DEPARTMENT OF ECOLOGY
State of Washington

State of Washington
REPORT OF EXAMINATION
FOR WATER RIGHT APPLICATION

G4-35266
WAC Doc ID: 4664978

PRIORITY DATE
January 22, 2010

WATER RIGHT NUMBER
G4-35266

MAILING ADDRESS
Public Utility District No. 2 of Grant County
PO Box 878
Ephrata WA 98823-0878

SITE ADDRESS
White River Acclimation Facility
23721 Little Wenatchee Road
Leavenworth WA 98826

Quantity Authorized for Withdrawal

WITHDRAWAL RATE	UNITS	ANNUAL QUANTITY (AF/YR)
120	GPM	32

Purpose

PURPOSE	WITHDRAWAL RATE ADDITIVE	WITHDRAWAL RATE NON-ADDITIVE	UNITS	ANNUAL QUANTITY (ac-ft/yr) ADDITIVE	ANNUAL QUANTITY (ac-ft/yr) NON-ADDITIVE	PERIOD OF USE (mm/dd)
Fish Acclimation (nonconsumptive use)	120		GPM	32		Continuously

Source Location

COUNTY	WATERBODY	TRIBUTARY TO	WATER RESOURCE INVENTORY AREA
Chelan	Alluvial Aquifer		45-Wenatchee

SOURCE FACILITY/DEVICE	PARCEL	TWN	RNG	SEC	QQ Q	LATITUDE	LONGITUDE
Well No. 1	271610340030	27N	16E	10	NESW	47°50'59.73"N	120°50'4.19"W
Well No. 3	271610340030	27N	16E	10	SESW	47°50'57.48"N	120°50'5.60"W

Datum: NAD83/WGS84

Place of Use (See Map: Attachment 1)

PARCEL

271610340030

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

Lot 4, Mike McComas Short Plat No. 3449, according to the plat thereof recorded July 8, 1997 in Book SP-14 of Short Plats, Pages 96 and 97, Chelan County, Washington, within the SE¼SW¼ of Section 10, T. 27 N., R. 16 E.W.M.

Proposed Works

The White River Acclimation Facility is supported by two wells. Well No. 1 was completed with a 6-inch diameter casing and a 60-slot well screen assembly from 174 to 184 feet below ground surface (bgs). Well No. 3 was completed with a 6-inch diameter casing and a 30-slot well screen assembly from 233 to 238 feet below ground surface (bgs). Each well will be equipped with submersible pump(s) capable of a total combined flowrate of up to 125 gallons per minute. Water will be conveyed a short distance and discharged onto the surface water diversion structure to control frazil ice.

Development Schedule

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
May 1, 2013	September 1, 2015	September 1, 2020

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
What rate should be reported?	Annual Peak Rate of Withdrawal (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 Central Region Office. If you do not have Internet access, you can still submit hard copies by contacting the Central Region Office for forms to submit your water use data.

Well Construction Standards

All wells constructed in the state shall meet the "Minimum Standards for the Construction and Maintenance of Wells" (WAC 173-160) and "Water Well Construction" (RCW 18.104). In general, wells shall be located at least 100 feet from sources of contamination and at least 1,000 feet of the boundary of a solid waste landfill. Any well which is unusable, abandoned, or is an environmental, safety, or public health hazard shall be decommissioned.

All wells shall be tagged with a Department of Ecology unique well identification number. If you have an existing well and it does not have a tag, please contact the well-drilling coordinator at the regional Department of Ecology office issuing this decision. This tag shall remain attached to the well. If you are required to submit water measuring reports, reference this tag number.

Installation and maintenance of an access port is required (WAC 173-160- 291(3)).

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.

Water Use Efficiency
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.

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.

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. G4-35266, 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 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	**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

Signed at Yakima, Washington, this 28th day of February 2012.

Mark Kemner, Section Manger
Water Resources Program/CRO

INVESTIGATOR'S REPORT

BACKGROUND

Project Description

On January 22, 2010, Public Utility District No. 2 of Grant County (Grant PUD) filed Application No. G4-35266, requesting appropriation of public groundwater to support a fish acclimation facility. The applicant proposed to withdraw 150 gallons per minute (gpm), and a cumulative annual withdrawal volume (Qa) of 160 acre-feet per year (ac-ft/yr). The purpose of use is for fish acclimation year round, as needed (see the application summary in Table 1 below).

The proposed White River Acclimation Facility is located on the bank of the White River in the Wenatchee River Basin Water Resource Inventory Area (WRIA 45), approximately 1.1 miles upstream of Lake Wenatchee. The large-scale facility will over-winter, rear, and acclimate up to 165,000 Endangered Species Act (ESA)-listed spring Chinook salmon.

The primary use of the groundwater at the facility will be to control frazil ice on the surface water intake screens. The surface water (authorized under S4-35267) is the primary water supply to the facility used to acclimate up to 30,000 spring Chinook salmon.

Table 1
Summary of Application No. G4-35266

Attributes	*Proposed*
Applicant	Public Utility District No. 2 of Grant County
Application Received	January 22, 2010
Quantity	150 gpm, 160 ac-ft/yr
Source	2 wells
Points of Withdrawal	NE¼ SW¼ and SE¼ SW¼, Section 10, T. 27 N., R. 16 E.W.M.
Purpose of Use	Fish Acclimation
Period of Use	Year round
Place of Use	White River Acclimation Facility within the SE¼, SW¼, Section 10, T. 27 N., R. 16 E.W.M.

Legal Requirements for Application Processing
The following requirements must be met prior to processing a water right application:

- **Public Notice**
  Notice of the proposed appropriation was published in the *Wenatchee World* of Wenatchee, Washington and the *Leavenworth Echo* of Leavenworth, Washington on April 12 and 19, 2010. No protests were received by Ecology.

- **State Environmental Policy Act (SEPA)**
  The subject application is categorically exempt under SEPA (WAC 197-11-305 and WAC 197-11-800(4)) because the instantaneous quantity is less than the 2,250 gpm threshold. However, a SEPA review for the project (including the corresponding surface water diversion) was completed by Grant PUD and concluded with a Determination of Nonsignificance issued on December 1, 2010. No comments were received.

- **Water Resources Statutes and Case Law**
  Chapter 90.44 RCW authorizes the appropriation of groundwater for beneficial use and describes the process for obtaining a water right. Laws governing the water right permitting process are contained in RCW 90.03.250 through 90.03.340. Based on the provisions of RCW 43.21A.690 and RCW 90.03.265, this application has been processed by Aspect Consulting, LLC (Aspect Consulting) under Ecology Cost-Reimbursement Agreement No. ASP009 (master contract No. C1000185).

Priority Processing
The Grant PUD requested that Application No. G4-35266 be processed under WAC 173-152-050(2)(b), commonly known as the Hillis Rule. This rule allows Ecology to prioritize the processing of new water right applications that are nonconsumptive, and include qualifying measures that substantially enhance or protect environmental quality in a watershed.

Guidance regarding classification of water uses as nonconsumptive for concurrent use of groundwater and surface water is given by Ecology's Water Resources Program, Policy POL 1020 (Ecology 1991). The policy defines water use as nonconsumptive when "water captured is returned in close proximity to the source immediately after use" and direct hydraulic continuity between the source and point of discharge is unequivocal. Likewise, WAC 173-545-030(12) defines nonconsumptive use when "...there is no diminishment in the overall amount or quality of water in the water source".

The second criterion for priority processing is that the new use will provide for significant environmental benefit. Grant PUD is committed to mitigate for unavoidable loss from operation of the Priest Rapids Hydroelectric Project. The White River spring Chinook salmon is one of the few, if not the only, groups of spring Chinook that migrates over 500 miles and through a lake to spawn in a glacially fed river. Application No. G4-35266 will help support this population of spring Chinook salmon. Based on this information, Ecology has concluded that the subject applications also meet the environmental enhancement/protection criterion for priority processing under WAC 173-152-050(2)(b).

INVESTIGATION

Aspect Consulting reviewed available documents pertaining to the application's site conditions, projected water usage and demand, and the potential effect on existing water right holders and instream flows. This included the information submitted by the applicant and pertinent Ecology records. Most notably, it included review of the Grant PUD's Hatchery and Genetic Management Plan (HGMP) summarizing the recommendations of the Priest Rapids Coordination Committee (PRCC), Hatchery Subcommittee. Grant PUD must meet the terms and conditions of the 2008 Biological Opinion (BiOp) issued by the National Oceanic Atmospheric Administration (NOAA) for the Priest Rapids Hydroelectric Project and the Priest Rapids Project Salmon and Steelhead Settlement Agreement. These requirements are incorporated into the new Federal Energy Regulatory Commission (FERC) License, issued April 17, 2008, for continued operation of the Priest Rapids and Wanapum hydroelectric dams located on the Columbia River.

A site visit was performed on November 5, 2010. Tyson Carlson of Aspect Consulting and Kelsey Collins representing Ecology met with Ross Hendrick of the Grant PUD. The site visit included inspection of the proposed point(s) of withdrawal and place of use, and an interview with the applicant.

Project Description

The PRCC Hatchery Subcommittee oversees the development, implementation, and monitoring of species-specific hatchery programs designed to supplement naturally producing populations, including spring, summer, and fall Chinook, steelhead, sockeye, and coho salmon. The HGMP (Grant PUD 2009) presents the supplementation program specifically designed for spring Chinook salmon in the White River. The purpose of the program is to mitigate for unavoidable mortality of spring Chinook salmon at the Priest Rapids and Wanapum Dams as well as to conserve, and ultimately restore the naturally spawning White River spring Chinook salmon. The ultimate goal of the supplementation program is the annual release of up to 165,000 spring Chinook smolts to the White River.

Since 1997, the White River spring Chinook supplementation program has been in a juvenile-based captive brood phase. After rearing in captivity to adulthood, the adults are spawned and their progeny are grown to smolt size for release back into the White River. However, the program is transitioning into as adult-based supplementation phase, where White River origin adults are trapped and spawned, grown to smolt size, then released. Adult holding, spawning, incubation, and early rearing activities will occur outside of the White River Basin at the Little White Salmon National Fish Hatchery, but final acclimation will be required at the White River Acclimation Facility (and several short-term sites) located within the basin.

Site Description

The proposed Bridge Site acclimation facility is located on a 17-acre plot approximately 1.1 river miles above Lake Wenatchee on the north side of the White River in the southwest quarter of Section 10, in Township 27 North, Range 16 East Willamette Meridian. Grant PUD owns the property.

The points of withdrawal are located on the northern side of the property, approximately 1,000 to 1,200 feet from the White River. Well No. 1 (Tag No. BAP019) was completed with a 6-inch diameter casing and a 60-slot well screen assembly from 174 to 184 feet below ground surface (bgs). Well No. 3 (Tag No. BAP349) was completed with a 6-inch diameter casing and a 30-slot well screen assembly from 233 to 238 feet bgs. Well No. 2 was not completed as a production well, but was used as an observation wells during testing of Well No. 3.

Following completion, testing of Well No. 1 and No. 3 indicate an average transmissivity of approximately 84 and 529 ft^2/d, respectively. Based on calculated aquifer parameters and availability drawdown, Well Nos. 1 and 3 were rated for a maximum sustainable flowrate of 50 and 75 gpm, respectively (Anchor 2011).

The testing results are reflective of the heterogeneous nature of the White River valley aquifer. The wells are completed within relatively thin, discontinuous water bearing interbeds located in a thick sequence of fine-grained deposits overlying bedrock. The sequence is likely the result of ancient meanderings of the White River and backwater conditions during several glacial and nonglacial cycles. Additional information regarding well testing and geologic setting is available in the White River Bridge Site Groundwater Report (Anchor 2011).

Well Nos. 1 and 3 will each be equipped with a submersible pump capable of a total combined flowrate of up to 125 gallons per minute. Water will be conveyed to and discharged onto the surface water diversion structure to control frazil ice. Demand to control frazil ice will depend on frequency and length of extreme cold weather during fish acclimation, October to May, conservatively estimated to be up to 8 weeks per year.

Agency Consultation Process

During the early stages of the application process, the Grant PUD solicited support from numerous entities, including those participating on the PRCC Hatchery Subcommittee. A Statement of Agreement (SOA) supporting the subject water right application was approved by NOAA Fisheries, Washington Department of Fish and Wildlife (WDFW), the United States Fish and Wildlife Service, and local Native American tribes, including the Tribes and Bands of the Yakama Nation and the Confederated Colville Tribes on September 16, 2010.

Water Quality

Ecology has established a total maximum daily load (TMDL) for the Wenatchee River and tributaries, which are known to exceed the water quality criteria for temperature, July through September, and Dissolved Oxygen (DO) and pH, which includes phosphorus. In response to the TMDLs, Ecology prepared a Water Quality Improvement Report for each TMDL (Ecology 2007a and 2009) providing targets for reducing loading to the Wenatchee River and its tributaries, along with implementation action items and associated timeframes. The Water Quality Improvement Report for DO and pH included the recommendation of no increase in nutrient loading for the upper Wenatchee River.

Four Statutory Tests

This Report of Examination (ROE) evaluates the application based on the information presented above and in referenced FERC relicensing documents. 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.

Beneficial Use
In accordance with RCW 90.54.020(1), the proposed appropriation for fish acclimation is a beneficial use of water. As detailed on the Application for Permit, the point(s) of withdrawal will be supported by the necessary infrastructure to deliver the full appropriation of water to the acclimation facility. The rate at which the water will be withdrawn is needed to control frazil ice on the surface water intake screen and protect the only source of water to sustain up to 165,000 spring Chinook salmon during over-winter acclimation.

Availability
Based on the information summarized above, we conclude that the quantity of water requested for use in this application is available for appropriation. Groundwater will be withdrawn from the alluvial aquifer in continuity with the White River. Water will be returned to the White River in the same amount as is withdrawn immediately after use, at a point in close proximity to the alluvial aquifer. The appropriation is therefore defined as non-consumptive concurrent use of ground and surface water.

Inspection of the 2009 Water Year data indicate that the White River just upstream of the Bridge Site (Ecology gage ID 45K090), had an annual mean discharge rate of 700 cfs, with a daily mean ranging from 117 to 4,270 cfs. Low flows are typically associated with the late summer (August to October), while high flows are the result of peak winter storm cycles and spring runoff. Flows during the intended period of use are approximately 200 cfs (March) and steady increase to over 3,000 cfs by the end of May. Based on the period of record available (2002 to present), the 2009 Water Year was average.

Based on this data, the quantity of water requested for use in this application is physically available for appropriation.

Potential for Impairment
RCW 90.03.290 and RCW 90.44.060 require a determination that a new appropriation will not impair existing rights. There are numerous water right certificates, permits, and claims for the White River and wells in continuity with the river.

The nearest existing groundwater user to the acclimation facility's point(s) of withdrawal is located approximately 200 feet east of well No. 1 and approximately 450 feet northeast of well No. 3. The exempt domestic well (ACE-590) currently serves one residence. During testing of well No. 1, the neighboring well was monitored during the 12-hour constant rate test, resulting in approximately 6 feet of interference drawdown. Additional interference drawdown will result from simultaneous pumping of well No. 3, likely limited to less than 9 feet (Anchor 2011). Together, the cumulative interference drawdown (15 feet) would be a small percentage of total available drawdown (95 feet) of the neighboring well. Therefore, no impairment of groundwater rights, as defined by WAC 173-150, is expected to occur.

There is also an instream flow rule for the Wenatchee River Basin established as part of an Instream Resources Protection Program (IRPP), WAC Chapter 173-545 to protect water quality, wildlife, fish, and other environmental values, as well as aesthetics, recreation and navigation, and to meet certain future out-of-stream water needs. The IRPP defines minimum instantaneous flows in reaches defined by nine control stations throughout the Basin. The program limits, and in some cases prohibits, issuance of new water rights that conflict with the adopted instream flows in these specified stream management units.

As defined by the WAC, the control point (stream gage station) that defines the stream management unit most applicable to the application under consideration is 12-4570.00 (Wenatchee River at Plain), extending from the headwaters of the Wenatchee River – including the Little Wenatchee and White Rivers – downstream to the Beaver Valley Highway Bridge in the town of Plain. Minimum instream flows in WAC 173-545-060(7) for this stream management unit are specified year round and fluctuate seasonally from a low of 520 cfs to a high of 2,500 cfs.

The configuration of the hatchery intake, ground water sources, and outfall provides that water will be returned to the White River within the same pool at a point proximate to where it is diverted or withdrawn. No diminishment in the overall amount or quality of water will occur. Therefore, because the proposed appropriation is nonconsumptive, no reduction in the availability of surface water or ground water is expected.

Public Welfare

No protests to the application were received. The proposed appropriation will support the Grant PUD's obligation to mitigate for the Priest Rapids Hydroelectric Project. An approved SOA was submitted from the PRCC Hatchery Subcommittee, which includes NOAA Fisheries, WDFW, the United States Fish and Wildlife Service, and local Native American tribes, including the Bands of the Yakama Nation and the Confederated Tribes of the Colville Reservation.

The IRPP WAC 173-545 and WRIA 45 Watershed Plan are expressions of the public interest. Since the proposed use is considered non-consumptive it is compatible with the intent of the IRPP WAC 173-545-110(a).

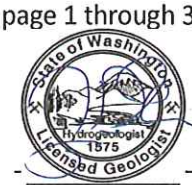
CONCLUSIONS

The conclusions based on the above investigation are as follow:

1. The proposed appropriation for fish acclimation at the White River Acclimation Facility is a beneficial use of water;
2. The quantity of water requested for nonconsumptive use in this application is available for appropriation;
3. The proposed nonconsumptive appropriation will not impair senior water rights; and
4. The proposed appropriation will not be detrimental to the public interest.

RECOMMENDATION

Based on the information presented above, the author recommends that the request to appropriate groundwater from the White River for fish acclimation be approved in the amounts described, limited, and provisioned on page 1 through 3 of this report.

Report by: 

Tyson D. Carlson — Aspect Consulting, LLC — Date

Reviewed by: Kelsey S. Collins — 2/28/12
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.

CITATIONS

Anchor QEA 2011. White River Bridge Site Groundwater Report. Prepared for Grant County Public Utility District. April 2011.

Ecology 1991. Water Resources Program Policy POL 1020, Consumptive and Nonconsumptive Water Use. October 31, 1991.

Ecology 2004. Water Resources Program Policy POL 1021, Priority Processing – Water Budget Neutral Projects. January 21, 2004.

Ecology 2007. Wenatchee River Watershed Temperature Total Maximum Daily Load, Water Quality Improvement Report. Publication No. 07-10-045. July 2007.

Ecology 2009. Wenatchee River Watershed Dissolved Oxygen and pH Total Maximum Daily Load, Water Quality Improvement Report. Publication No. 08-10-062. August 2009.

Federal Energy Regulatory Commission 2008. Order Issuing New License. Public Utility District No. 2 of Grant County, Washington. Project No. 2114-116. April 17, 2008.

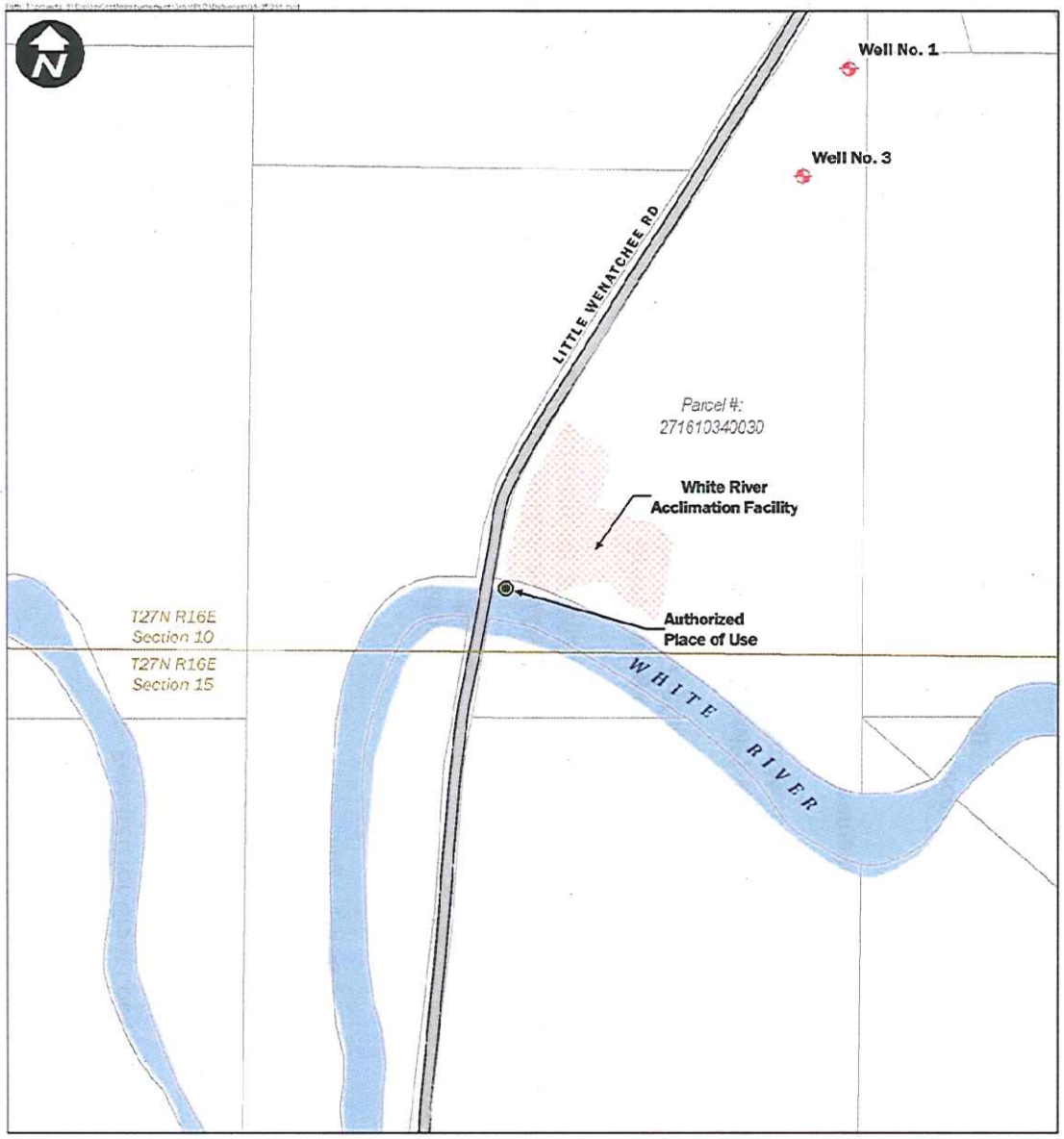
Grant PUD 2009. Hatchery and Genetic Management Plan (HGMP), Upper Columbia River Spring-run Chinook Salmon – White River Supplementation Program. September 15, 2009.

Grant PUD 2006. Priest Rapids Salmon and Steelhead Settlement Agreement. Priest Rapids Salmon and Steelhead Settlement Agreement. February 9, 2006.

NOAA Fisheries. 2008. Biological Opinion and Magnuson-Steven Fishery Conservation and Management Act. New License for the Priest Rapids Hydroelectric Project. NMFS Log Number 2006/01457. February 1, 2008.

Washington Administrative Code, Chapter 170-545 2008. Instream Resources Protection Program for the Wenatchee River Basin, Water Resource Inventory Area (WRIA) 45. April 10, 2008.

REPORT OF EXAMINATION



Comments: *Place of use and point of withdrawal are defined on the cover sheet under the heading "LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED."*

Authorized Point of Withdrawal
Authorized Place of Use
Sections (TRS)
Tax Parcel

0 150 300 600
Feet

No. G4-35266
(Public Utility District No. 2 of Grant County)
T27N R16E Sec 10
WRIA 45, Chelan County, Washington

Aspect Consulting	Oct., 2011	ATTACHMENT NO. 1
	090180 / TDC / LAH	

Attachment 1