STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
PO Box 47775 • Olympia, Washington 98504-7775 • (360) 407-6300

June 25, 2013

Peterson Farms
Attn: Marty Peterson
2526 Dike Road
Woodland WA 98674

Re: Water Right Application No. S2-30592

Dear Mr. Peterson:

Enclosed is an amended copy of the Department of Ecology's *Report of Examination.* This report contains our decision regarding your application.

Your application has been approved.

A permit will be issued consistent with the enclosed *Report of Examination* after the appeal period has expired, if no appeals have been filed.

You have a right to appeal this action 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 document 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 document 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 Rd SW Ste 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 .

If you have any questions, please contact Ecology at 360-407-6300.

Sincerely,

Michael J. Gallagher
Section Manager
Water Resources Program

BY CERTIFIED MAIL: 7011 3500 0003 5810 5502

Enclosures: Report of Examination
Your Right To Be Heard

File No. S2-30592
WAC Doc ID:

DEPARTMENT OF
ECOLOGY
State of Washington

State of Washington
AMENDED
REPORT OF EXAMINATION
FOR WATER RIGHT APPLICATION

PRIORITY DATE
January 25, 2012

APPLICATION NUMBER
S2-30592

MAILING ADDRESS
Peterson Farms
2526 Dike Road
Woodland WA, 98674

SITE ADDRESS (IF DIFFERENT)

Quantity Authorized for Withdrawal or Diversion

DIVERSION RATE	UNITS	ANNUAL QUANTITY (AF/YR)
5.76 (4.45 non-additive)	CFS	698

Purpose

PURPOSE	WITHDRAWAL OR DIVERSION RATE			ANNUAL QUANTITY (AF/YR)		PERIOD OF USE (mm/dd)
	ADDITIVE	NON-ADDITIVE	UNITS	ADDITIVE	NON-ADDITIVE	
Irrigation of 766 acres		2.67	CFS	215		05/01-10/01
	587	800	GPM	483		05/01-10/01

Source Location

WATERBODY	TRIBUTARY TO	COUNTY	WATER RESOURCE INVENTORY AREA
Columbia River	Pacific Ocean	Cowlitz	27
Well No. 1	NA	Cowlitz	27

SOURCE FACILITY/DEVICE	PARCEL WELL TAG		TWN	RNG	SEC	QQ Q	LATITUDE	LONGITUDE
Columbia River/pump plant								
	60532		5N	1W	22	SW ¼	45°53'53"	122°47'42"
Well No. 1	60532	AAR 983	5N	1W	22	SW ¼	45°53'53"	122°47'41"

Datum: WGS84

Place of Use (See Map, Attachment 1)

PARCEL

Parcel Nos. WB2608001,WB2608003, 60431, 6043201, 60432, 60433, WB2216001, WB2311004, WB2204001, 60512, 605190100, 60515, 605160200, 60518, 605160100, 60513, 60517, 60544, 605440100, WB1501002, WB1015003, WB1016001, WB1103001, WB2311001, WB2311002, 60444, 60527, 60531, and WB1515001, all within portions of Sections 10,11,14,15,22,23,26, and 27 of T5N, R1W, Cowlitz County

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

See attached map

Proposed Works

A 16-inch diameter casing well, 131 feet deep, screened from 74 to 80 feet and 85.5 to 115.5 feet was completed on May 3, 2011. Piping from this new well has been connected to the existing irrigation mainline which is buried under the Dike Road. The existing mainline is a 10-inch diameter pipe which is encased in a 12-inch diameter steel casing. The existing surface water pumping facility from the Columbia River, which was approved under Surface Water Certificate No. S2-25864, has a 125 hp motor with a pump rating of 1,500 gpm.

Development Schedule

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
Started	May 1, 2014	May 1, 2015

Measurement of Water Use

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

Provisions

Measurements, Monitoring, Metering and Reporting

An approved measuring device shall 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 Ecology Southwest Regional Office. If you do not have Internet access, you can still submit hard copies by contacting the Regional Office for forms to submit your water use data.

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.

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. http://wdfw.wa.gov/about/regions/
A permit from the Department of Fish and Wildlife may be needed to raise fish in any state waters: http://wdfw.wa.gov/about/regions/.

Easement and Right-of-Way
The water source and/or water transmission facilities are not wholly located upon land owned by the applicant. Issuance of a water right authorization by this department does not convey a right of access to, or other right to use, land which the applicant does not legally possess. Obtaining such a right is a private matter between applicant and owner of that land.

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 permit. 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.

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. S2-30592 subject to existing rights and the provisions specified above.

Signed at Olympia, Washington, this 25th day of June 2013.

Michael J. Gallagher

Michael J. Gallagher, Section Manager
Water Resources Program/SWRO
Department of Ecology

Your Right To Appeal

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Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	**Department of Ecology** Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 111 Israel RD SW STE 301 Tumwater, WA 98501	**Pollution Control Hearings Board** PO Box 40903 Olympia, WA 98504-0903

Please send a copy of your appeal to:

Michael J. Gallagher, Section Manager
Water Resources Program
Southwest Regional Office
P.O. Box 47775
Olympia WA 98504-7775

BACKGROUND

Cost Reimbursement

This application is being processed under a cost reimbursement agreement between the applicant and the Department of Ecology (Ecology). This report has been prepared by HDR Engineering under Ecology Cost-Reimbursement Agreement No. HDR008 (Master Contract No. C1000189). The Work Assignment for this project was authorized by Ecology on August 14, 2012.

Project Description

Peterson Farms is a large scale farming operation located west of Woodland and adjacent to the right bank of the Columbia River, with total land holdings of approximately 1,500 acres. The farming operation is also known as Columbia Fruit, as well as M and J Farms. Two brothers, Marty and Matt Peterson, now manage this business venture, which was formerly managed by their father, Jerry Peterson.

This application was filed by Peterson Farms of Woodland, WA for irrigation of additional acreage using existing sources. Peterson Farms is requesting approval for irrigation of 950 additional acres so that they have irrigation water rights for the total number of acres that they irrigate in any given year.

Table 1

Summary of Application No. S2-30592

Attributes	*Proposed*
Applicant	Peterson Farms
Application Received	January 25, 2012
Instantaneous Quantity	2.67 cfs/1,200 gpm
Source	Columbia River/Well No. 1
Point of Diversion	SW ¼ Section 22, T 5N, R 1W
Purpose of Use	Irrigation of 950 acres
Period of Use	May 1 to October 1
Place of Use	Parcel Nos. WB2608001,WB2608003, 60431, 6043201, 60432, 60433, WB2216001, WB2311004, WB2204001, 60512, 605190100, 60515, 605160200, 60518, 605160100, 60513, 60517, 60544, 605440100, WB1501002, WB1015003, WB1016001, WB1103001, WB2311001, WB2311002, 60444, 60527, 60531, and WB1515001, all within portions of Sections10,11,14,15,22,23,26, and 27, T. 5N, R 1W.

Legal Requirements for Application Processing

The following requirements must be met prior to processing a water right application:

Public Notice

Public notice of the application was given in the Daily News, published in Cowlitz County on March 31 and April 7, 2012. There were no comments or protests received during the 30 day protest period following the last date of publication.

State Environmental Policy Act (SEPA)

A water right application is subject to a SEPA threshold determination (i.e., an evaluation whether there are likely to be significant adverse environmental impacts) if any one of the following conditions are met.

(a) It is a surface water right application for more than 1 cubic feet 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.

Because this application does not meet any of these conditions, it is categorically exempt from SEPA and a threshold determination is not required.

INVESTIGATION

Site Visit

The following information was obtained from a site inspection conducted by Jerry Louthain of HDR on November 8, 2012, with the applicant's representative, Mr. Marty Peterson. Additional information relating to this application was provided by the applicant following the site visit.

Proposed Project

The intent of this filing is to request approval for the irrigation of 950 additional acres so that they have irrigation water rights for the total number of acres that they irrigate in any given year. Two sources are being requested for approval, the original point of diversion from the Columbia River, and Well No. 1, so that land can be irrigated from either the Columbia River source or the new well. Problems with water levels and water quality have been experienced at some times in using the existing surface water pumping facility, so an additional ground water source is needed so the applicant can access a reliable source of irrigation water.

Other Water Rights Appurtenant to the Proposed Place of Use

Surface Water Certificate S2-25864 is for irrigation from two sources, the Columbia River for 2.67 cfs (1,200 gpm) and a well for 800 gpm (1.78 cfs), 300 acres and 600 acre-feet per year. The entire place of use for this certificate is included within the proposed place of use for this application.

Surface Water Certificate No. 9586 is for diversion of 0.75 cfs and 150 acre-feet per year for irrigation of 75 acres from Goerig Slough, a tributary of the Columbia River. This certificate was issued in 1963 with the entire place of use for this certificate included within the proposed place of use for this application.

Certificate of Ground Water Right No. G2-20039C is for 300 gallons per minute and 159 acre-feet per year for irrigation of 94 acres. The entire place of use for this certificate is included within the proposed place of use for this application.

The total for these three existing water rights which all have their place of use being within the proposed place of use for this application, is 469 acres and an annual quantity of 909 acre-feet per year.

History of Water Use

Water has been used every year for irrigation under Surface Water Certificate No. S2-25864, Surface Water Certificate No. 9586, and Ground Water Certificate No. G2-20039C. Different crops have been grown on the property over the years, so the acreage and the specific types of crops that have been irrigated have varied over the years. Peterson Farms provided power usage records for the last five years from 2007 through 2011 for the recently approved change to Certificate No. S2-25864. These records showed the kilowatt hours used on a monthly basis for the existing Columbia River pumping plant from May through September for each of these years.

Current Use and Proposed Water Use

Information relating to irrigation of the entire property and provided from Mr. Marty Peterson, shows that approximately 180 acres of berries, 200 acres of corn and 60 acres of green beans for a total of 440 acres are irrigated every year. Additional crops that are irrigated in some years are 30 acres of strawberries, 50 acres of wheat, 150 acres of green peas, and 565 acres of grass seed, for a total acreage of 795 acres, or a grand total of 1,235 irrigated acres. Not all of these crops are grown or irrigated every year. Mr. Petersen has provided a listing by County Parcel Number of all of the land that the Peterson family owns and leases from others for agricultural use and irrigation. This listing also shows the number of acres for each Parcel Number. In addition, Mr. Peterson has provided a CD of a map of property in this vicinity, which shows the ownership of each Parcel. The total acreage owned by the Peterson family which is irrigated is 875 acres, with an additional 360 acres which are leased, for a total of 1,235 acres of irrigated agricultural lands, owned or managed by the Peterson family.

This is the reason the application was filed to authorize additional irrigated acreage up to the maximum number of acres they intend to irrigate in the future. When the application was submitted, the applicant was not aware of the exact number of additional acres that were not covered by existing water rights, so the application was made for 950 acres of additional irrigated acres just to make sure that they had applied for a sufficient number of acres.

The exact number of acres, the types of crops that have been irrigated, and the amount of water that has been used for irrigation varies each year depending on the particular crop rotation. It is known however that the number of acres irrigated in any given year has been well over 1,000 acres, even though the existing total authorized irrigated acreage in water rights is only 469 acres under existing rights. There have been no metering requirements for any of these water rights, so no records have been kept on the amount of water use.

Since there are no specific data available on the annual amount of water usage for their irrigated cropland, and the fact that the crops grown on the total acreage changes on a yearly basis, assigning a standard annual quantity of 2 acre-feet per acre for all of the potential irrigated land is a reasonable method of determining an appropriate water allocation for the entire irrigated acreage. Using the total irrigated acreage of 1,235 acres and an annual quantity of 2 acre-feet per acre, this would result in a total demand of 2,470 acre-feet per year.

Therefore, one of the provisions to be included with this new water right will be a metering requirement, which will provide yearly data on the total amount of water used for irrigation from the new well which will serve the entire place of use.

Pumping Capacity

The instantaneous pumping capacity of the existing pump from the Columbia River is documented in the Report of Examination for Certificate No. S2-25864 which showed that the horsepower of the motor for the pump is 125 HP, and that the pump is rated at 1,500 gpm (3.34 cfs), which was the approved pumping rate on the Report of Examination for this certificate. Certificate No. S2-25864 was only issued for 2.67 cfs (1,200 gpm), which was based on a pump efficiency of 80% (1,500 x 0.8= 1,200 gpm).

The maximum total annual quantity that can be obtained during the five months (154 days) irrigation season from May 1 to October 1, at a maximum pumping rate from the Columbia River pumping at 1,200 gallons per minute is calculated as follows, using a conversion factor of 1 gallon per minute being equivalent to 1.61 acre-feet per year:
1,200 gpm x1.61 acre-feet/year/gpm x 154/365=815 acre-feet per irrigation season.

The water well report shows that the well was pump tested on April 29-30, 2011 at 1,387 gpm with 39 ft of drawdown after 24 hours, for a specific capacity of 36 gpm/ft. The pump test showed sufficient yield for the proposed use.

The maximum total annual quantity that can be obtained during the five months (154 days) irrigation season from May 1 to October 1, at a maximum pumping rate from the well of 1,387 gallons per minute is calculated as follows:
1,387 gpm x1.61 acre-feet/year/gpm x 154/365=942 acre-feet per irrigation season.

Hydrologic/Hydrogeologic Evaluation

The following information related to hydrogeology was taken from a December 20, 2011 hydrogeological analysis report from Alan Wald, Certified Hydrogeologist with Applied Hydrology Northwest, which includes a copy of the Water Well Report for the subject well, showing that the well was completed on May 3, 2011. This report is included with this Report of Examination as ATTACHMENT 1.

The static water level in the well could not be measured at the time of the site visit as the casing extends about 12 feet above land surface because of potential floods and is capped. The applicant reports that water levels in the well during drilling fluctuated with water levels (stage) in the river. The static water level is shown on the well driller's log as being 10 feet below the top of the well casing on May 2, 2011.

Geologic materials along the lower Columbia River in this area are principally flood deposits of unconsolidated fine sediments and alluvium over deeper Quaternary (Recent) sediments and debris of fluvial origin. The water well report describes 115 ft of sands and occasional gravel over a thin sequence of clay and fine sand at 115 to 131 ft. The well is screened from 74 to 115.5 ft.

Pumping the well at the rate of the pumping rate capacity of 1,387 gpm is expected to induce recharge from the Columbia River since the static water level in the well is approximately river stage and less than 50 ft from the river. The specific capacity test data was analyzed using the method described in Bradbury and Rothschild (1985) to obtain the aquifer hydraulic parameters necessary to compute the drawdown under the river from pumping the well. The analysis assumed an aquifer thickness of about 110 feet and a specific yield ranging from 0.15 to 0.20 resulting in a calculated transmissivity of 16,000 to 17,000 ft^2/day and a hydraulic conductivity of 150 to 160 ft/day.

Impairment Considerations

The record of water rights within 1/2 mile of the proposed well includes three groundwater right claims (G2-08306CL, G2-067930CL, and G2-067931CL) and two surface water rights (S2-27726GWRIS, and S2-20043CWRIS). The groundwater right claims are for domestic and stock water use and the surface water rights are for irrigation from an unnamed slough, and Goerig Slough, respectively. The nearest water right is more than 1,600 feet landward of the proposed withdrawal.

As shown above, the well was pump tested at 1,387 gallons per minute. Based on this as the maximum pumping rate for the well, and the fact that the existing water right change for Certificate No. S2-25864 C was approved for 800 gallons per minute, the maximum instantaneous quantity that this application can be approved for is 587 gallons per minute as a primary right.

A supplemental hydrogeologic analysis was performed by Alan Wald for this application to evaluate the potential impacts of pumping at a maximum rate of 1,387 gpm and an additional rate of 587 gpm from this well. This report is dated December 14, 2012 and is included with this report as ATTACHMENT 2.

Mr. Wald's December 2012 report showed that solution of the Theis equation for a transmissivity, T of 16,600 ft^2/day and storage coefficient, S of 0.2 at the maximum total pumping rate of 1,387 gpm for 30 days results in a conceptual drawdown of 1.32 feet at a radius of 1,600 feet from the well. This drawdown is consistent with the pump test at the time of well construction and clearly within the zone of influence of the river. In addition, this report showed that using these same parameters, pumping at a rate of the added amount for this application of 587 gpm would result in a drawdown of 0.56 feet.

Based on the above hydrogeologic analysis, these rights would not be impaired by the proposed approval of this application. There also would be no impairment from pumping at the previously approved rate of 2.67 cfs from the Columbia River.

Summary of Irrigated Acreage, Instantaneous Quantities, and Annual Quantities from each source
Irrigated Acreage

There is a total of 469 acres approved under existing water rights that are appurtenant to the proposed place of use for this application. The total acreage that has historically been irrigated is 1,235 acres. Therefore, the additional acreage that is not covered by existing water rights and that could be approved under this application for the ground water source and the surface water source is 766 acres.

This acreage is less than the 950 acres applied for, however 766 additional acres of irrigation is all that is needed with the 469 acres in existing water rights, for the total irrigated acreage of 1,235 acres.

Instantaneous Quantities

The maximum pumping rate from Well No. 1 is 1,387 gpm as determined from the pump test for this well. Existing instantaneous rights from Well No. 1 under SWC S2-25864 is 800 gpm, so the maximum instantaneous rate that could be approved under this application for well No. 1 is 587 gpm, with 800 gpm as being non-additive.

The maximum pumping rate from the Columbia River pump has been documented as being 1,200 gpm. This instantaneous rate was approved under SWC S2-25864. So 1,200 gpm can be approved under this application as being non-additive.

Annual Quantities

Surface Water Certificate S2-25864C authorizes a total of 600 acre feet per year for the irrigation of 300 acres from either of two sources, the Columbia River or Well No. 1 from May 1 to September 30 of each year.

The concurrent change application for Ground Water Certificate G2-20039C, is requesting approval for a change in point of withdrawal and place of use for this right of 159 acre feet per year for the irrigation of 94 acres. The proposed point of withdrawal is Well No. 1 the same well used for SWC S2-25864 and the proposed ground water source for this application.

The total annual quantity authorized under existing rights for the surface water source is 600 acre feet per year and 459 acre feet per year for the ground water source.

The place of use for the other existing water right (SWC 9586) is included within the proposed place of use; however the source for this right is Goerig Slough, instead of the proposed two sources under the subject application. Therefore, this source is not included with the other existing rights for the subject application.

As stated above under **Current Use and Proposed Water Use,** the potential annual quantity demand for the total acreage irrigated by Peterson Farms is 2,470 acre feet per year. Also as stated above, under **Current Use and Proposed Water Use,** the maximum annual quantity that could be produced by the pump from the Columbia River surface water source pumping at a maximum rate of 1,200 gpm during the five month irrigation season from May 1 to October 1 is 815 acre feet. Also, as stated under **Impairment Considerations**, the maximum annual quantity that could be produced by the well pump pumping at a maximum rate of 1,387 gpm during the five month irrigation season is 942 acre feet.

Therefore, by subtracting the annual quantity authorized under existing rights for the surface water source of 600 acre feet per year from the maximum annual quantity of 815 acre feet that could be produced from the surface water source, this results in a additional demand for 215 acre feet per year that could be approved for the surface water source.

Similarly by subtracting the annual quantity authorized under existing rights for the ground water source of 459 acre feet per year from the maximum annual quantity of 942 acre feet that could be produced from the ground water source, this results in a additional demand for 483 acre feet per year that could be approved for the ground water source.

This maximum additional annual quantity of 215 acre feet per year that can be allocated from the Columbia River surface water source, plus the maximum additional annual quantity of 483 acre feet per year that can be allocated from the ground water source amounts to a total of 698 acre feet per year that can be allocated from both sources.

Beneficial Use
The use of water for irrigation purposes is defined in statute as a beneficial use of water (RCW 90.54.020(1)). The stated purpose of use for the Peterson well qualifies as a beneficial use.

Public Interest Considerations

Approval of this application for use of water for irrigation purposes is not contrary to the public interest.

The attached hydrogeological analysis by Alan Wald reviews the State requirements for instream flows and discusses current practice for water right reviews in this area including a consultation with Steve Boessow, the Washington State Department of Fish and Wildlife Instream Flow Biologist. Based on this review, it was concluded there are no instream flow requirements on the Columbia River downstream of Bonneville Dam.

In addition, there were no protests filed or objections made to the approval of this application.

Four Statutory Tests
This Report of Examination (ROE) evaluates the application based on the information presented above. To approve the application, Ecology must issue written findings of fact and determine that each of the following four requirements of RCW 90.03.290 has been satisfied:

1. The proposed appropriation would be put to a beneficial use;
2. Water is available for appropriation;
3. The proposed appropriation would not impair existing water rights; and
4. The proposed appropriation would not be detrimental to the public welfare.

CONCLUSIONS

The conclusions based on the above investigation are as follow:

1. The proposed appropriation for irrigation is a beneficial use of water;
2. The approved quantity) is available for appropriation;
3. The new appropriation will not impair senior water rights; and
4. The new appropriation will not be detrimental to the public interest.

RECOMMENDATION

Based on the information presented above, the author recommends that this request to for a water right be approved in the amounts described below, and within the limitations, and provisions on page 1 through 4 of this report.

Purpose of Use and Authorized Quantities

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:

2.67 cfs (Non-additive) and 215 acre-ft/yr from the Columbia River for irrigation of 766 acres from May 1 to October 1 of each year.

1,387 gpm (587 gpm additive and 800 gpm non-additive) and 483 acre-feet from a well for irrigation of 766 acres from May 1 to October 1 of each year.

These are alternative sources to the same 766 acres of irrigation

Point of Diversion and Point of Withdrawal: SW¼, Section 22, Township 5 North, Range 1W.W.M.

Place of Use: As referenced on Page 2 of this Report of Examination and shown in ATTACHMENT 3.

Report by: _____

Jerry Louthain, P.E. Date
HDR Engineering, Inc.

Reviewed by: Michael J. Gallagher 6/25/13

Michael J. Gallagher, LHG, Date
Ecology Water Resources Program

ATTACHMENT 1-December 20, 2011 Hydrogeology Report, Applied Hydrology Northwest
ATTACHMENT 2- December, 2012 Hydrogeology Report, Applied Hydrology Northwest
ATTACHMENT 3- Points of withdrawal/diversion and Place of Use for Application No. S2-30592

If you need this publication in an alternate format, please call Water Resources Program at 360 407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.