase sedimentation and turbidity in the river and could strand fish.

All SEPA-related documents are located in the BWOL project file at Ecology's Eastern Regional Office.

- **Overriding Consideration of Public Interest (OCPI)**

BWOL project proponents do not propose mitigation for the 4.54 cfs flow reduction in the 1.7 mile reach of the Walla Walla River that will occur June through February each year as a result of construction of the BWOL consolidation and piping project, because fish activity within the affected reach of the Walla Walla River is significantly suppressed as a result of water temperatures well above those suitable for rearing juvenile steelhead and bull trout.

The decreased flow will be a violation of Chapter 173-532 WAC, Water Resources Program for the Walla Walla River Basin, because all rivers and streams in the basin are seasonally closed to further consumptive appropriation (WAC 173-532-040[1]). The 1.7 mile upstream move of the OL point of diversion will essentially result in a new consumptive appropriation for that reach of the Walla Walla River, and will therefore violate the rule.

The WWCCD has requested Ecology to issue an Overriding Consideration of Public Interest decision for the months of the year that the Walla Walla instream flow rule is violated and no mitigation plan is in place. In accordance with RCW 90.54.020(3)(a), the WWCCD submitted an "OCPI Analysis" to support their request, which weighs public benefits against public costs for the proposed BWOL project.

In making a statutory determination of overriding consideration of public interest under RCW 90.54.020(2)(a), the OCPI analysis must include sufficient information to:

a) Determine whether and to what extent important public interests would be served by the proposed appropriation. The public interests served may include benefits to the community at large as well as benefits to the river or other environmental resources.
b) Determine whether and to what extent the proposed appropriation would harm any of the public interests (fish, wildlife, scenic, aesthetic, and other environmental and navigational values) protected by the closure and/or any other public interests.
c) Determine whether the public interests served clearly override any harm.

The following is a cost-benefit analysis of the proposed BWOL consolidation and piping project:

- Benefits
  Permanent removal of the BW and OL diversion structures (gravel push-up berms) will improve fish passage by eliminating physical barriers that currently impede passage of mid-Columbia steelhead and bull trout, both of which are listed as "threatened" under the federal Endangered Species Act.

  Consolidation of the existing BW and OL diversion structures will eliminate antiquated, poorly functional fish screens and replace them with a modern fish screen that meets NMFS regulatory standards and will prevent juvenile fish entrainment and impingement.

  Permanent removal of the BW and OL gravel berms will eliminate the need for heavy equipment work in the river each year to construct and maintain them, thereby eliminating annual temporary destruction of fish habitat. Natural channel forming processes will be restored and water quality will be improved by reducing turbidity and sedimentation.

  Consolidation of the diversion structures will result in a net increase in flows of the Walla Walla River below the current OL diversion structure at RM 29.2 by at least 4.46 cfs (on paper). In all probability, the actual flow increase will be even greater than the paper savings, because the BWOL irrigation system will be converted from continuously free-flowing open-ditches to an on-demand piping system that eliminates ditch conveyance losses and evaporation.

  Consolidation of the diversion structures will result in a permanent increase in instream flows between RM 31.5 and RM 30.9 by as much as 8.85 cfs (on paper), as a result of moving the existing BW point of diversion downstream 0.6 miles.

  Consolidation of the diversion structures and installation of a new pipeline will be accompanied by installation of a modern flow measurement device that will accurately measure instantaneous and annual quantities of water diverted from the river for beneficial use.

- Costs
  Moving the existing OL point of diversion to a point adjacent to the existing L2GC diversion structure will be a 1.7 mile upstream move, which will result in decreased flows in the Walla Walla River from RM 30.9 to RM 29.2 by as much as 4.54 cfs.

  Disturbances of the Walla Walla River channel during construction activities for the proposed BWOL project will result in temporary impediments to fish passage, temporary increase in sedimentation and turbidity, and injury and possibly death to some fish.

Ecology has received letters of support for the proposed BWOL project from the following parties:

- Confederated Tribes of the Umatilla Indian Reservation
- U.S. Fish and Wildlife Service
- Washington Department of Fish and Wildlife
- National Marine Fisheries Service
- Walla Walla Watershed Management Partnership

Each of these parties state they are aware that the BWOL project will result in violation of the Walla Walla River Basin rule (Chapter 173-532 WAC) from June through February each year. However, each party believes the benefits of improved fish passage during critical migration periods outweigh the unmitigated reduction of flows in the 1.7 mile reach of the Walla Walla River between the old and new points of diversion for the Old Lowden ditch irrigators. They believe the BWOL project is just one element in the overall collaborative and comprehensive basin efforts to re-establish conditions necessary to restore and sustain viable native fish populations in the Walla Walla River basin.

The Department of Ecology believes the OCPI analysis submitted by the WWCCD and supported by a number of interested parties, demonstrates that public benefits for the proposed project outweigh public costs. Because all criteria have been satisfied, Ecology has issued an OCPI determination for the BWOL consolidation and piping project.

See copies of documents listed above located in the project file at Eastern Regional Office, ECY.

INVESTIGATION

In considering this application, the investigation included, but was not limited to, research and/or review of:

- The State Water Code, administrative rules, and policies
- Other recorded water rights in the vicinity
- Correspondence and conversations with Rick Jones and Kay Mead of the WWCCD
- Correspondence and conversations with Jack Myrick of the Washington Conservation Commission
- A site visit conducted on March 12, 2010 by ECY staff Laurie Dahmen with Kay Mead and Jack Myrick
- Correspondence with Ecology staff
- Correspondence with Paul LaRiviere, David Karl and Mark Grandstaff of WDFW
- Correspondence with Bill Neve of Water Right Solutions, a private consulting firm
- Topographic and local area maps
- Aerial photographs of the site

History of Water Use

An extent and validity determination of individual water right certificates and water savings on Old Lowden ditch, including aerial photograph review and project review, were made by Jack Myrick and Kay Mead and verified by Ecology permit manager, Laurie Dahmen. The instantaneous quantity is based on pump curves and irrigation system evaluation. The annual quantity is based on irrigation system, owner/operator interviews and the Washington Irrigation Guide (WIG) for the gross irrigation requirements (GIR) for 0.51 acre of turf at a 75% system efficiency.

WWRAC No. 429 is tentatively determined valid to the extent of 0.008 cfs April 1 - July 1, 0.006 cfs July 1 - October 1, 0.012 cfs October 1 - April 1 and 1.97 acre-feet annually for the irrigation of 0.51 acres. The remaining 0.1 acre authorized in this water right along with the associated 0.5 acre-foot (0.1 acre X 5.0 acre-feet per acre) has not been historically irrigated, and therefore is tentatively determined to be relinquished. The total historical beneficial use for conveyance and on-farm consumptive and non-consumptive irrigation uses is 2.55 acre-feet (0.51 acre X 5.0 acre-feet per acre). The 1.97 acre-feet is for on-farm irrigation uses and the remaining 0.58 acre-foot is considered conveyance loss and available for trust. *See Trust Water Right Calculations section below.*

The following table describes the 20 water rights that divert water from the Old Lowden ditch in this project. This table only describes the paper water right and does not reflect the validity and extent findings or the amount placed into trust. For a complete breakdown of each water right see Excel spreadsheets in project file.

Table 2 Summary of Attributes for Old Lowden ditch irrigators

Water Right	Priority Date/Class	Name	Qi (cfs) 4/1-7/1	Qi (cfs) 7/1-10/1	Qi (cfs) 10/1-4/1	Qa (acre-feet)	Acres of Irrigation
WWRAC No. 89	1870/10	A. Dennis	0.013	0.01	0.02	5	1
WWRAC No. 90	1870/10	E. Loos	0.093	0.07	0.14	35	7
WWRAC No. 91	1870/10	School District No. 41	0.027	0.02	0.04	10	2
WWRAC No. 92	1870/10	Lowden Co.	0.133	0.1	0.2	50	10
WWRAC No. 93 w/Change No. 252, 253, & 413*	1870/10	M. Lowden	0.918	0.69	1.38	345	69
WWRAC No. 412	1892/30	A. D. Ackley	0.933	0.7	1.4	350	70
WWRAC No. 413	1892/30	M. H. Patton	0.2	0.15	0.3	75	15
WWRAC No. 414	1892/30	G. Rader	2	1.5	3	750	150
WWRAC No. 415	1892/30	R. S. Edwards	1.013	0.76	1.52	380	76
WWRAC No. 416	1892/30	F. M. Lowden, Jr.	2.133	1.6	3.2	800	160
WWRAC No. 428	1892/30	J. M. Short	0.02	0.015	0.03	7.5	1.5
WWRAC No. 429	1892/30	G. Hailston	0.008	0.006	0.012	3.05	0.61
Water Right	Priority Date/Class	Name	Qi (cfs) 4/1-7/1	Qi (cfs) 7/1-10/1	Qi (cfs) 10/1-4/1	Qa (acre-feet)	Acres of Irrigation
WWRAC No. 858	1926/64	M. Lowden	1.333	1	2	500	100
SWC** No. 1837 w/Change No. 207, 254 & 381	1941	J. P. Dodd	0.666	0.5	1	*Not given*	50
SWC No. 1877	1941	E. L. Colley	0.666	0.5	1	*Not given*	50
SWC No. 2039	1941	O. Bishop	0.213	0.16	0.32	*Not given*	32
SWC No. 5198	1952	R. & J. Tailor	0.89	0	1.34	*Not given*	67
SWC No. 6977	1956	E. L. Colley	0.733	0	1.1	220	55

w/Change No. 565							
SWC No. 7238	1952	F. M. Lowden, Jr.	1.33	0	2	*Not given*	100
SWC No. 7421	1958	W. C. Estes	0.3	0	0.39	78	19.5

*This is the portion of the water right in the project. The remaining quantity is a proportional share appurtenant to 21 acres not part of this irrigation efficiencies project. Two (2) points of diversion were added and that portion of land changed to a new POU under Certificate of Change No.'s Vol. 1-3, page 413.

**Surface Water Certificate (SWC)

The historic diversion rate for Old Lowden irrigators at the current ditch diversion point was 9.0 cfs from October 1 to July 1, and 7.781 cfs from July 1 to October 1. The historic diversion rate is the maximum rate of diversion from the Walla Walla River into the Old Lowden ditch. It is not the cumulative instantaneous quantities of all Old Lowden ditch irrigators. The cumulative instantaneous quantities are greater than the historic diversion rate because the water rights are not all exercised at the same time. The total authorized instantaneous quantities are 13.625 cfs for April 1 to July 1, 7.781 cfs for July 1 to October 1, 20.392 cfs for October 1 to April 1.

The instantaneous quantity for each individual Old Lowden water right was determined by evaluating the historic beneficial use of the water. It was determined that all water users exercised their instantaneous quantities to the full extent.

The total annual quantity of water authorized (on paper) for all Old Lowden water rights was 5,103.55 acre-feet per year, for the irrigation of 1,035.61 acres. The annual quantity of water actually put to beneficial use by each Old Lowden irrigator is determined by using water duty values given in the Washington Irrigation Guide (WIG) and applying them to the acres historically irrigated by each water user.

Proposed Use

The purpose of instream flow is to enhance instream flows for fish maintenance and habitat enhancement within the Walla Walla River.

Other Rights Appurtenant to the Place of Use

A review of Ecology records was conducted for existing surface water rights on Old Lowden ditch. In order to evaluate the pending trust water applications, it is necessary to review all water rights appurtenant to the POU described under WWRAC No. 429.

WWRAC No. 429 place of use (POU) is within the SE¼NW¼ of Section 29, T. 7 N., R. 34 E.W.M. within Water Resource Inventory Area (WRIA) 32 (specifically described on page 2 legal description of this report).

There are 23 water rights that are located along the Old Lowden Ditch. Three (3) of those water rights are not included in the project and are described as authorized on the certificate below.

Table 3 Summary of water rights not included in the irrigation efficiencies project

Water Right	Priority Date/Class	Name	Qi (cfs) 4/1-7/1	Qi (cfs) 7/1-10/1	Qi (cfs) 10/1-4/1	Qa (acre-feet)	Acres of Irrigation	Reason not in project
WWRAC No. 859	1926/64	T. Buckley	2.133	1.6	3.2	800	160	Ditch does not convey water to POU (Change Application on file to add a new POD)
WWRAC No. 865	1926/64	T. Buckley	1.067	0.8	1.6	400	80	Ditch does not convey water to POU (Change Application on file to add a new POD)
SWC No. 6176	1952	T. Small	0.67	0	1	Not given	50	Does not use water from ditch

There is one (1) surface water right overlapping the POU for WWRAC No. 429. Attributes of the surface water right is listed above in Table 3. An explanation of the relationship to WWRAC No. 429 is described below.

Table 4 Summary of surface water rights overlapping WWRAC No. 429 POU

Water Right	Relationship to WWRAC No. 429
WWRAC No. 93	None

The legal description for WWRAC No. 93, excluding that portion under Certificate of Change Vol. 1-3, Page 413, is changing through a report of examination from this irrigation efficiencies project to exclude the water rights that overlap with no relationship.

No other overlapping water rights for the acres in this irrigation efficiency project were found.

Hydrologic/Hydrogeologic Evaluation

John Covert, Department of Ecology Hydrogeologist, provided the following analysis for the Walla Walla area:

The Walla Walla River Basin comprises 1,750 square miles along the Oregon-Washington border east of the Columbia River. It is a bowl-shaped depression bordered by the gently rising Blue Mountains on the east and south, the Touchet Highlands on the north and northwest, and the Horse Heaven Hills on the southwest. Regional folding around the basin boundary and faulting formed the Walla Walla River Basin. About 73% of the drainage lies in Washington.

In length, the basin extends eastward about 55 miles from the mouth at the Columbia River to the drainage divide in the Blue Mountains. Basin elevations range from a high of 6,250 feet at Table Rock in the Mill Creek drainage to a low of 340 feet at the mouth near Wallula, WA.

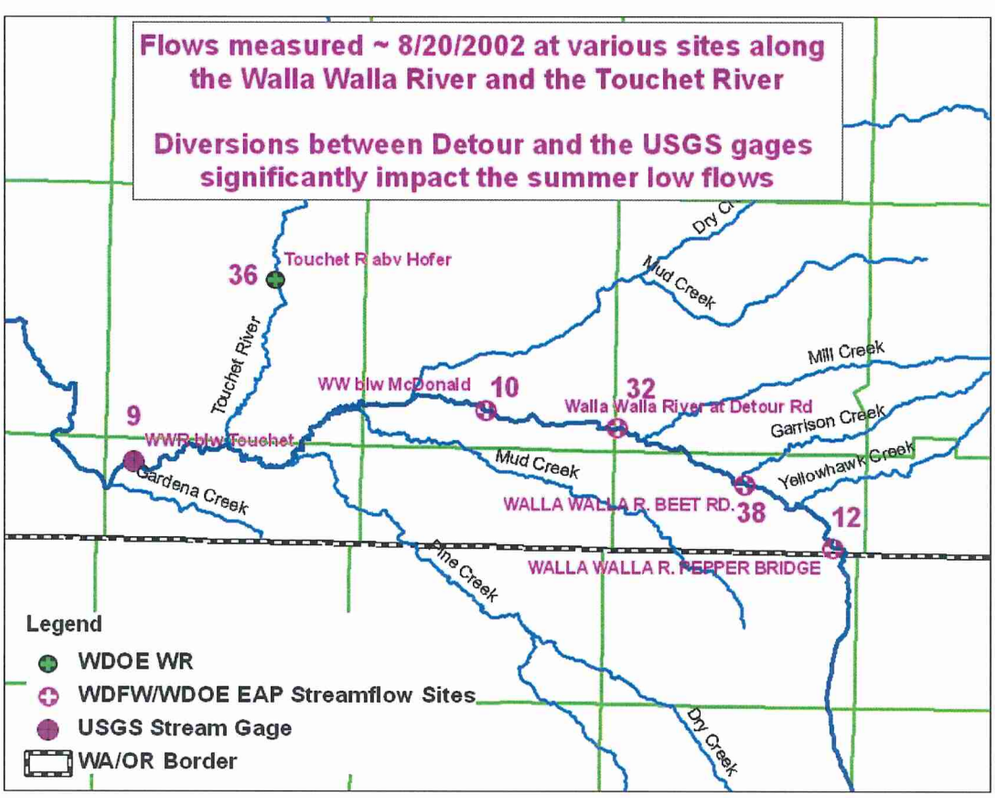
The major rock underlying the basin is the Miocene Age (15 to 20 million years ago) Columbia River Basalt Group, which consists of a thick sequence of lava flows known to be in excess of 6,000 feet thick in the Pasco Basin. Individual flows generally range from approximately 50 to over 150 feet. Unconsolidated gravels and clays overlie the basalt.

An extensive deposit of windblown silt (loess soil) called the Palouse Formation covers most of the Walla Walla River Basin. This formation eroded and resulted in the gently rolling hills that are typical of the region. Water-laid materials called the Touchet Beds, composed of silts and fine sands interlayered with lenses of gravels, filled portions of the Walla Walla River Basin, particularly in the western area toward the Pasco Basin. Deposits of recent alluvium are found in the river channels.

The main stem of the Walla Walla River originates at the confluence of its North and South Forks about 4 miles southeast of Milton-Freewater, Oregon. From the confluence, the river flows westward a short distance then swings toward the north and into the State of Washington where it changes direction, again following a westward course to its confluence with the Columbia River. The river crosses the state line at river-mile 41.5.

The discharge of the Walla Walla River comes from three sources. These are: 1) storm water precipitation, 2) snowmelt, and 3) groundwater discharge. The storm runoff is especially dominant in early winter; the snowmelt, in spring and early summer; and the groundwater outflow is dominant during the summer and the long cold periods of winter. Mean annual flow for the Walla Walla River near the Touchet USGS gage is 569 cfs.

Summer low flows are significantly impacted by diversions and groundwater pumping from the gravel aquifer.



Trust Water Right Calculations

While an entire water right, or portion thereof, may be accepted into trust, the extent to which that water right may be exercised is based on the highest water use within the last five (5) years that will be foregone for the period of trust. The amount determined as beneficially used minus the quantity of water savings may be exercised.

The change application submitted for this water right proposes to use 1.97 acre-feet of water per year for the irrigation of 0.51 acres, which is the quantity of water that has been historically beneficially used for on-farm purposes according to water use records based on the WIG and air photos. That is the quantity of water that is authorized for future on-farm irrigation use under this water right.

The remaining 0.58 acre-feet authorized in this water right was historically beneficially used to convey water through the ditch system to all irrigators on the Old Lowden ditch. That is the quantity of water that is being placed into trust for this water right.

The instantaneous quantity authorized in this water right (0.006 to 0.012 cfs, depending on season of use) was historically beneficially used at the turn-out point on the ditch. As a result of the BWOL project, the instantaneous quantity of water to be pumped at the new POD for all Old Lowden ditch irrigators will be reduced from the instantaneous quantity that was historically diverted at the former point of diversion. The reduced POD instantaneous quantity will be shared by all Old Lowden water users. The quantity of cfs reduction for each individual water right is taken as a proportion of conveyance loss of the historic diversion to the total historic use of authorized instantaneous quantities under all water rights combined. Therefore, the instantaneous quantity of water authorized for this water right in the future will be reduced to 0.007 cfs for April 1 to July 1, 0.005 cfs for July 1 to October 1, and 0.011 cfs for October 1 to April 1.

The calculation for the extent to which a water right may be exercised as a Trust Water Right is not a tentative determination of the water right and is not a finding of relinquishment or abandonment. Because the instantaneous quantity was used at the fullest extent at the turn-out point on the ditch for this water right and the water right is taking a proportionate reduction of instantaneous quantity from the savings resulting from this project, there is no relinquishment for instantaneous quantity.

For each individual water right, the total annual and instantaneous quantities available to go into trust are the differences between the quantities historically authorized minus the instantaneous quantities authorized for future use (see discussion above).

For the subject water right, the annual and instantaneous quantities to be placed into trust are 0.58 acre-feet per year and 0.001 cfs for April 1 to July 1, 0.001 cfs for July 1 to October 1, and 0.001 cfs for October 1 to April 1.

The following table summarizes the quantity in trust and remaining for irrigation as a result of this IEGP project in perpetuity.

Table 5. Quantities in trust and remaining for use.

In Trust	Remaining for Use
Instream flow	0.51 acres of irrigation
0.001 cfs April 1 – July 1 0.001 cfs July 1 – October 1 0.001 cfs October 1 – April 1	0.007 cfs April 1 – July 1 0.005 cfs July 1 – October 1 0.011 cfs October 1 – April 1
0.58 acre-feet	1.97 acre-feet

Trust Water Place of Use

Trust Water use for instream flow are generally split into primary and secondary reaches in order to distinguish the contribution of return flows from a water use and the benefits of any reduction in consumptive water use. The annual quantity placed into Trust is calculated differently for the primary reach and secondary reach due to the effects of return flows. The primary reach of a stream is the portion that benefits from both the reintroduction of return flows and any reduced consumptive water use. It is considered to be the reach starting at the point of diversion for the subject right/claim, and extending downstream to a point on the stream where return flows from the irrigated lands have rejoined the stream. The secondary reach is that portion of the stream that benefits by the reintroduction of water that would otherwise be lost to consumptive use and extends from the end of the primary reach to such point downstream as it is practical and feasible to regulate for the subject right. Because this irrigation efficiency project did not reduce consumptive use, there is no benefited secondary reach of the stream.

Primary Reach

The trust water right for the primary reach begins from the point water has been historically diverted and ends at the point where return flows are estimated to have returned to the river. For this project the primary reach begins at approximately River Mile 29.2, the historic point of diversion for the Old Lowden ditch irrigators, and ends approximately at River Mile 22.5 at the Touchet-Gardena Road Bridge.

Secondary Reach

There is no secondary reach in this trust water right.

Trust Water Management

Consistent with 90.42.080(1)(a), this Trust Water Right shall be managed by Ecology as an instream flow right for the Walla Walla River, as described in this Trust Water Report.

Impairment Considerations

"Impair" or "impairment" means to 1) adversely impact the physical availability of water for a beneficial use that is entitled to protection, and/or 2) to prevent the beneficial use of the water to which one is entitled, and/or 3) to adversely affect the flow of a surface water course at a time when the flows are at or below instream flow levels established by rule (POL-1200), and/or 4) degrade the quality of the source to the point that water is unsuitable for use by existing water right holders (Chapter 173-150 WAC). Demonstration of impairment would require evidence of a substantial and lasting or frequent impact reflecting such conditions.

The proposed trust water has been evaluated as to the potential for impairment to existing water rights in the area. No other water rights are located between the original diversion and the proposed new diversion point. The Old Lowden water right ditch users all have different priority dates. Water right holders will be regulated if needed in the order of priority date. The water retained instream from this Trust Water Right will be available to other water rights in accordance with seniority and no impairment of any water right will occur.

A consequence of the BWOL diversion consolidation and piping project will be that instream flows on a 1.7 mile reach of the Walla Walla River will be impaired several months of each year (see "State Environmental Policy Act (SEPA)" section of this report for more information. The Department of Ecology has determined that the impairment of flows of this short reach of river is acceptable because the overall fish and habitat benefits to the river system in the basin as a result of the BWOL project are in the public's best interest. (See "Overriding Consideration of Public Interest (OCPI)" section of this report for more information.)

No Enhancement of the Original Water Right

No diversion of water over and above what has been historically put to beneficial use would be authorized through approval of this change. Total water between trust and that portion remaining with the water right claim holder will not exceed the greatest use within the last five (5) years of water use nor will the total exceed the historical extent of the water right.

Consideration of Protests and Comments

No protests or comments were received.

CONCLUSIONS

It is the conclusion of this examiner that, in accordance with 90.42 RCW, the applications for trust water through an irrigation efficiencies project under Walla Walla Adjudicated Surface Water Certificate No. 429 (CS3-*28429J) will not impair existing rights provided the terms and conditions below are followed.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that the request for change in point of diversion, purpose of use and place of use for transfer of water to the TWRP under WWRAC No. 429 be approved, within the limitations listed below and subject to the Provisions Section of this report.

Portion of Water Right Certificate Placed into Trust:

For instream flow in the Walla Walla River in the primary reach permanently in the amount of 0.001 cfs April 1 – July 1, 0.001 cfs July 1 – October 1, 0.001 cfs October 1 – April 1 and 0.58 acre-feet annually.

The primary reach begins at the existing Old Lowden ditch point of diversion site located within the NE¼NE¼ of Section 33, T. 7 N., R. 34 E.W.M. at River Mile 29.2 and ending downstream approximately at River Mile 22.5 at the Touchet-Gardena Road Bridge within SE¼NW¼ of Section 3, T. 6 N., R. 33 E.W.M.

Portion of Water Right Certificate Not Placed into Trust:

The remaining quantity available listed under WWRAC No. 429 after subtracting out this Irrigation Efficiencies Project trust water savings is 0.007 cfs April 1 – July 1, 0.005 cfs July 1 – October 1, 0.011 cfs October 1 – April 1 and 1.97 acre-feet annually for the irrigation of 0.51 acres.

Point of Diversion:

Approximately River Mile 30.9 within the SE¼NW¼ of Section 35, T. 7 N., R. 34 E.W.M.

Place of Use:

0.51 acres within in Walla Walla County Washington, described as follows:

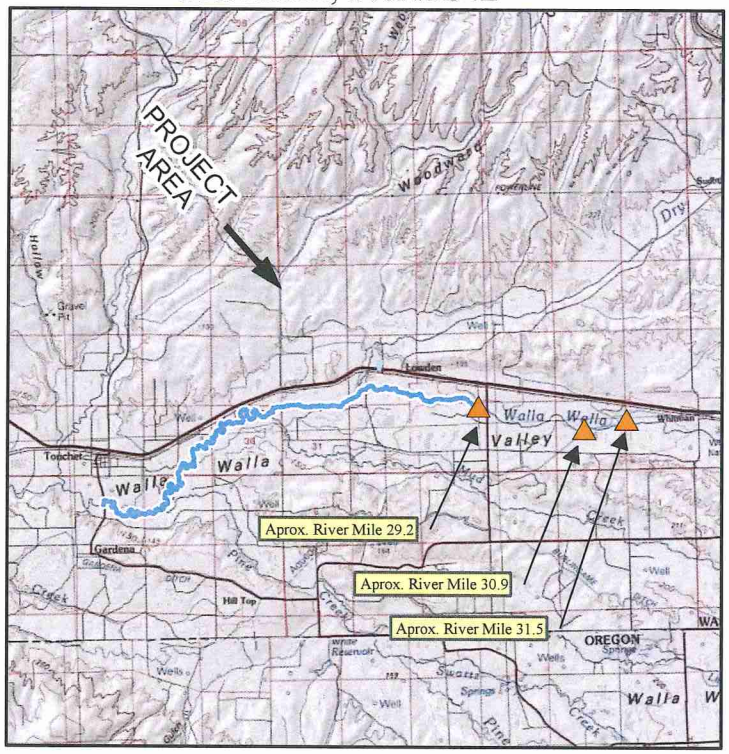
Lot 10, Block 2 of the Town of Lowden, according to the official plat on file in the office of the auditor of Walla Walla County. Also, commencing 60 feet north from the northeast corner of Block 2 in the said Town of Lowden and running thence north 150 feet, thence at right angles west 180 feet, thence south 150 feet, thence east 180 feet to the place of beginning; all within the SE¼NW¼ of Section 29, T. 7 N., R. 34 E.W.M.

Report by: _____ May 16, 2012
Date

Laurie Dahmen, Irrigation Efficiencies Permit Manager
Water Resources Program
Eastern Regional Office

Helen Self

Document # CS3-*28429J
T07N/R32E, T07N/R33E, T07N/R34E
T06N/R32E, T06N/R34E



Basemap - (ESRI US top maps)

Legend

- Authorized Place of Use
- Primary Reach
- Authorized Point of Diversion
- Townships
- Sections

0 65 130 260 390 520 Feet

Basemap - (NAIP 2011 1m color)

DEPARTMENT OF ECOLOGY State of Washington

Map Date: 5/14/2012

Comment:
Place of use and source locations are as defined within the Report of Examination cover sheet for the document identfied in the header above.

ATTACHMENT 1