DEPARTMENT OF ECOLOGY
State of Washington

State of Washington
REPORT OF EXAMINATION
FOR WATER RIGHT APPLICATION
WRTS File # G4-35343

File No. G4-35343
WR Doc ID: 4683954

PRIORITY DATE
June 8, 2010

APPLICATION NUMBER
G4-35343

MAILING ADDRESS
Public Utility District No. 1 of
Okanogan County
P.O. Box 912
Okanogan, WA 98840

SITE ADDRESS (IF DIFFERENT)
77 Ironwood Street
Oroville, WA 98844

Quantity Authorized for Withdrawal or Diversion

DIVERSION RATE	UNITS	ANNUAL QUANTITY (AF/YR)
898	GPM	1,085

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)
Fish and Wildlife Maintenance and Enhancement	898	0	GPM	1,085	0	01/01 – 12/31

Source Location

WATERBODY	TRIBUTARY TO	COUNTY	WATER RESOURCE INVENTORY AREA
Well		Okanogan	49 - Okanogan

SOURCE FACILITY/DEVICE	PARCEL	TWN	RNG	SEC	QQ Q	LATITUDE	LONGITUDE
Well	9940273384	40N	27E	33	NW SE		

Place of Use (See Map, Attachment 1)

PARCEL

Existing side-channel of the Similkameen River adjacent to Parcel 9940273384

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

S½NW¼SE¼, Section 33, T. 40 N., R. 27 E.W.M. falling approximately along the left bank meander line of the Similkameen River.

Proposed Works

A well completed in the shallow unconfined aquifer, equipped with a 25 to 30 horsepower (hp) pump. Well will discharge water through a perforated pipe into a constructed riffle at the head of the side-channel. The side-channel will be approximately 800-ft in length with an average gradient of 0.0015 feet/feet or 0.15 percent. From the side-channel the water will discharge into the mainstem Similkameen River.

Development Schedule

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
December 31, 2015	December 31, 2017	December 31, 2022

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?	Monthly Volume
What rate should be reported?	Monthly Peak Rate of Withdrawal (gpm)

Provisions

Well Completion

Any well drilled under this authorization must be completed in the shallow alluvial aquifer as described in the report of examination.

Department of Fish and Wildlife Requirement(s)

A Hydraulic Project Approval (HPA) permit will be required for construction related to discharging water to the Similkameen River side-channel as part of the proposed project.

Well Head Protection

In accordance with WAC 173-160, wells shall not be located within certain minimum distances of potential sources of contamination. These minimum distances shall comply with local health regulations, as appropriate. In general, wells shall be located at least 100-ft from sources of contamination. Wells shall not be located within 1,000-ft of the boundary of a solid waste landfill.

Well Construction Standard

All wells constructed in the state shall meet the construction requirements of WAC 173-160 titled "Minimum Standards for the Construction and Maintenance of Wells" and RCW 18.104 titled "Water Well Construction". Any well which is unusable, abandoned, or whose use has been permanently discontinued, or which is in such disrepair that its continued use is impractical or is an environmental, safety or public health hazard shall be decommissioned.

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-ft 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.

Well Tag

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.

Access Port

Required installation and maintenance of an access port as described in WAC 173-160-291(3).

Measurements, Monitoring, Metering and Reporting

An approved measuring device must be installed and maintained for each of the sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", WAC 173-173, which describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements. Installation, operation and maintenance requirements are enclosed as a document titled "Water Measurement Device Installation and Operation Requirements". http://www.ecy.wa.gov/programs/wr/measuring/measuringhome.html

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.

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, records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.

The point of withdrawal is located on property not owned by the water right holder (OKPUD). The land owner has asked that the OKPUD provide notification before going on-site. OKPUD has informed the landowner that district staff will accompany anyone that needs to visit the site. Ecology staff will need to contact OKPUD far enough in advance of any site visits to allow time for OKPUD to provide notification to the property owner.

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.

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.

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. G4-35343, 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.

Address and Location Information

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 6 day of August 2013.

Mark Kemner, LHG, Section Manager
Water Resources Program/CRO

If you need this document in an alternate format, please call the Water Resources Program at 509-575-2490. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

INVESTIGATOR'S REPORT

BACKGROUND

Public Utility District No. 1 of Okanogan County (OKPUD) proposes to develop a side-channel enhancement area project as a prevention, mitigation, and enhancement measure to mitigate for potential impacts on aquatic resources from the Enloe Hydroelectric Project (Federal Energy Regulatory Committee (FERC) No. 12569). Elevated summer stream temperature is a significant limiting factor for salmonids in the Similkameen and adjacent Okanogan Rivers. The project would address this limiting factor by pumping cool ground water from the proposed well to the side-channel, providing cold water for rearing salmonids, particularly salmon and steelhead, and improving their habitat. The proposed water right is for fish and wildlife maintenance and enhancement in the side-channel enhancement area.

OKPUD has filed change applications for two existing water rights to add the east bank of the river as a new point of diversion and new place of use (application numbers CS4-CV1P243(A) and CS4-CV1P243(B)) as well as an application for an additional hydropower water right at Enloe Dam (application number S4-35342) and this groundwater application designed to provide environmental mitigation for any instream impacts that result from the project (application number G4-35343). These other applications are addressed in separate ROEs.

Table 1
Summary of Application No. G4-35343

Attributes	*Proposed*
Applicant	Public Utility District No. 1 of Okanogan County
Application Received	June 8, 2010
Instantaneous Quantity	898 gpm
Source	Well
Point of Diversion	NW¼SE¼ Section 33, T. 40 N., R. 27 E.W.M.
Purpose of Use	Fish Propagation [1]
Period of Use	Year round
Place of Use	S½NW¼SE¼, Section 33, T. 40 N., R. 27 E.W.M. falling approximately along the left bank meander line of the Similkameen River.

[1] Although the applicant requested a water right for fish propagation. We feel that Fish and Wildlife Maintenance and Enhancement is a more appropriate description of the proposed use, which is consistent with descriptions of beneficial use in RCW 90.54.020(1).

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 published in the *Okanogan Valley Gazette-Tribune* and *Quad City Herald* on February 10 and February 17, 2011. One written protest was received by Ecology on March 18, 2011, during the 30-day protest period. The protest was from the Center for Environmental Law and Policy (CELP) on behalf of CELP, the Sierra Club Washington State Chapter, Spokane Falls Trout Unlimited, Citizens for a Sustainable Okanogan, and the Columbia River Bioregional Education Project.

  The protest letter is discussed in the *Consideration of Protests and Comments* section below.

- **State Environmental Policy Act (SEPA)**
  On April 4, 2012, OKPUD submitted a SEPA Determination of Nonsignificance (DNS) and Environmental Checklist, with supporting documents, for the four water right applications associated with the Enloe Dam Hydroelectric Project on the Similkameen River. These applications are in support of the PUD's Federal Energy Regulatory Commission (FERC) proposed license for the Enloe Dam Project, FERC No. 12569. Based on these documents, the PUD has determined that issuance of the requested water rights will not have a probable significant environmental impact and, therefore, they have prepared a DNS. The DNS was published on April 4 and 5 in the Omak-Okanogan Chronicle and the Gazette Tribune, respectively. This publication completes the environmental review associated with the four water right applications. Interested parties had until April 18 to submit written comments or permitting requirements.

  A comment letter was received from the Washington Department of Fish and Wildlife, dated April 17, 2012, which expressed concerns about the protection of flows in the bypass reach. OKPUD has replied to the WDFW and explained that the ROEs will be conditioned on OKPUD meeting the requirements of the State 401 water quality certification which, in turn, will be a condition of the FERC license. Both the FERC license and the 401 water quality certification will specify the flow requirements for the bypass reach and the methods of providing those flows. Indeed, the water right ROEs for each of the OKPUD applications include a provision that the water cannot be used for hydropower unless the requirements of the 401 water quality certification are met, which include the bypass flows and temperature criteria among other things.

  The Department of Ecology's environmental review staff commented in a letter dated April 16, 2012, that the details of the project relating to water rights will be addressed as part of the water right permitting process.

- **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 90.03.340.

- **Expedited Processing**
  Based on the provisions of RCW 43.21A.690 and RCW 90.03.265, this application has been processed by RH2 Engineering, Inc., under Ecology Cost-Reimbursement Agreement

No. C1000190; Work Assignment Number RH2002. The side-channel enhancement project will have no net consumptive use and the subject application will not diminish the water available to earlier pending applications from the same source of supply. Therefore, this application meets the criterion for expedited review under RCW 90.03.265(1)(b).

INVESTIGATION

Project Description

This project is intended to pump groundwater, which exhibits consistent year round temperatures that fall within the ideal salmonid range, into a side-channel of the Similkameen River. Pumping will occur when either flow augmentation is needed or when water temperature in the side-channel rises above the optimum temperature range for salmonid growth. The goal is that the side-channel will become a cold water refuge for rearing salmonids, particularly salmon and steelhead, in this reach of the river.

A well will be drilled into the shallow unconfined aquifer to a depth of approximately 40-ft. Water will be conveyed from the well through a pipe to a dissipation manifold secured to the bottom of a constructed riffle at the head of the side-channel. Water will be introduced to the channel under low pressure. The side-channel is a natural feature that will be enhanced through the introduction of the groundwater discharge. The channel is approximately 800-ft in length with an average gradient of 0.0015 feet/feet or 0.15 percent. From the side-channel the water will discharge into the mainstem of the Similkameen River.

The well will operate dependent on flow and temperature conditions in the side-channel. While it is likely that the well will be operating continuously during the summer months and will be idle the rest of the year, the period of use on this water right is year round to provide flexibility to OKPUD to be able to provide groundwater to the side-channel when needed.

Site Visit

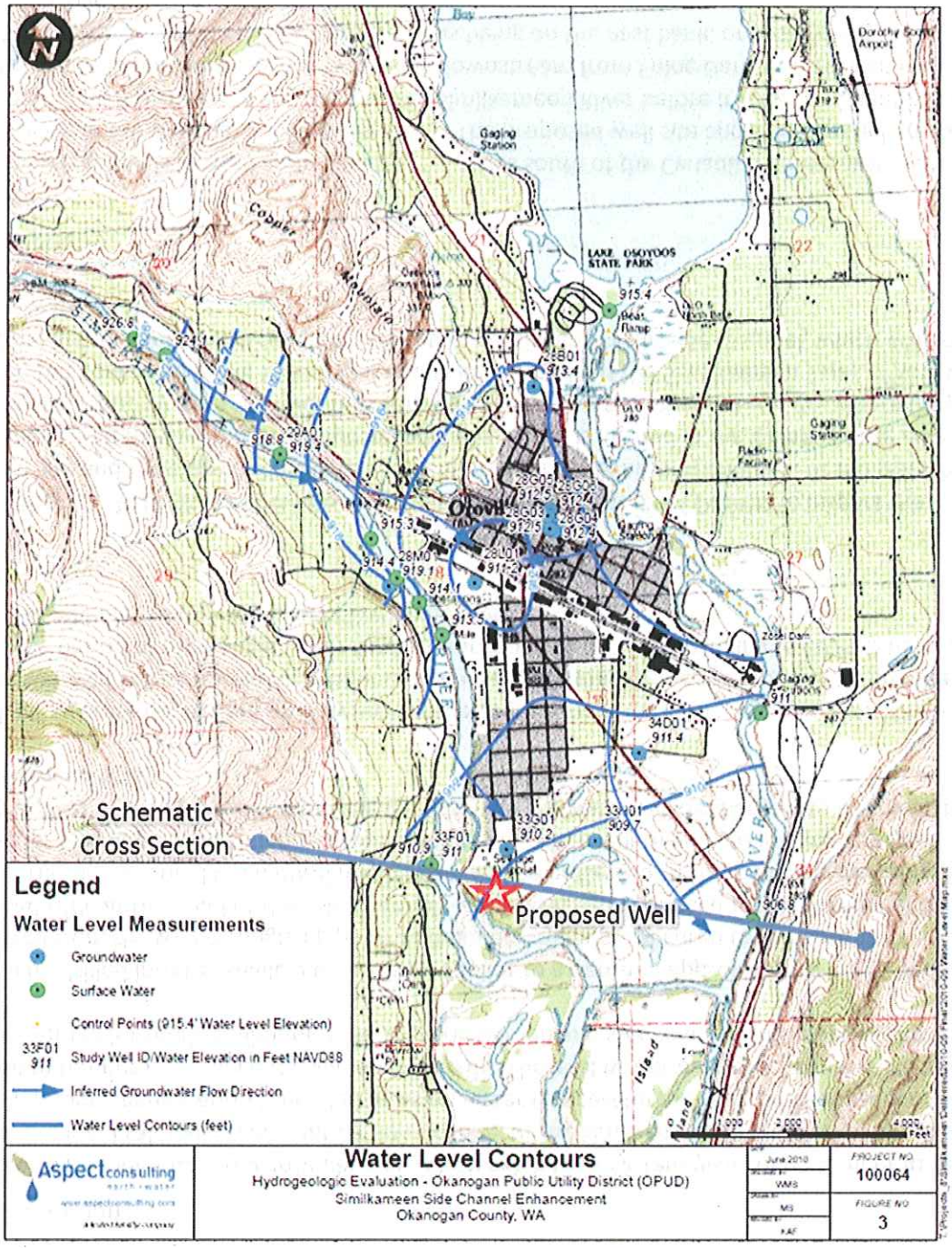
On November 22, 2010, Steve Nelson of RH2 met with Nick Christoph of OKPUD to inspect the Enloe Dam site and the side-channel enhancement area on the Similkameen River. At the side-channel enhancement area they visited the proposed well site, which is located in the vicinity of the dike protecting the property from the river during flood events. The side-channel was dry where they plan to add water, but contained water in its lower reach where it joined the Similkameen River. Photos were taken of the general area showing riparian vegetation adjacent to the side-channel, which will help to shade the water body.

Site Description

Geography

The proposed project is located approximately 5.4 miles south of the Canadian Border just south of the City of Oroville in the Okanogan Valley (Figure 1). The proposed well site and side-channel are located near the left bank (northeast of the river) of the Similkameen River before it joins the Okanogan River. This site is located approximately 4.7 river miles downstream from Enloe Dam. For the remainder of this report the proposed well site will be referred to as being on the east bank, or east side of the Similkameen River.

Figure 1. Water Table and Ground Water Flow Directions on October 26, 2009 (Modified from Aspect Consulting, 2010)



Geology

The Okanogan River Valley consists of unconsolidated glacial and alluvial deposits bounded both vertically and laterally by igneous and metamorphic bedrock (Ecology, 1974) as well as some sedimentary bedrock (WADNR, 1991). The unconsolidated deposits can be separated into two units. There is a coarse-grained aquifer that is alluvial and glacial in origin and can be found at ground surface

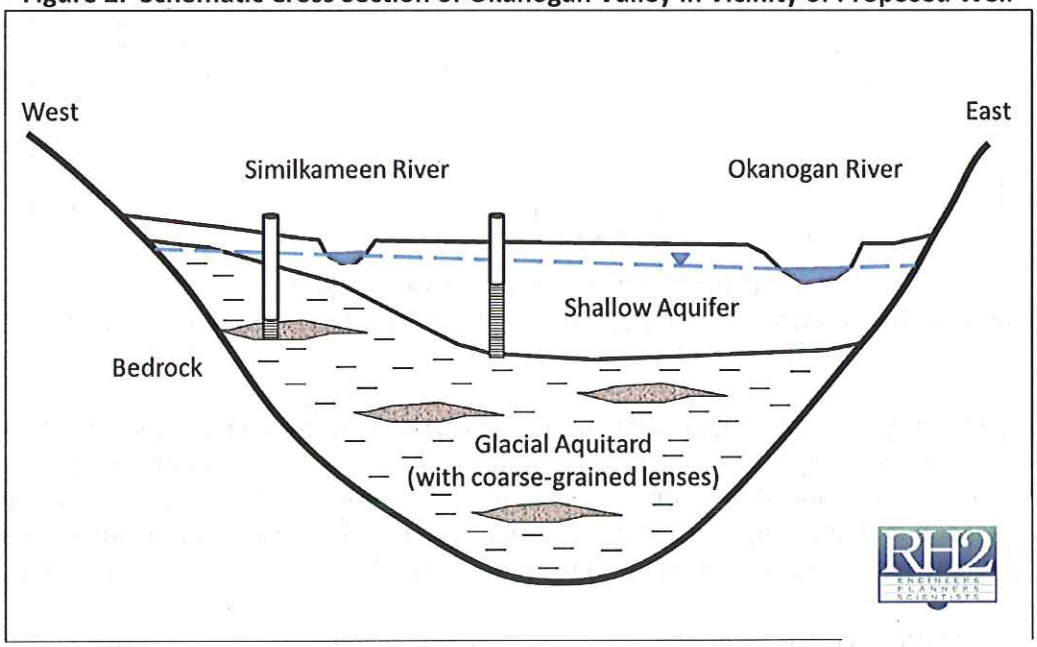
between the Similkameen and Okanogan Rivers. There is a fine-grained aquitard that is interpreted to be glacial in origin and can be found to the west of the Similkameen River and also beneath the coarse-grained deposits. The fine-grained deposits likely lie directly on bedrock. These units are described in more detail below (Figure 2).

Shallow Alluvial Aquifer – This aquifer consists of shallow, coarse-grained alluvial and glacial deposits in the valley bottoms. The region lying between the Similkameen and Okanogan Rivers is characterized by high-yield, shallow wells completed in the alluvial aquifer overlying an aquitard of unknown thickness. (Aspect Consulting, 2010). Drilling logs indicate wells in the Shallow Alluvial Aquifer are completed at depths typically ranging from 10 to 80-ft. These data indicated coarse sediments (sand and gravel) comprise an aquifer overlying fine sediments (silt and clay) (Aspect Consulting, 2010).

Glacial Aquitard – A silt and clay aquitard underlies the shallow alluvial aquifer and is inferred to be of glacial origin (Aspect Consulting, 2010). A thick zone of so-called blue clay occurs locally throughout the length of the valley and can extend down to bedrock (Ecology, 1974).

Bedrock – Fractures within the bedrock provide low yields generally suitable for domestic purposes. Bedrock on the hills surrounding the proposed well site is composed of a wide range of igneous, metamorphic, and sedimentary rock (WADNR, 1991).

Figure 2. Schematic Cross Section of Okanogan Valley in Vicinity of Proposed Well



Hydrogeology:
The bedrock is nearly devoid of water and is effectively impermeable and can be regarded as the floor of the ground-water reservoir (Ecology, 1974).

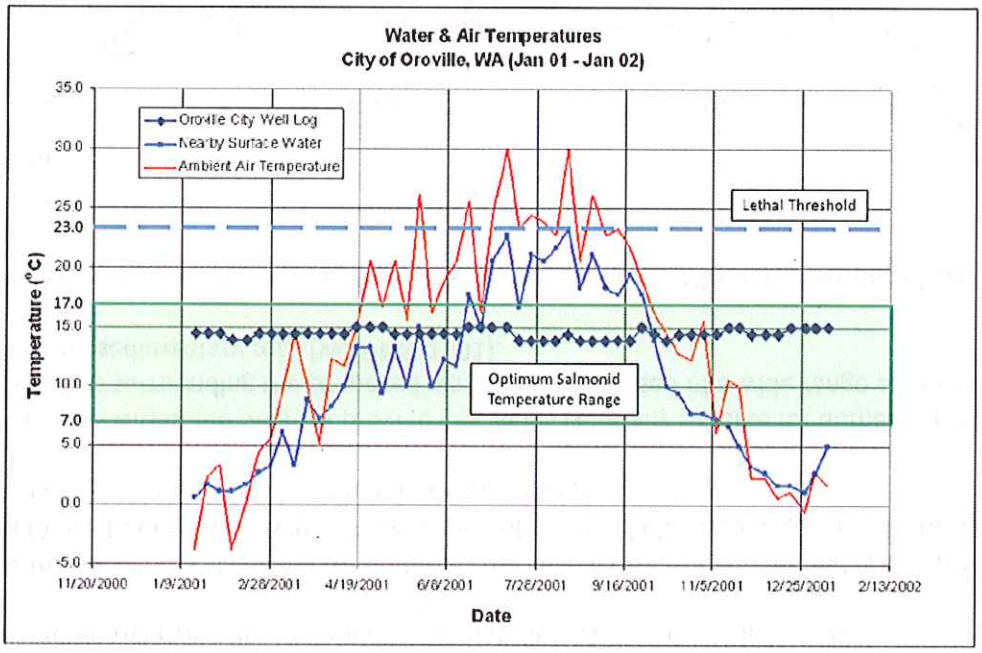
The glacial aquitard unit is not productive enough to be considered as the target for the proposed production well. Wells completed in coarser-grained lenses within the glacial aquitard unit usually have yields of less than 30 gpm (Aspect Consulting, 2010).

Driller's logs indicate water levels within the shallow alluvial aquifer range from 10 to 47-ft. Most wells produce water from depths less than 40-ft. Open or screened intervals range from 10 to 80-ft, with most wells screened at depths between approximately 20 to 40-ft. Wells completed in this unit often yield several hundred gpm with the largest well operated by the City of Oroville yielding up to 1,700 gpm (Aspect Consulting, 2010).

The water table beneath the valley floor is controlled by the level of the river (Ecology, 1974). Surveying of river levels compared with groundwater level in area wells, performed by Aspect Consulting, on October 26, 2009, shows that the water levels are similar, which supports the conceptual model that the shallow aquifer and rivers are hydraulically connected (Aspect Consulting, 2010) (Figure 1).

One year of weekly temperature data from the City of Oroville's Well 1 (Well 28L01 on Figure 1 above) show that the temperature in the shallow aquifer was consistent throughout the year and only varied from 13.8 to 15 degrees C, which is within the optimum temperature range for salmonid growth of 7 degrees C to less than 17 degrees C (Figure 3) (Aspect Consulting, 2011). This suggests that the addition of groundwater directly to the side-channel will improve temperature conditions in that channel.

Figure 3: Comparison of Groundwater and Surface Water Temperatures, City of Oroville (modified from Aspect Consulting, 2011)



Annual Volume Allocation

OKPUD indicated that 898 gpm (2 cfs) is the maximum rate needed to provide additional flow to the side-channel. Based on Figure 3 it is likely that the well will only be operating during the summer months (June through September). However, this water temperature data is only representative of groundwater and river conditions for one particular year. Since the proposed use is nonconsumptive and will vary dependent on conditions in the Similkameen River, more annual volume calculated for this proposed use is granted than will likely be withdrawn. If authorized, the annual volume may be reduced

when the permit goes to certificate based on metering records of actual beneficial use. The annual volume calculated for this proposed use is based on 9 months of continuous pumping at 898 gpm, which is equal to 1,085 acre-feet (ac-ft) per year.

References

Aspect Consulting, June 8, 2011, *Response to RH2 Engineering Questions on OPUD Water Right Application Similkameen Side-channel Enhancement*, Memorandum to Jeremy Pratt.

Aspect Consulting, August 10, 2010, *Hydrogeologic Evaluation, Okanogan Public Utility District (OPUD) Similkameen Side-channel Enhancement*, Memorandum to Jeremy Pratt.

Department of Ecology, 1974, Water in the Okanogan River Basin, Washington, Water Supply Bulletin 34.

Washington State Department of Natural Resources Division of Geology and Earth Resources, 1991, Geologic Map of Washington – Northeast Quadrant, Geologic Map GM-39.

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.

Beneficial Use

In accordance with RCW 90.54.020(1), the proposed use of water for fish and wildlife maintenance and enhancement represents a beneficial use of water.

Availability

Even though a well has not yet been drilled at the proposed point of withdrawal location, all of the geologic and hydrogeologic information suggests that when the well is drilled it will encounter the shallow alluvial aquifer. This aquifer will physically be able to produce the requested withdrawal rate; however it might take multiple wells due to the limited aquifer thickness.

Since this water use will be nonconsumptive, there is no issue with legal availability.

Potential for Impairment

Although the well has not yet been drilled, modeling performed by Aspect Consulting (2010) predicts that the interference drawdown as measured in the closest well, which is approximately 750-ft away from the proposed well site, will be on the order of 1.5-ft. The proposed well site is less than 200-ft from the Similkameen River. Given that the saturated thickness of the aquifer in this vicinity is estimated to be 30-ft, this amount of drawdown will not impair any existing well owner or water right holder, who has sufficiently penetrated the aquifer, from being able to exercise their full water right.

Since this water right request is for a nonconsumptive use from a well located in the unconfined aquifer in close proximity to the Similkameen River, with all flow ultimately being discharged back to the river, there will be no impairment of minimum instream flows established in WAC 173-549. This right can be approved consistent with WAC 173-549-070(3), which states that; "Non-consumptive uses which are compatible with the intent of the chapter may be approved."

Also, since the proposed water use is nonconsumptive, it will not impair the minimum instream flows established on the Similkameen and Okanogan Rivers.

Public Welfare

No potential for detriment to the public welfare was identified during the investigation of this application. WDFW supports the side-channel enhancement project.

Consideration of Protests and Comments

Comments were solicited from the Colville Confederated Tribes, Yakama Nation, and Washington State Department of Fish and Wildlife (WDFW) through email requests on March 11, 2011 and April 7, 2011. No response was received from either the Colville Confederated Tribes or the Yakama Nation.

WDFW worked with Ecology to ensure that the bypass flow requirements of the 401 Water Quality Certification are protective of fish and wildlife. This project is not authorized to be operated unless the bypass requirements of the Water Quality Certification are satisfied.

In addition, in an e-mail dated November 7, 2011, Patrick Verhey, the WDFW lead on Enloe Dam, stated

> *We do not have concerns in regards to the water right applications and indeed support the side-channel project as part of the mitigation to address impacts of Project operations.*

One written protest letter was received on March 18, 2011, from the Center for Environmental Law and Policy (CELP). The protest was from the Center for Environmental Law and Policy (CELP) on behalf of CELP, the Sierra Club Washington State Chapter, Spokane Falls Trout Unlimited, Citizens for a Sustainable Okanogan, and the Columbia River Bioregional Education Project. The protest relates to the following new and amended water rights:

- CS4-CV1P243(A)
- CS4-CV1P243(B)
- S4-35342
- G4-35343

Because the protest letter applied to each of the four water right applications and because the applications are a mix of change applications and new surface and ground water applications, not every comment applies to every application. The following discussion includes the comments and Ecology's response to those comments as they relate to this water right application. These points are also addressed in each of the other pending water right applications (Nos. CS4-CV1P243(A), CS4-CV1P243(B), and S4-35342) as they relate to those applications.

(1) Impoundment/diversion of water for the Enloe Dam is not non-consumptive and will have negative impacts on de-watered reaches of the Okanogan River.

Not applicable to this application for ground water.

(2) Proposed mitigation for the water rights is inadequate.

The Section 401 Water Quality Certification will provide instream flow requirements for this project designed to protect the aesthetic and instream values of the bypass reach and the operation of the project will be conditioned on these flows. Use of groundwater for fish and wildlife maintenance and enhancement is a non-consumptive use and therefore the water right does not need to be mitigated.

(3) Impoundment/diversion of water will cause adverse water quality impacts in the Similkameen River.

While this water right application does not entail impoundment or diversion of surface water, the introduction of cold ground water into the Similkameen River side-channel is expected to have a positive impact on surface water quality.

(4) Impoundment/diversion of water will cause adverse impacts on habitat and native aquatic species in the Similkameen River.

While this water right application does not entail impoundment or diversion of surface water, the introduction of cold ground water into the Similkameen River side-channel is expected to have a positive impact on habitat and native aquatic species.

(5) Impoundment/diversion of water will cause adverse impacts on aesthetic values, including at the Similkameen Falls.

Not applicable to this ground water application.

(6) The Enloe Dam project is not economically feasible and the proposed water rights are therefore not a beneficial use of water resources of the state.

This comment appears to be focused on the overall hydropower project and the water right applications related to that development. This comment is addressed in the pertinent ROEs.

In accordance with RCW 90.54.020(1), the proposed use of water for fish and wildlife maintenance and enhancement represents a beneficial use of water.

(7) The Enloe Dam project is connected to the proposed Shankers Bend project, directly upstream, but the two projects have been improperly segmented and the impacts are not being studied together.

Not applicable to this ground water application but this issue is addressed in the appropriate ROEs for the other water right applications.

(8) Water is not available for the proposed water rights.

Even though a well has not yet been drilled at the proposed point of withdrawal location, all of the geologic and hydrogeologic information suggests that, when the well is drilled, it will encounter the shallow alluvial aquifer. This aquifer will physically be able to produce the requested withdrawal rate; however it might require multiple wells due to the limited aquifer thickness.

(9) The proposed water rights will be detrimental to the public interest.

This comment was probably aimed primarily at the other water rights that comprise this project and is addressed in each of the appropriate ROEs. This ground water application seeks water to improve fish habitat and help address a long-standing temperature problem for salmonids on the mainstem of the Similkameen River. Given that the water use is non-consumptive and withdrawal of the water provides environmental benefits, this use of water will not be detrimental to the public interest. In addition, WDFW supports the project as proposed including the side-channel enhancement project (email from Patrick Verhey received November 7, 2011).

(10) SEPA review is inadequate.

At the time the protest was received (March 18, 2011), this was a true statement given the fact that the SEPA review had not yet been conducted for the project. However, on April 4, 2012, OKPUD issued a SEPA checklist and Determination of Nonsignificance (DNS) for the water right related portion of this project. In addition, OKPUD has adopted FERC's Environmental Assessment documents to satisfy the full project SEPA review. Issuance of that threshold determination and adoption of the federal documents concluded the SEPA process. Consistent with Water Resources Program Procedure PRO-1000, this draft report of examination was not finalized until SEPA was satisfied See the discussion in the section of this ROE entitled State Environmental Policy Act (SEPA), above.

(11) Water right decisions must be linked with 401 Certification decisions.

This comment is directed at the other water right applications associated with this project and is not directly applicable to this ground water application. However, the use of water for environmental enhancement is certainly consistent with the overall goals and intent of the 401 Certification process.

(12) The existing water rights for the project have been lost for non-use.

Not applicable to this ground water application.

CONCLUSIONS

The conclusions based on the above investigation are as follow:

1. The proposed appropriation for fish and wildlife maintenance and enhancement is a beneficial use of water;
2. The 898 gpm and 1,085 acre-ft/yr 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 the request for a groundwater permit be approved in the amounts described, limited, and provisioned on page 1 through 5 of this report.

Report by: Jim Bucknell

Jim Bucknell, RH2 Engineering, Inc. Date

Report by:

Steve Nelson, RH2 Engineering, Inc. Date

Report by:

State of Washington Hydrogeologist 822 Licensed Geologist

ANDREW B. DUNN

Andrew B. Dunn, RH2 Engineering, Inc. Date

Reviewed by: Kelsey S. Collins 8/6/13

Kelsey S. Collins, Water Resources Program Date

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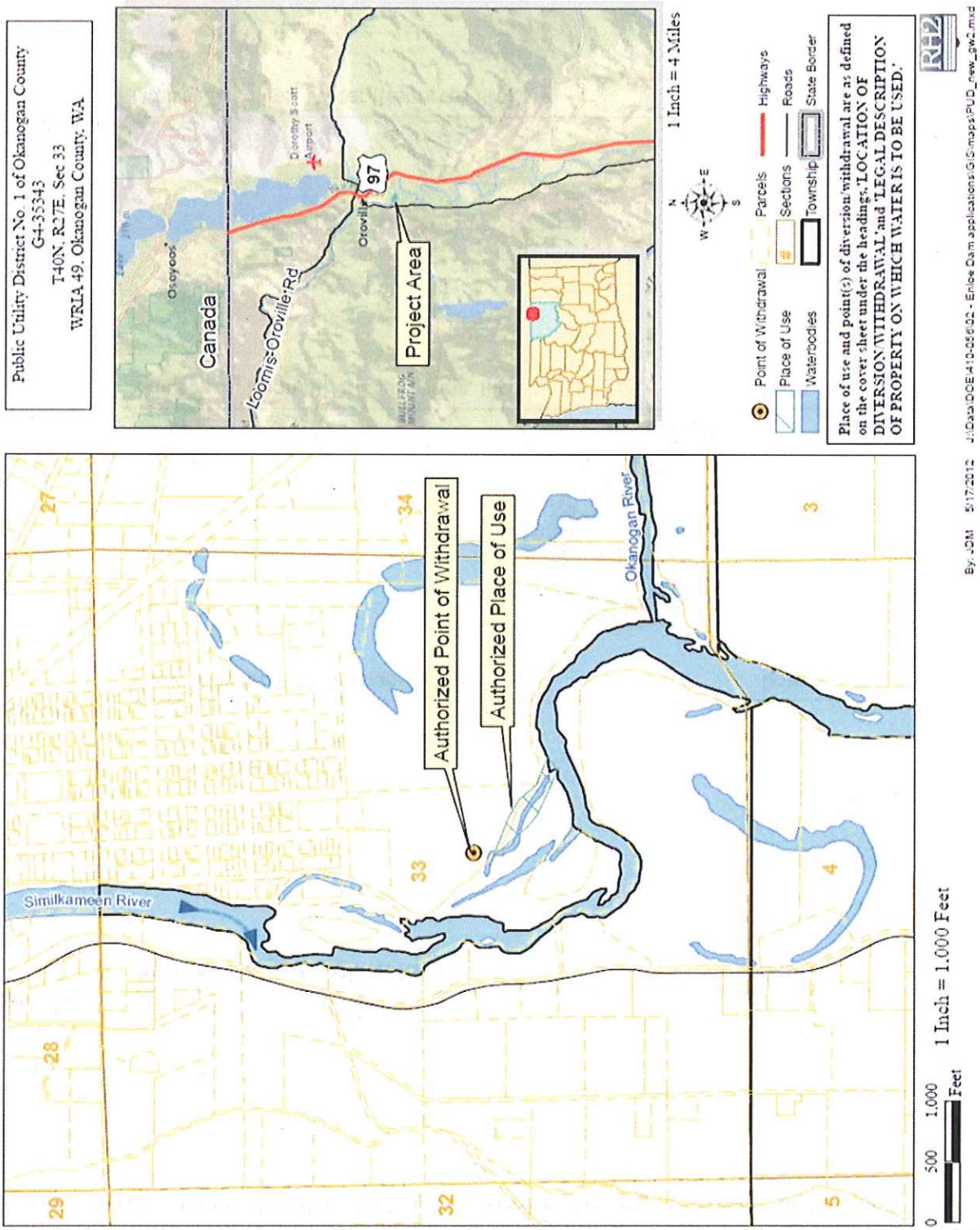
ATTACHMENT 1. Authorized Point of Withdrawal and Place of Use