File No. G4-33040
WAC Doc ID: 4961581

DEPARTMENT OF ECOLOGY
State of Washington

State of Washington
REPORT OF EXAMINATION
FOR WATER RIGHT APPLICATION

PRIORITY DATE
September 26, 2011

APPLICATION NUMBER
G4-33040

MAILING ADDRESS
Public Utility District No. 2 of Grant County
PO Box 878
Ephrata, WA 98823

SITE ADDRESS (IF DIFFERENT)
Wanapum Dam
14353 Hwy 243 S.
Beverly, WA 99321

Quantity Authorized for Withdrawal

DIVERSION RATE	UNITS	ANNUAL QUANTITY (AF/YR)
100	GPM	Non-consumptive

Purpose

PURPOSE	WITHDRAWAL RATE ADDITIVE	WITHDRAWAL RATE NON-ADDITIVE	UNITS	ANNUAL QUANTITY (AF/YR) ADDITIVE	ANNUAL QUANTITY (AF/YR) NON-ADDITIVE	PERIOD OF USE (mm/dd)
Municipal	100	0	GPM	150	NC	01/01 – 12-31

Source Location

WATERBODY	TRIBUTARY TO	COUNTY	WATER RESOURCE INVENTORY AREA
Groundwater		Kittitas	40

SOURCE FACILITY/DEVICE	PARCEL	TWN	RNG	SEC	QQ Q	LATITUDE	LONGITUDE
Powerhouse Well	554833	16N	23E.W.M.	17		46.8772 N	119.9706 W
							Datum: WGS84

Place of Use (See Attachments 1)

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

The place of use (POU) of this water right is shown on the map in Attachment A. The POU is the service area described in the most recent Water System Plan/Small Water System Management Program approved by the Washington State Department of Health, so long as the water system is and remains in compliance with the criteria in RCW 90.03.386(2). RCW 90.03.386 may have the effect of revising the place of use of this water right.

Proposed Works

Powerhouse Well and associated distribution system that supplies water to individual turbine seals.

Development Schedule

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
Started	Completed	In Use

Measurement of Water Use

How often must water use be measured?	Monthly
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 (gpm)

Provisions

Measurements, Monitoring, Metering and Reporting

An approved measuring device shall be installed and maintained for each of the sources and managed 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.

Water Quality Permitting

Grant County PUD No. 2 is responsible for meeting state water quality standards.

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.

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. G4-33040, 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 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 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
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503 **Pollution Control Hearings Board** 111 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

Signed at Yakima, Washington, this 19th day of December 2012.

Mark C. Schuppe
Operations Manager
Office of Columbia River

INVESTIGATOR'S REPORT
Kelsey S. Collins, Department of Ecology
Water Right Control Number G4-33040

BACKGROUND

On September 26, 2011, Public Utility District No. 2 of Grant County (Grant PUD) filed Application for Ground Water Right Permit G4-33040 with the Department of Ecology (Ecology). The application requests 200 gpm and an unspecified annual quantity for municipal supply within the Wanapum Dam hydroelectric facility. The applicant indicates that the water use will be non-consumptive for machinery lubrication. The project site is located in Water Resource Inventory Area (WRIA) 40 in Kittitas County, near the border of Grant County (WRIA 41).

Project Description

The project site is the Wanapum Dam, which is located on the Columbia River at River Mile 415, approximately 6 miles downstream from Vantage, Washington. The dam straddles the Columbia River in Section 17, Township 16 N., Range 23 E.W.M. The proposed withdrawal point is an existing well located within the powerhouse.

The Wanapum Dam is part of Grant PUD's Priest Rapids project that includes two hydroelectric developments, Wanapum and Priest Rapids, located on the Columbia River in central Washington. This application is specific to operations at Wanapum Dam.

The Wanapum facility includes a dam, powerhouse, fishway, spillway, reservoir, 230-kilovolt (kV) transmission lines, water rights, rights-of-way, and structures and lands associated with the operation of the Project. The dam is equipped with a fish ladder on both the east and west banks of the river to provide upstream passage for salmon, steelhead, and other anadromous fish.

Grant PUD is in the process of upgrading its 10 turbines and generators at Wanapum Dam. Upon completion, the powerhouse will have an authorized installed capacity of 735 MW/year with a maximum output of 1,125 MW/year.

The intent of this application is to obtain a water right for Municipal Water Supply for shaft-seal lubrication of 10 turbine generators and two turbine pumps that provide water to the fishway. Water is injected directly into the turbine shaft seals to provide lubrication and a sealing pressure to prevent river water from entering the powerhouse. No oil or other contaminants are injected into this process. Water leaving the turbine shafts goes into the tailrace or is collected in the dam's drainage system and returned to the river.

Water from this well has been used continuously for this purpose since the well was installed in 1973, however the PUD only recently realized that the use wasn't authorized by the surface water right held by the PUD for power generation. This use is metered at the source and approximately 150 acre-feet per year is generally withdrawn and discharged.

Table 1. Summary of Application No. G4-33040

Attributes	*Proposed*
Applicant	Public Utility District No. 2 of Grant County
Application Received	September 26, 2011
Instantaneous Quantity	200 gpm (reduced to 100 gpm based on capacity)
Source	Powerhouse Well
Point of Diversion	2693 feet south and 2679 feet east of the NE corner of Section 17
Purpose of Use	Municipal (MU)
Period of Use	Year-round, as needed
Place of Use	Government Lots 3, 6, and 7 in Section 17, Township 16 N., Range 23 E.W.M. Kittitas County, Washington

The well that supplies the shaft-seal lubrication is also used for domestic supply of the powerhouse plant, operations office/control room, administrative offices, plant personnel, and the museum/tour center. Originally, water for these purposes was obtained from a surface-water intake on the Columbia River (Wanapum Dam); however surface-water right S3-00465 has been modified by the Grant County Water Conservancy Board decision No. GRAN-11-17 that authorizes use of the well as a replacement source. See Table 2 below. The system is dual plumbed with a separate meter that records how much water is used for the consumptive purposes and how much water will be used under this authorization for additional non-consumptive use associated with turbine cooling.

Table 2 - Grant PUD Water Rights Appurtenant to Wanapum Dam

Water Right (Change Decision)	Priority Date	Qi	Qa (afy)	Source	Purpose of Use
Hydroelectric					
S3-01613C	11/28/1955	188,350 cfs	N/A	Columbia River	Hydroelectric
R3-01615C	11/28/1955	N/A	541,000	Columbia River	Storage
Municipal					
GWC 3784 (GRAN-11-18)	5/26/1960	300 gpm	203	Maintenance Center Well; Powerhouse Well; Wanapum Village Well 1; Wanapum Village Well 2; Wanapum Village Well 3; Switchyard Well; Right Bank Well; and Maintenance Center Additional Well[1]	Municipal
GWC 4710 (GRAN-11-19)	5/17/1963	120 gpm	192		Municipal
GWC 4848 (GRAN-11-16)	5/17/1963	100 gpm	100		Municipal
S3-00465C (GRAN-11-17)	4/15/1970	0.02 cfs	5		Municipal
TOTAL		529 gpm	500 ac-ft/yr		

[1] Water right certificates GWC 3784, GWC 4710, GWC 4848, and S3-00465 have been modified by the Grant County WCB so that each water right authorizes the use of multiple withdrawal points as listed..

Legal Requirements for Application Processing

The following requirements must be met prior to making a permit decision:

- **Public Notice**
  A notice of publication was published in the Grant County Journal and Ellensburg Daily Record on April 26, 2012 and May 3, 2012. No protests were received as a result.

- **State Environmental Policy Act (SEPA)**
  The proposed action is categorically exempt from SEPA [WAC 197-11-305 or WAC 197-11-800(4)], because the instantaneous quantity is less than the threshold of 2,250 gallons per minute.

- **Columbia River Consultation**
  To meet the requirements of WAC 173-563-020(4) the Department of Ecology (Ecology) must consult with interested parties before issuing new water rights from the Columbia River. In response to this notification Ecology received written comments from Stephen Lewis on behalf of the US Fish and Wildlife Service (USFWS).

  Mr. Lewis questioned the possible discharge of contaminants into the Columbia River from the use of ground water for shaft seal lubrication. He suggested that the 401 Certification for the Priest Rapids Project be amended to address water quality impacts. Ecology's Water Quality Program is discussing this issue and will be in contact Grant PUD.

- **Water Resources Statutes and Case Law**
  Chapters 90.03 and 90.44 RCW authorize the appropriation of public water for beneficial use and describe the process for obtaining water rights. Laws governing the water right permitting process are contained in RCW 90.03.250 through 90.03.050.

- **Cost Reimbursement and Expedited Processing**
  Based on the provisions of RCW 43.21A.690 and RCW 90.03.265, this application has been processed by Pacific Groundwater Group under Ecology Cost-Reimbursement Agreement Contract No. C1000192, Work Assignment PGG013.

  RCW 90.03.265(1)(b) provides that the requirement for an applicant to pay for the processing of senior applications does not apply in situations where it can be determined that the water allocated to one party will not diminish the water available to a senior applicant from the same source of supply. Because this requested appropriation is non-consumptive, with the proposed ground water to be passed through the turbines and returned to the river, the water-use effects will be neutral to other users, and thus, this application can be processed prior to other pending applications.

INVESTIGATION

The examination of Ground Water Right Application G4-33040 was led by Pacific Groundwater Group which was contracted as part of Ecology's cost reimbursement program to facilitate the processing of the application. Kelsey Collins, of the Dept. of Ecology's Water Resources Program, Central Regional Office, oversaw the examination and provided review.

A site visit was conducted by Jill Van Hulle of Pacific Groundwater Group on April 16, 2012. The tour included the inspection of the production wells and the project site.
The investigation included, but was not limited to, the review of:

- The State Water Code, specifically WAC 173 and RCW 90.03 and 90.44
- Washington State Department of Ecology, 2012, Washington State Well Log Viewer website, http://apps.ecy.wa.gov/welllog/index.asp.
- Washington State Department of Ecology, 2012, Water Rights Tracking System (WRTS) website http://www.ecy.wa.gov/programs/wr/rights/tracking-apps.html
- Hydrogeologic Evaluation of the Hydraulic Connection between Grant PUD Wanapum Facility Wells and the Columbia River, Final Draft by RH2 Engineering, Inc. in July 2011 (RH2, 2011).

Site Description

The project area is largely undisturbed, except for the dam facility, maintenance buildings, and an access highway. Only limited residential development has occurred along the eastern shoreline for dam personnel.

The Wanapum dam is located on the Columbia River in central Washington. The Columbia River is approximately 1,214 miles long, and drains an area of approximately 260,000 square miles in the Pacific Northwest. The Columbia River originates in British Columbia and enters the United States in the northeastern corner of Washington. From there it flows south, and east, then south again to its confluence with the Snake River near Richland, Washington. The Columbia River then turns westward, forming the Washington-Oregon border for 320 miles and eventually entering the Pacific Ocean near Astoria, Oregon.

Geomorphology

The project site is located on the Columbia River in central Washington, along the western edge of a vast basalt plateau that dominates the landscape of central Washington. The volcanic flows were later shaped into canyons and coulees by massive Lake Missoula floods that occurred during Pleistocene glaciations.

The Wanapum Dam is flanked on both shorelines by near vertical basalt cliffs. The Columbia River had carved a deep valley through a thick succession of basalt lava flows. Steep cliffs rise as much as 700 feet above the reservoir level. Erosion of the basalt cliffs that rim much of the Columbia River floodplain and the project reservoir has produced talus slopes at the base of the bedrock cliffs that extend to the waters edge along much of the shoreline. The talus consists predominantly of sand, gravel, cobble, and boulders, as the result of freeze-thaw spalling of basalt from cliff faces (Grant PUD 2003, Technical Appendix E-9.A).

Geology and Hydrogeology

The geology and hydrogeology of the dam area has been studied in detail and was most recently summarized by RH2 Engineering (2011), from which the following description was partly derived. Surficial geologic units in the vicinity of the Wanapum Dam consist of alluvial sand and gravel deposits along and beneath the Columbia River to depths of more than 218 feet. Beneath the sediments and exposed in surrounding cliffs are the regionally extensive basalt formations of the Columbia River Basalt Group, with thin minor sedimentary interbeds between some of the flows. The basalts extend several thousand feet below the Columbia River. The surficial basalt units within the Columbia River Basalt Group underlying the dam site are the Wanapum and Grande Ronde Basalt (GRB) Formations.

The surficial sediments and permeable zones within the basalt, including breciated flow tops and bottoms and pillow-palagonite complexes, have relatively high horizontal permeability. These basalt interbeds, where saturated, serve as the principal water-supply aquifers in the area. The basalt flows also contain vertical fractures that extend through the massive flow centers and hydraulically interconnect the flow tops and bottoms.

Powerhouse Well Description

The proposed point of withdrawal is known as the Powerhouse Well. The well was constructed via a hatch on the dam's Draft Tube Deck and Parking Lot at Wanapum Dam, elevation 527.5 feet. Actual drilling began in the Fish Pump and Water room below the Parking Lot elevation. According to the Well Log, the boring penetrated 41 feet of cement (dam) before continuing into the underlying basalt. As measured from the Draft Tube Deck and Parking Lot, the well is constructed to 185 feet. Water-bearing layers were noted from approximately 105 to 175 feet. These are either brecciated flow tops or brecciated flow bottoms consisting of pillow-palagonite complexes, both of which are highly fractured and more permeable than the massive flow centers (described by the driller as "hard basalt"). The uppermost water-yielding basalt layer in the Powerhouse well is only 6 feet below the bedrock surface. Given the ubiquitous vertical fractures in the Wanapum and GRB Formations, the basaltic aquifers and Columbia River are hydraulically interconnected.

The well is equipped with 3 motors and 3 pumps and provides water for both potable and non-potable purposes. Two of the three pumps are dedicated for non-potable municipal supply and the system is dual plumbed so as to prevent cross-connection between the systems. The other pump is dedicated to consumptive uses authorized under other water rights.

When originally constructed, the well's artesian flow was 25 to 30 gpm. The well appeared to yielded 200 gpm, based on visual observation of an air test by the driller. However, it's currently equipped to produce up to 100 gpm, and there are no plans to increase production. The current wellhead is located at elevation 488.5 feet msl. The static water-level elevation (head) in the Powerhouse well was approximately 531 feet msl at the completion of drilling, which is between the elevations of the Wanapum Pool and the dam's tailwater (492 to 500 feet). The water level has not been monitored to compare groundwater fluctuations with pool or tailwater fluctuations since construction.

Hydrogeology

Although there is not much data specifically related to the Powerhouse Well, other GPUD wells were monitored during general operations to gather background information to support the Applications for Change filed with the Grant County Water Conservancy Board. RH2 Engineering determined that regular use of the Maintenance Center well (located 3,500 feet to the east of the Powerhouse Well) induces drawdown of approximately one foot and the water level quickly recovers back to static conditions (RH2, 2011). Measured drawdown in the Wanapum Village Well No.3 (located approximately two miles to the southeast) due to regular pumping at 100 gpm is on the order of 30 to 35 feet (RH2, 2011). Interference drawdown as measured in Wanapum Village Well No. 3 due to pumping at the Wanapum Village Well No.2 pumping, located approximately 150 feet away from each other, is approximately 10 feet of drawdown.

Prior to 1956, the Columbia River flowed freely past the project site. The construction of Priest Rapids Dam and other hydroelectric projects created large reservoirs that raised the elevation of ground water in the adjacent aquifers. Today groundwater levels in adjacent unconsolidated and basalt aquifers along

much of the Columbia River respond to changes in water levels associated with the management of the river for hydroelectric production and flood management. The analysis of hydrogeologic data for the Wanapum Dam facility indicates that the project wells withdraw groundwater in hydraulic continuity with the Columbia River and are completed in basalt interbeds or immediately overlying unconsolidated sediments.

Lake Wanapum will likely act as a constant-head boundary to the Wanapum and Grand Ronde Basalt aquifer when any of the vicinity wells are pumped, which will reduce the amount and areal extent of drawdown. This further limits the potential for impairment by the Powerhouse well.

Public Water Systems Near Wanapum Dam

The Washington Department of Health's Sentry Internet Homepage[2] was accessed to identify public water systems supplied by groundwater in the vicinity. The geographic area searched included Sections 8, 9, 10, 15, 16, 17, 18, 19, 20, 21, 22, 27, 28, 29, and 30 in Township 16 North, Range 23 East, W.M. This area extends several miles on either side of the river. This search identified no public water systems in the vicinity that are not owned by Grant PUD.

Groundwater Rights Near Wanapum Dam

Washington State Department of Ecology Water Resources Explorer[3] was accessed to identify the location of any wells in the vicinity associated with privately held (non-GPUD) water right documents, such as permits, certificates, and claims. There are no water right documents that have been filed for wells within a 1.5 mile radius of the Powerhouse Well.

Water Wells Near Wanapum Dam

The Washington Department of Ecology's Well Log Viewer[4] was accessed to identify permit exempt wells in the vicinity. The closest wells with posted well logs are shown in Table 3. These wells are believed to be located within a 1.5 mile radius of the subject well.

Table 3 – Well logs for Wells Near Wanapum Dam

Well Tag	Depth	Owner	Location	Date Drilled	Approx. Distance from Powerhouse Well (feet)	County
AGG374	105	ANTOINE JARJOUR	NW NE, Sec 28, T16N, R23E	6/12/2002	9,750	GRANT
AKL567	240	BILL FULLETON	SW NW, Sec 9, T16N, R23E	3/11/2004	5,800	GRANT
	100	DARREL LOPEMAN	SW SW, Sec 9, T16N, R23E	7/10/1992	4,640	GRANT
	58	DAVID SMITH (GPUD)	SE SE, Sec 18, T16N, R23E	7/21/1993	6,300	KITTITAS
AFL859	128	GETTYS COVE (GPUD)	NE SW, Sec 18, T16N, R23E	6/21/1993	6,300	KITTITAS
ALE629	138	ROBERT STEFFES	SW NW, Sec 9, T16N, R23E	3/16/2006	5,740	GRANT
AFH460	100	ROY INGRAM	SW SW, Sec 9, T16N, R23E	2/4/2000	4,850	GRANT

[2] https://fortress.wa.gov/doh/eh/portal/odw/si/Intro.aspx (accessed by RH2 on August 29, 2011) verified by PGG May 4, 2012

[3] https://fortress.wa.gov/ecy/waterresources/map/WaterResourcesExplorer.aspx (accessed by RH2 on August 29, 2011, verified by PGG May 4, 2012

[4] http://apps.ecy.wa.gov/welllog/index.asp (accessed on August 29, 2011)

Water Quality Issues

The USFWS has expressed concerns regarding the potential for contaminated water entering the river as a result of contact with the turbines. This concern is shared by Ecology's Water Quality Program which is working with Grant PUD to ensure that water quality standards are met.

While the enforcement of specific water quality practices is beyond the scope of this water right permit, a provision has been added to remind Grant PUD that they are responsible for remaining in compliance with all required water quality standards.

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

Beneficial Use

Grant PUD has proposed to use this water for beneficial purposes including industrial supply associated with a hydro-electrical facility. Water serves the added function of making sure that the fish passage infrastructure is kept fully operational.

Grant PUD has requested that this right be issued with a municipal use designation. While originally filed for industrial purposes the use of water under this water right application qualifies as being a governmental or governmental proprietary purpose and a public utility district is one of the exclusive governmental entities that can qualify.

Grant PUD further qualifies as a municipal provider based on its operation of the Wanapum Powerhouse Water System which is a Group A water system (Water System I.D. No. 29080P), as well as other systems that supply the Wanapum and Priest Rapid complexes.

Under RCW 90.03.386(2) the place of use of a municipal water right automatically becomes the service area as approved by the (DOH) in an approved planning or engineering document. Grant PUD has requested that the place of use of this water right be slightly different than the current service area approved by DOH in their most recent water system plan. Grant PUD intends to submit the refined service area description contained in this report of examination for DOH approval at the time of their next water system plan update.

Availability

Water is physically available for use and has been used for shaft seal lubrication since the well was installed in 1973. Legally water is available due to the fact that the aquifer the well is completed in has a hydraulic connection with the Columbia River and the use is non-consumptive with all water being returned to the river within the immediate vicinity of the dam.

Potential for Impairment

WAC 173-563-040(1) identifies Priest Rapids Dam as a control station for flow in this reach of the Columbia River. Since the Powerhouse Well is capturing groundwater that is flowing from the Wanapum Pool to the Priest Rapids Pool and returning that same water directly to the river, the discharge of the Columbia River past Priest Rapids Dam will not be reduced due to the request.

Other groundwater users will not be impaired due to the sparse distribution of other wells and water systems and the fact that the amount of drawdown caused by the operation of this well is projected to be very minor, based on conditions in other PUD wells that show high continuity with the Columbia River (RH2, 2011).

Public Welfare

RCW 90.03.290 requires that a proposed appropriation not be detrimental to the public interest. The Water Resources Act of 1971 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 the state's natural resources and values with the state's 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.

In the present case, water use will not be detrimental to public interest because it will be used to produce clean, renewable low cost hydroelectric power, and will preserve instream flows because it is non-consumptive. This water supply is also for operation of the pumps that supply the fishway; a requirement of 2008 Biological Opinion issued by the National Marine Fisheries Service (NMFS) for Wanapum Dam and the District's 2008 FERC license. As such, this water supply promotes uses that preserve the state's natural resources and enhance economic interests vital to the region. Based on the foregoing analysis, issuance of this water right will not be detrimental to the public interest.

CONCLUSIONS

The conclusions based on the above investigation are as follow:

1. The proposed appropriation for Municipal Supply purposes (non-consumptive industrial) is a beneficial use of water;
2. The 200 gpm requested is available for appropriation, however only 100 gpm is actually being used and there are no plans to expand the use of this well;
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 above investigation and conclusions, I recommend that this request for a water right be approved and that a permit be issued in the amounts and within the limitations listed below and subject to the provisions on page 1-2.

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:

- 100 gpm, 150 acre-feet per year for the purpose of continuous Municipal Supply
- The Point of Withdrawal is located approximately at the center of Section 17, Township 16 North, Range 23 E.W.M.
- Place of Use is the service area described in the most recent Water System Plan/Small Water System Management Program approved by the Washington State Department of Health, so long as the water system is and remains in compliance with the criteria in RCW 90.03.386(2).

Report by: Jill E Van Hulle 12/10/12

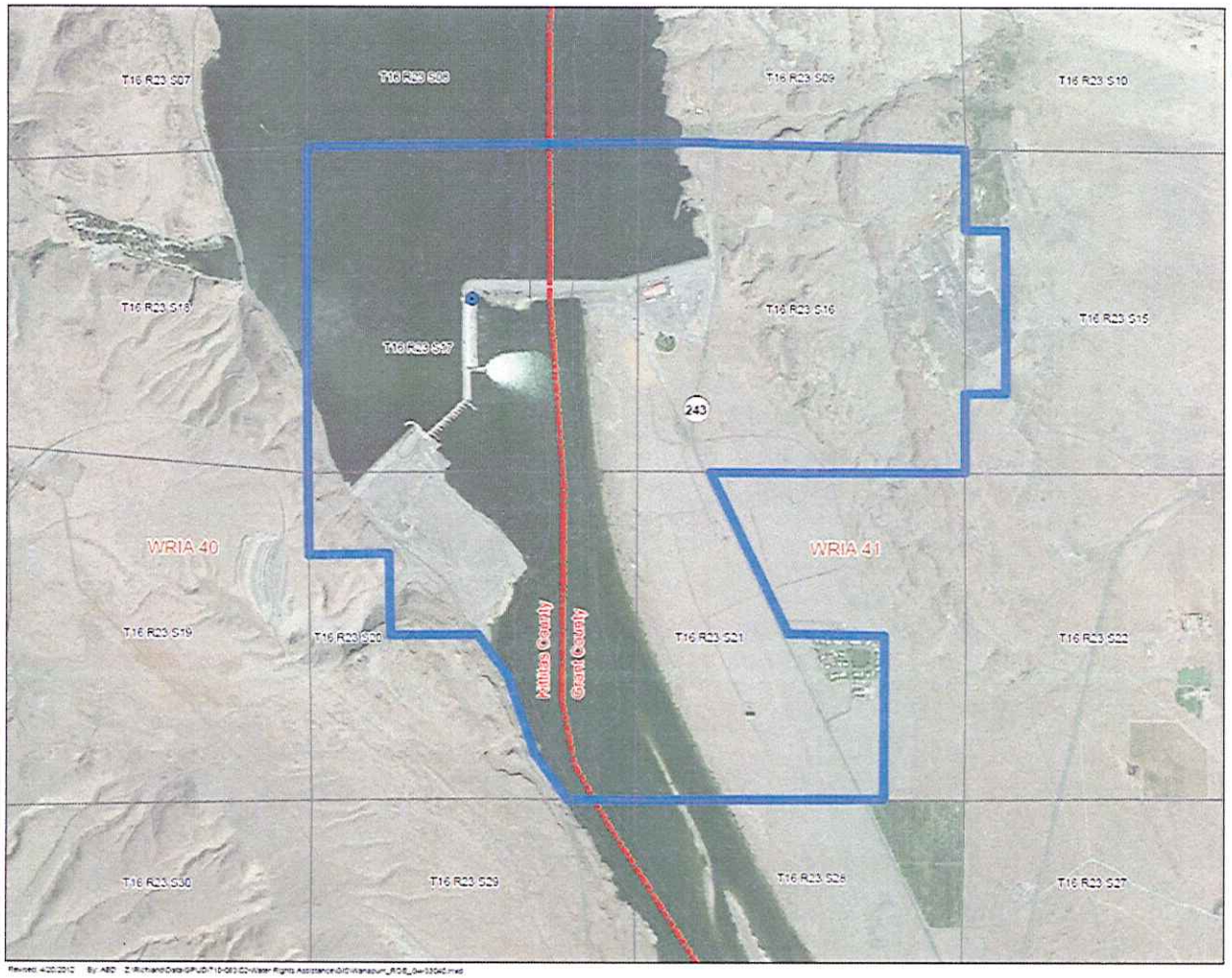
Jill Van Hulle, Pacific Groundwater Group Date

Reviewed by: Kelsey S. Collins 12/6/12

Kelsey S. Collins, Water Resources Program Date

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.

ATTACHMENT 1



G4-33040
Approved Place of Use & Point of Withdrawal Location

Legend

Point of Withdrawal

Place of Use

Township, Range, Section

County & WRIA Boundary

RH2

0 1,500 3,000 Feet

1 " = 1,500 '

DATA SOURCES:
Water Rights, Place of Use, WRIA Boundary:
Washington State Dept. of Ecology
Proposed Retail Service Area: Drawn from Exhibit K maps.
Township, Range, Section: Grant County GIS

This map is a geographic representation based on information available. It does not represent survey data. No warranty is made concerning the accuracy, currency, or completeness of data depicted on this map.