



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

REPORT OF EXAMINATION
To Appropriate Public Waters of the State of Washington

APPLICATION DATE January 5, 2005	APPLICATION NO. S4-35023
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NAME Public Utility District No. 1 of Chelan County		
ADDRESS/STREET PO Box 1231, 327 N Wenatchee Ave	CITY/STATE Wenatchee, WA	ZIP CODE 98807-1231

PUBLIC WATERS TO BE APPROPRIATED

SOURCE Chiwawa River		
TRIBUTARY OF (IF SURFACE WATERS) Wenatchee River		
MAXIMUM CUBIC FEET PER SECOND 21.0*	MAXIMUM GALLONS PER MINUTE	MAXIMUM ACRE-FEET PER YEAR 5,124*

QUANTITY, TYPE OF USE, PERIOD OF USE

21.0 cubic feet per second and 5,124 acre-feet per year for fish propagation; nonconsumptive seasonal use from May 1 through August 31, as needed.

*All quantities are exclusively additive to S4-29891.

LOCATION OF DIVERSION/WITHDRAWAL

APPROXIMATE LOCATION OF DIVERSION Approximately 100 feet south and 200 feet west of the northeast corner of Section 1.					
LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION) NE¼NE¼	SECTION 01	TOWNSHIP 26 N.	RANGE 17 E.W.M.	WRIA 45	COUNTY Chelan
PARCEL NUMBER 271736100000	LATITUDE 47°47'17.51"N		LONGITUDE 120°39'4.40"W	DATUM WGS84	

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED

[Attachment 1 shows location of the authorized place of use and point(s) of diversion or withdrawal.]

A rectangular parcel of land with a north-south dimension of 270 feet and an east-west dimension of 280 feet, with the southern property boundary lying on the southerly section line of Section 36 and the easterly property boundary lying 260 feet west of the southeast corner of Section 36, T. 27 N., R. 17 E.W.M., Chelan County, Washington.

DESCRIPTION OF PROPOSED WORKS

Surface water will be diverted from the existing Chiwawa River diversion structure consisting of three 24-inch tee screens that extend through the concrete shoreline wall. The screens are equipped with an air backwash system and a Wenatchee River water injection manifold. Surface water gravity flows through the screens to three submersible 40-horsepower vertical turbine pumps with a combined maximum discharge rate of 21 cubic feet per second. Water is then conveyed a short distance to one of the facility's existing rearing ponds, proposed raceway, or fish trap, then following treatment, conveyed back to the Chiwawa River and discharged approximately 33 feet downstream of the original point of diversion.

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE September 2012	COMPLETE PROJECT BY THIS DATE September 2017	WATER PUT TO FULL USE BY THIS DATE September 2022
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PROVISIONS

GENERAL CONDITION(S)

1. Use of surface water under this authorization is considered nonconsumptive. However, fill or charging of the hatchery's infrastructure is subject to the instream flows specified in WAC 173-545-060(7) for control point 12-4570.00, located at Wenatchee River mile 46.2. Instream flow hydrographs presented in WAC 173-545-170 (Appendix 1) shall be used for identification of instream flows on days not specifically identified in the citation above.

MEASUREMENTS, MONITORING, METERING AND REPORTING

2. Meter Installation

An approved measuring device shall be installed and maintained for each of the sources authorized by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", WAC 173-173. <http://www.ecy.wa.gov/programs/wr/measuring/measuringhome.html>.

3. Record Weekly, Report Annual Totals

Water use data shall be recorded weekly and maintained by the property owner. The maximum rate of diversion and the annual total volume shall be submitted to the Department of Ecology by January 31st of each calendar year.

4. Electronic Reporting

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.

5. Metering Rule Description And Petition Info

WAC 173-173 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>.

DEPARTMENT OF FISH AND WILDLIFE

6. Fish Screening Criteria

The intake(s) shall be screened in accordance with Department of Fish and Wildlife screening criteria (pursuant to RCW 77.57.010, RCW 77.57.070, and RCW 77.57.040). Contact the Department of Fish and Wildlife, 600 Capitol Way N, Olympia, WA 98501-1091. Attention: Habitat Program, Phone: (360) 902-2534 if you have questions about screening criteria.

7. Fish Rearing

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

8. HPA

The applicant must obtain Hydraulic Project Approval from the Washington Department of Fish and Wildlife for all construction activities occurring within the high water mark of the Columbia River and its tributaries. Please contact the Department of Fish and Wildlife, 3860 Chelan Hwy N., Wenatchee, WA 98801-9625 or by telephoning Bob Steele at (509) 662-0503.

SCHEDULE AND INSPECTIONS

9. 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.

10. Project Completion

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 water right. Elements of a proof inspection may include, as appropriate, the source(s), system instantaneous capacity, beneficial use(s), annual quantity, place of use, and satisfaction of provisions.

FINDINGS OF FACT AND ORDER

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

Therefore, I ORDER the approval of Application No. S4-35023 subject to existing rights and the provisions specified above

YOUR RIGHT TO APPEAL

You have a right to appeal this decision to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this decision. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of this decision:

- File your appeal and a copy of this decision 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 decision 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 Pollution Control Hearings Board 1111 Israel Road SW, Ste 301 Tumwater WA 98501	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia WA 98504-7608 Pollution Control Hearings Board PO Box 40903 Olympia WA 98504-0903

For additional information visit the Environmental Hearings Office Website: <http://www.eho.wa.gov>
To find laws and agency rules visit the Washington State Legislature Website: <http://www.leg.wa.gov/CodeReviser>

Signed at Yakima, Washington, this 9th day of February 2011.


 Mark C. Schuppe, Section Manager
 Water Resources Program
 Central Region Office

BACKGROUND

Project Description

On January 5, 2005, the Public Utility District No. 1 of Chelan County (Chelan PUD) filed Application No. S4-35023 with the Washington State Department of Ecology (Ecology) to appropriate public surface water to supply a proposed expansion to the Chiwawa Hatchery. The applicant proposed to divert 21.0 cubic feet per second (cfs) and a cumulative annual diversion volume (Qa) of 5,124 acre-feet per year (ac-ft/yr). The purpose of use is for nonconsumptive seasonal use for fish rearing May 1 through August 31, as needed.

The Chiwawa Hatchery is located on the bank of the Chiwawa River in the Wenatchee River Basin Water Resource Inventory Area (WRIA 45), just upstream from the confluence with the Wenatchee River. The facility is currently used for rearing and acclimating of Endangered Species Act (ESA)-listed juvenile spring Chinook salmon and also traps ESA-listed adult spring Chinook and ESA listed bull trout. The planned expansion of the facility will accommodate rearing and acclimation of an additional 450,000 juvenile steelhead.

Table 1
Summary of Application No. S4-35023

Attributes	Proposed
Applicant	Public Utility District No. 1 of Chelan County
Priority Date	January 5, 2005
Instantaneous Quantity	21 cubic feet per second
Annual Quantity	5,124 acre-feet per year
Source	Chiwawa River
Point of Diversion	NE¼, NE¼, Section 1, T. 26 N., R. 17 E.W.M.
Purpose of Use	Fish Rearing
Period of Use	May 1 through August 31
Place of Use	Chiwawa Hatchery

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 on September 2 and 9, 2009. No protests were received by Ecology.
- **State Environmental Policy Act (SEPA)**
A SEPA review of the proposed diversion was completed by Chelan PUD and concluded with a Determination of Nonsignificance issued on July 29, 2008. No comments were received.
- **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 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. ASP002 (Master Contract No. C1000185).

INVESTIGATION

In consideration of this application, 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 Chelan PUD's Habitat Conservation Plans (HCP) and recommendations of the HCP Hatchery Committee (HC) to meet the stated goal of "no net impact" on salmon and steelhead migrating past the Rocky Reach and Rock Island hydroelectric projects. The expansion of the Chiwawa Hatchery also includes a companion application requesting a surface water diversion from the Wenatchee River (No. S4-35209).

A site visit was performed on February 18, 2010. Tyson Carlson of Aspect Consulting, and Candis Graff representing Ecology, met with Waikele Hampton and Sam Dilly of Chelan PUD. The site visit included inspection of the proposed point of diversion and place of use, and an interview with the applicants.

Using this information, Aspect Consulting evaluated water availability and potential effects of the proposed appropriation on existing groundwater and surface water rights. Each of the four requirements specified in RCW 90.03.290 were individually examined and are presented below.

Project Description

In 1993, the prospect of ESA listings for salmon and steelhead prompted the Chelan PUD to develop two HCPs for anadromous fish in cooperation with federal and state regulatory agencies and tribes. The plans commit Chelan PUD to a 50-year program to ensure their hydro projects have "no net impact" on mid-Columbia salmon and steelhead runs. Under the HCPs, this level of protection is planned to be accomplished through a combination of increased survival, off-site hatchery programs and evaluations, and habitat restoration work conducted in mid-Columbia tributary streams (Hampton 2007).

The Turtle Rock Island hatchery program was originally designed to mitigate for lost spawning areas (due to damming at Rocky Reach) in the mainstem Columbia River, as required by the original Federal Energy Regulatory Commission (FERC) license. Current fish management practices split incubation and early rearing of steelhead at multiple facilities, prior to final rearing at Turtle Rock over the fall and winter months. In the spring, fish are trucked and released at locations throughout the Wenatchee River Basin. However, the practice has led to adult stray rates greater than 10 percent from the Wenatchee Basin, which is inconsistent with objectives established by the HCP HC. Therefore, the Chelan PUD's long-term goal is to relocate all Turtle Rock rearing activities to other facilities. To increase homing fidelity specifically to the Wenatchee River, steelhead will be reared over the winter at the expanded Chiwawa Hatchery prior to release.

The Chiwawa Hatchery is currently supported by two surface water right permits – one diverting from the Wenatchee and one diverting from the Chiwawa River. The Wenatchee River permit (S4-29892) authorizes the seasonal diversion of 12 cfs and 3,000 ac-ft/yr, November 1 through March 31. The Chiwawa River permit (S4-29891) is for the seasonal diversion of 21 cfs and 10,000 ac-ft/yr, September 1 through April 30. In addition to the subject application (S4-35023), a companion application (S4-35209) was submitted requesting authorization of a year round diversion (up to 21.4 cfs and 17,460 ac-ft/yr) from the Wenatchee River. The annual diversion requested under S4-35209 was subsequently reduced to 10,924 ac-ft/yr.

A summary of the Chiwawa Hatchery's existing and requested water right quantities is provided in Table 2.

Table 2
Summary of Chiwawa Hatchery Water Right Permits and Applications

Source Control No.	Wenatchee River			Chiwawa River		
	S4-29892 <i>Permit</i> <i>(cfs)</i>	S4-35209 <i>Application</i> <i>(cfs)</i>	Max Qi <i>(cfs)</i>	S4-29891 <i>Permit</i> <i>(cfs)</i>	S4-35023 <i>Application</i> <i>(cfs)</i>	Max Qi <i>(cfs)</i>
Date						
January	12	9.4	21.4	21	-	21
February	12	9.4	21.4	21	-	21
March	12	9.4	21.4	21	-	21
April	-	21.4	21.4	21	-	21
May	-	21.4	21.4	-	21	21
June	-	21.4	21.4	-	21	21
July	-	21.4	21.4	-	21	21
August	-	21.4	21.4	-	21	21
September	-	16	16	21	-	21
October	-	16	16	21	-	21
November	12	4	16	21	-	21
December	12	9.4	21.4	21	-	21
Qa in Ac-ft/yr	3,000	10,924	13,924	10,000	5,124	15,124

The Wenatchee River diversion (S4-29892) will be primarily used in support of the expanded steelhead rearing program, while the Chiwawa River will support the Chelan PUD's existing spring Chinook smolt program at the Chiwawa Hatchery. The subject application (S4-35023) will be used to supply one of the two existing acclimation and rearing ponds, a proposed raceway, and will be used to attract and trap adult ESA listed spring Chinook and bull trout. The fish will be brought on site around September of each year and will be released around May of the following year. Trapping will occur June through August.

Site Description

The existing point of diversion is located on the north side the Chiwawa River approximately 0.6 miles upstream of the confluence with the Wenatchee River in the northeast quarter of the northeast quarter of Section 1, in Township 26 North, Range 17 East Willamette Meridian.

Inspection of the 2009 Water Year data indicate that the Chiwawa River, 6.2 miles above the confluence with the Wenatchee River (USGS Gage No. 12456400), had an annual mean discharge rate of 441 cfs, with a daily mean of 100 to 2,950 cfs. Low flows are typically associated with the late summer (late August through October), while high flows are the result of peak winter storm cycles and spring runoff. Based on the period of record available (approximately 1911 to present), the 2009 Water Year was slightly below average.

Surface water will be diverted from the existing Chiwawa River diversion structure consisting of three 24-inch tee screens that extend through the concrete shoreline wall. Surface water gravity flows through the screens to three submersible 40-horsepower vertical turbine pumps with a combined maximum discharge rate of 21 cfs. Water is then conveyed a short distance to one of the facility's two existing rearing ponds, proposed raceway, or fish trap, then following treatment, conveyed back to the Chiwawa River and discharged approximately 33 feet downstream of the original point of diversion.

The Chiwawa River diversion screens are equipped with a water injection manifold. Warmer water from the Wenatchee River is injected onto the diversion screen to prevent the buildup of frazil ice. In order to maintain nonconsumptive use with respect to the Wenatchee River, an equal amount (up to 6 cfs) of Chiwawa River water will be diverted back to the Wenatchee River under the existing Chiwawa River permit No. S4-29891.

The existing vacuum pump system will be used to remove the solids from the rearing pond and raceway. The solids will be removed to a waste basin for settling. Following an approximate 24 hour detention time, the clarified water will be decanted and pumped to the Chiwawa River. A vactor truck will be used several times a year to remove the accumulated solids.

The existing configuration of the Chiwawa Hatchery requires approximately 290,000 gallons of Wenatchee River water and approximately 280,000 gallons of Chiwawa River water to fill the facility. The proposed expansion, including the six rearing ponds, raceway, and Steelhead rearing and reuse facility will require an additional 380,000 gallons of Wenatchee River water and 45,000 gallons of Chiwawa River water. In total, the expanded Chiwawa Hatchery will require approximately 670,000 gallons (~2.1 acre-feet) of Wenatchee River water and 325,000 gallons (~1.0 acre-foot) of Chiwawa River water to fill.

Instream Flow Requirements

To retain perennial rivers, streams, and lakes in the Wenatchee River Basin with levels necessary 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, an Instream Resources Protection Program (IRPP) was established by Chapter 173-545 WAC. The IRPP defines minimum instantaneous flows in reaches defined by nine control stations throughout the Basin. The program effectively limits, and in some cases prohibits, the further issuance of consumptive water rights that could affect 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 12-4565.00 (Chiwawa River near Plain), extending from the headwaters of the Chiwawa River, downstream to the confluence with the Wenatchee River. No minimum instream flows are specified for this stream management unit; however, minimum instream flows are specified for the Wenatchee River just downstream of the confluence by control point 12-4570.00 (Wenatchee River at Plain), located at 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.

Agency Consultation Process

Ecology has sought consultation with the U.S. Bureau of Reclamation (Reclamation), who controls all unappropriated waters of the Columbia River above Priest Rapids Dam – including all tributaries and groundwater that are in continuity. Reclamation subsequently granted a release of water for the subject application in a letter received July 18, 2007.

In addition, during the early stages of the application process, Ecology received a number of letters of support regarding the pending water right application. Letters were received from National Marine Fisheries Service (NMFS), Washington Department of Fish and Wildlife (WDFW), the United States Fish and Wildlife Service, and local Native American tribes, including the Colville Confederated Tribes and Bands of the Yakama Nation.

Water Quality

Discharge of effluent from the rearing facility will be governed by an Upland Fin-Fish Hatching and Rearing General NPDES Permit issued by Ecology's Water Quality Program. The purpose of the permit is to control the discharge of potential pollutants into waters of the state by specifying best management practices, effluent limitations, and monitoring requirements.

In addition, 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, including phosphorus. In response to the TMDLs, Ecology prepared a Water Quality Improvement Report for each TMDL (Ecology 2007 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.

APPLICATION EVALUATION

Priority Processing

The Chelan PUD requested that Application No. S4-35023 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 surface water is given by Ecology's Water Resources Program, Policy *POL 1020* (Ecology 1991). The policy defines water use as nonconsumptive when "...there is no diversion from the water source or diminishment of the source." Specifically, nonconsumptive use at a fish hatchery is defined when water is returned to the same source, in the same quantity as diverted, at a point downstream in close proximity to the point of diversion and water quality standards are met. POL 1020 also specifies that water use to initially fill or charge the system is allowed, subject to instream flows and existing rights.

Ecology recognizes that certain projects may have a small component of water consumption – such as, through an increase in bank storage or evaporation rate. However, as a matter of policy, Ecology classifies these types of projects as nonconsumptive (Ecology 1991).

The second criterion for priority processing is that the new use will provide for significant environmental benefit. Chelan PUD has committed to a 50-year program to ensure their hydroelectric projects have “no net impact” on mid-Columbia salmon and steelhead runs. Application No. S4-35023 will support mitigation for the Rock Island and Rocky Reach hydroelectric projects and recommendations of the HCP HC. 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). Ecology has determined that Application No. S4-35023 is nonconsumptive and provides for environmental enhancement; therefore, the water right application is being processed on a priority basis as allowed for under WAC 173-152-050(2)(b).

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.
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 maintenance and enhancement is a beneficial use of water. As detailed on the Application for Permit, the point of diversion will be supported by the necessary infrastructure to deliver the full appropriation of water to the facility. The rate at which the water will be diverted is required for suitable operation of the expanded Chiwawa Hatchery.

Availability

Based on the collective information summarized above, we conclude that the quantity of water requested for use in this application is available for appropriation. Water will be returned to the Chiwawa River in the same quantity as diverted, at a point downstream in close proximity to the point of diversion and water quality will be required to meet the water quality standards of the Upland Fin-Fish Hatching and Rearing General NPDES Permit issued by Ecology’s Water Quality Program.

Potential for Impairment

RCW 90.03.290 and RCW 90.44.060 require a determination that a new appropriation will not impair existing rights. Numerous water right certificates, permits, and claims are present on or downstream on the Wenatchee River, in addition to the numerous permitted points of withdrawal utilizing aquifers in continuity with the River. However, no diversion is located in the 33-foot bypass reach or downstream of the hatchery on the Chiwawa River before the confluence with the Wenatchee River. Therefore, because the proposed appropriation is nonconsumptive, no impairment of surface water or groundwater rights is expected to occur.

Filling or charging of the facility with approximately 1.0 acre-feet of water up to once a year will be provisioned on meeting the instream flows specified in WAC 173-545-060(7) at control point 12-4570.00.

Public Welfare

No protests to the application were received. The proposed appropriation will support the recommendations made by the HCP HC in fulfilling the Chelan PUD commitment for “no net impact” on mid-Columbia salmon and steelhead runs by their hydroelectric projects. Letters of support were received from NMFS, WDFW, the United States Fish and Wildlife Service, and local Native American tribes.

CONCLUSIONS

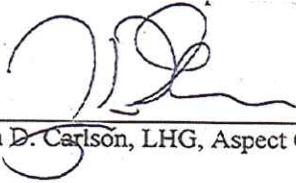
The conclusions based on the above investigation are as follow:

1. The proposed appropriation for fish propagation in the proposed Chiwawa Hatchery 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.
4. The proposed appropriation will not be detrimental to the public interest.

RECOMMENDATION

I recommend approval of Application for Water Right No. S4-35023, and issuance of a permit to allow a nonconsumptive appropriation of surface water from the Chiwawa River for fish propagation at a maximum instantaneous withdrawal rate (Qi) of 21 cfs and a cumulative annual volume of 5,124 ac-ft/yr. The seasonal period of use will be May 1 through August 31 as needed.

The amount of water granted is a maximum limit that shall not be exceeded and the water user shall be entitled only to that amount of water within the specified limit that is beneficially used and required.



Tyson D. Carlson, LHG, Aspect Consulting, LLC

Report by:

February 9, 2011

Reviewed By: MEUSSA DOWNS for
Candis Graff, Water Resources Program

02-09-2011
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

Ecology 1991, Water Resources Program Policy POL 1020; Consumptive and Nonconsumptive Water Use, October 31, 1991 pgs. 1-2.

Ecology 2004, Water Resources Program Policy POL 1021; Priority Processing – Water Budget Neutral Projects, January 21, 2004, pgs. 1-2.

Ecology 2007, Wenatchee River Watershed Temperature Total Maximum Daily Load, Water Quality Improvement Report, Publication No. 07-10-045, July 2007, pgs. 1-8.

Ecology 2009, Wenatchee River Watershed Dissolved Oxygen and pH Total Maximum Daily Load, Water Quality Improvement Report, Publication No. 08-10-062, August 2009, pgs. 1-7, 52-55.

HCP HC 2006. Statement of Agreement on Production Levels for Chelan County PUD's Turtle Rock Summer Chinook Hatchery Program, October 18, 2006, p. 1.

Hampton, Waikele 2007, Email communication providing background on Turtle Rock Island Program, May 22, 2007.

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.

