

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

REPORT OF EXAMINATION
TO APPROPRIATE PUBLIC WATERS OF THE STATE OF WASHINGTON

- Surface Water** (Issued in accordance with the provisions of Chapter 117, Laws of Washington for 1917, and amendments thereto, and the rules and regulations of the Department of Ecology.)
- Ground Water** (Issued in accordance with the provisions of Chapter 263, Laws of Washington for 1945, and amendments thereto, and the rules and regulations of the Department of Ecology.)

PRIORITY DATE September 15, 2000	APPLICATION NUMBER S2-29934	PERMIT NUMBER	CERTIFICATE NUMBER
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NAME
Cascade Water Alliance

ADDRESS (STREET) 11400 SE 8th Street, Suite 440	(CITY) Bellevue	(STATE) Washington	(ZIP CODE) 98004
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PUBLIC WATERS TO BE APPROPRIATED

SOURCE
Lake Tapps Reservoir

TRIBUTARY OF (IF SURFACE WATERS)
White River

MAXIMUM CUBIC FEET PER SECOND 135	MAXIMUM GALLONS PER MINUTE	MAXIMUM ACRE FEET PER YEAR 54,300
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QUANTITY, TYPE OF USE, PERIOD OF USE
54,300 acre feet per year Municipal Water Supply, including industrial and commercial purposes Year round, as needed

LOCATION OF DIVERSION/WITHDRAWAL

APPROXIMATE LOCATION OF DIVERSION--WITHDRAWAL
Approximately 1540 feet South and 940 feet East of the NW Corner of Section 8, Township 20N, Range 5E

LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION) SW1/4, NE1/4	SECTION 8	TOWNSHIP N. 20	RANGE, (E. OR W.) W.M. 5 E.W.M	W.R.I.A. 10	COUNTY Pierce
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RECORDED PLATTED PROPERTY

LOT	BLOCK	OF (GIVE NAME OF PLAT OR ADDITION)
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LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED

The place of use for this water right is the combined service areas described in the most recent Water System Plans approved by the Washington State Department of Health for the Cascade Water Alliance, the City of Seattle and the City of Tacoma.

DESCRIPTION OF PROPOSED WORKS

Lake Tapps Reservoir Water Rights and Supply Project

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE: December 31, 2040	COMPLETE PROJECT BY THIS DATE: Within 15 Years of Begin Construction Date	WATER PUT TO FULL USE BY THIS DATE: December 31, 2060
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PROVISIONS

The Development Schedule, and Provisions and Conditions of the 2010 Report of Examination for S2-29920(A) in their entirety are incorporated by reference.

FINDINGS OF FACT AND DECISION

Upon reviewing the attached report, I find all facts, relevant and material to the subject application, have been thoroughly investigated. Furthermore, I find it is clear that overriding considerations of the public interest will be served by the appropriation of public surface water, and the appropriation as recommended is a beneficial use and will not be detrimental to existing rights or the public welfare.

Therefore, I ORDER a permit be issued under Surface Water Application Number S2-29934, subject to existing rights and the conditions and provisions above, to allow appropriation of public surface water for the amount and uses specified above.

You have a right to appeal this decision. To appeal this you must:

- File your appeal with the Pollution Control Hearings Board within thirty (30) days of the "date of receipt" of this document. Filing means actual receipt by the Board during regular office hours.
- Serve your appeal on the Department of Ecology within thirty (30) days of the "date of receipt" of this document. Service may be accomplished by any of the procedures identified in WAC 371-08-305(10). "Date of receipt" is defined at RCW 43.21B.001(2).

Be sure to do the following:

- Include a copy of this document that you are appealing with your *Notice of Appeal*.
- Serve and file your appeal in paper form; electronic copies are not accepted.

1. To file your appeal with the Pollution Control Hearings Board

Mail appeal to:

OR

Deliver your appeal in person to:

The Pollution Control Hearings Board
PO Box 40903
Olympia WA 98504-0903

On or before September 17:
The Pollution Control Hearings Board
4224 – 6th Ave SE Rowe Six, Bldg 2
Lacey WA 98503

On or after September 20:
The Pollution Control Hearings Board
1111 Israel Rd. SW, Ste 301
Tumwater, WA 98501

2. To serve your appeal on the Department of Ecology

Mail appeal to:

OR

Deliver your appeal in person to:

The Department of Ecology
Appeals & Application for Relief Coordinator
P.O. Box 47608
Olympia WA 98504-7608

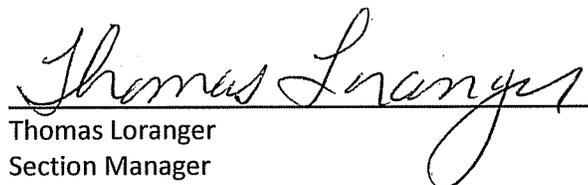
The Department of Ecology
Appeals & Application for Relief Coordinator
300 Desmond Dr SE
Lacey WA 98503

3. And send a copy of your appeal to:

Thomas Loranger
Section Manager
Water Resources Program - Department of Ecology
Southwest Region
P.O. Box 47775
Lacey WA 98504-7775

For additional information visit the Environmental Hearings Office Website: <http://www.eho.wa.gov>. To find laws and agency rules visit the Washington State Legislature Website: <http://www1.leg.wa.gov/CodeReviser>.

Signed at Lacey, Washington, this 15th day of September, 2010.


Thomas Loranger
Section Manager
Water Resources Program
Southwest Region

INVESTIGATOR'S REPORT

This report concerns S2-29934, one of four related water right applications that Puget Sound Energy ("Puget") submitted to the Washington State Department of Ecology ("Ecology") for the same project, known as the "Lake Tapps Reservoir Water Rights and Supply Project" ("Project"). These include three municipal water rights applications for new appropriations (S2-29920, R2-29935, and S2-29934) filed in 2000 and a change/transfer application (CS2-160822CL) filed in 2005 for existing pre-code water right claim number 160822 ("Puget Claim"). These four applications are referred to collectively as the "Applications."

Puget originally filed the Applications. On December 18, 2009, Puget conveyed its interest in the Applications through an asset purchase agreement to Cascade Water Alliance ("Cascade"). Through the Asset Purchase Agreement Cascade also acquired Lake Tapps Reservoir, the Puget Claim, and associated hydroelectric project ("Hydro Project") facilities. Cascade is the current Applicant for the Project. By letter dated December 15, 2009, Ecology accepted the assignment of the Applications from Puget to Cascade (Ecology 2009).

The three municipal water rights applications are necessary for the new consumptive appropriations for municipal supply. Each of the three new municipal applications addresses a component of the Project. The three applications are:

- Application S2-29920 requests authorization to 1) divert water for municipal supply purposes from the White River into Lake Tapps Reservoir for the Project and 2) establish a separate Regional Reserved Water Program for future use by the cities of Auburn, Bonney Lake, Buckley, and Sumner. For clarity, Ecology has issued two separate ROEs corresponding to S2-29920: S2-22920(A) for the diversion from the White River into Lake Tapps Reservoir, and S2-22920(B) for the Regional Reserved Water Program.
- Application R2-29935 requests authorization to store the quantity of water diverted under Application S2-29920 in Lake Tapps Reservoir.
- Application S2-29934 requests authorization to withdraw the annual quantity of water diverted under Application S2-29920 and stored in Lake Tapps Reservoir under Application R2-29935 for municipal supply.

Puget submitted the application for a change in use of the Puget Claim to confirm that it continues to have the right under the Puget Claim to divert and use the water for multiple beneficial purposes, including, but not limited to recreation, reservoir maintenance, fish passage, flow augmentation, and water quality. The application to change the Puget Claim is a significant component of the Project because it confirms that Cascade may continue to use the Claim as it has historically been used.

Table 1 lists the Applications. In addition, Table 1 explains the minor changes from Cascade's original proposal.

Because the three new water right applications are interrelated elements of the same Project, the primary investigation is contained in one report associated with the diversion from the White River. The 2010 Report of Examination for S2-29920(A) ["2010 ROE for S2-29920(A)"] includes the full investigation of the three applications for new water rights including a description of the Project; protestants'

concerns; demand and supply analysis; evaluation of hydrologic, hydrogeologic, water quality, recreation and fisheries effects of the Project; evaluation of the potential effects of climate change on the Project; conclusions regarding water availability, beneficial use, impairment, public interest and overriding considerations of public interest ("OCPI"); and provisions of the authorization. This Report of Examination refers to the 2010 ROE for S2-29920(A) for many components of the investigation.

LEGAL REQUIREMENTS

Public Notice (RCW 90.03.280)

Puget published Public Notice for this project in the Tacoma News Tribune on October 5 and 12, 2000.

State Environmental Policy Act (SEPA)

Cascade assumed lead agency status for the environmental review of the Project under SEPA. On June 30, 2008, Cascade published a Determination of Significance and Request for Comments on Scope of Environmental Impact Statement and Environmental Checklist (Cascade 2008a). Cascade published a Draft Environmental Impact Statement ("DEIS") on January 29, 2010 (Cascade 2010a). The comment period for the Draft Environmental Impact Statement ("DEIS") was extended from January 29, 2010 until May 21, 2010, providing an overlapping comment period with the Draft ROEs. The Final Environmental Impact Statement ("FEIS") was published on June 16, 2010 (Cascade 2010c).

The FEIS reviewed potential impacts to earth, surface water quantity and quality, groundwater, plants and wildlife, fisheries, recreation and aesthetics, shoreline use and land use, as well as the impacts of climate change on the proposal. The FEIS concludes that the Project would have no significant adverse impacts.

Additional detail about SEPA review is provided in the 2010 ROE for S2-29920(A).

Consultation with the Department of Fish and Wildlife

In accordance with RCW 77.57.020, Ecology provided notice to the Washington State Department of Fish and Wildlife ("WDFW") of the water right applications associated with the Project. WDFW participated in review and evaluation of the Project at various phases. On February 17, 2010, WDFW was provided prior notification of the publication of the Draft ROEs.

Determinations

Chapter 90.03 RCW authorizes 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. In accordance with RCW 90.03.290, favorable determinations must be made on the following four criteria in order for Ecology to approve an application for a new water right:

- Water must be available
- There must be no impairment of existing rights
- The water use must be beneficial
- The water use must not be detrimental to the public interest

Table 1 – Water Rights Applications and Change of Purpose of Use Application

Application No. (Filing Date)	Type	Description of Original Application	Description of Current Proposal
S2-29920 ¹ (Jun 20, 2000)	Permit for: Diversion from the White River	<p><u>Quantity:</u> Qa = Maximum Annual Quantity Qa = 72,400 acre-feet/year [equivalent to a 100 cubic feet per second ("cfs") continuous rate]</p> <p>Qi = Maximum Instantaneous Quantity Qi = 2,000 cfs</p> <p><u>Purpose:</u> Public water supply for consumptive municipal, industrial and commercial purposes.</p>	<p>Lake Tapps Reservoir Water Rights and Supply Project [S2-29920(A)]: <u>Quantity:</u> Qa = 54,300 acre-feet/year (equivalent to a 75 cfs continuous rate) Qi = 1,000 cfs from February 15 until the Refill date or July 1, whichever is earlier; 400 cfs from the Refill date until September 15 or the subsequent date the Fall Drawdown commences, whichever is later; and 150 cfs from the date the Fall Drawdown commences to February 15 per WRMA</p> <p><u>Purpose:</u> Unchanged from Original Application.</p> <p>Regional Reserved Water Program [S2-29920(B)]: <u>Quantity:</u> Qa = 5,060 acre-feet/year (equivalent to a 7 cfs continuous rate) Qi = 10 cfs Quantities are additive with Lake Tapps Reservoir Water Rights and Supply Project [S2-29920(A)].</p> <p><u>Purpose:</u> Unchanged from Original Application.</p>
R2-29935 ¹ (Sep 15, 2000)	Permit for: Storage in Lake Tapps Reservoir	<p><u>Quantity:</u> Storage of up to 46,700 acre-feet of water in Lake Tapps Reservoir</p> <p><u>Purpose:</u> Public water supply for consumptive municipal, industrial and commercial purposes.</p>	<p><u>Quantity:</u> Unchanged from Original Application.</p> <p><u>Purpose:</u> Unchanged from Original Application.</p>
S2-29934 ¹ (Sep 15, 2000)	Permit for: Withdrawal from Lake Tapps Reservoir	<p><u>Quantity:</u> Qa = 72,400 acre-feet/year (equivalent to a 100 cfs continuous rate) Qi = 150 cfs</p> <p><u>Purpose:</u> Public water supply for consumptive municipal, industrial and commercial purposes.</p>	<p><u>Quantity:</u> Qa = 54,300 acre-feet/year (equivalent to a 75 cfs continuous rate) Qi = 135 cfs</p> <p><u>Purpose:</u> Unchanged from Original Application</p>
CS2-160822CL (Nov 22, 2005)	Change of: Puget Claim	<p><u>Quantity:</u> Qa = 1,440,000 acre-feet/year (equivalent to a 2,000 cfs continuous rate) Qi = 2,000 cfs</p> <p><u>Purpose:</u> Hydropower and other beneficial uses including recreational reservoir levels; winter reservoir levels to maintain reservoir; protect and enhance fish and wildlife; maintenance of water quality for recreational purposes in the reservoir and to meet other regulatory requirements.</p>	<p><u>Quantity:</u>² Qa = 931,281 acre-feet/year (perfected) (equivalent to a 1,286 cfs continuous rate) Qi = 1,988 cfs (perfected) Qi to be diverted from the White River under the changed Claim for non-hydropower purposes would be identical to Qi for S2-29920(A) per WRMA.</p> <p><u>Purpose:</u> Unchanged from Original Application of Change</p>

¹ The original S2-29934 and R2-29935 applications submitted by Puget erroneously referred to the S2-29920 application as S2-29921.

² An application for a temporary donation of a portion of CS2-160822CL into the State Trust Water Rights Program was accepted by Ecology on October 26, 2009.

Under WAC 173-510-040, the White River is closed to further consumptive appropriations. Stream "closures" are determinations by Ecology under RCW 90.54.020 that water is not available for further appropriations. See *Postema v. Pollution Control Hearings Board*, 142 Wn.2d 68, 95, 11 P.2d 726 (2000). However, a stream closure under the authority of RCW 90.54.020(3)(a) may in certain circumstances be overridden under an exception that authorizes a new appropriation from a closed stream "in those situations where it is clear that overriding considerations of the public interest will be served."

BACKGROUND

Project Description

The Project has three main components:

1. **New municipal appropriations** to divert water from the White River into Lake Tapps Reservoir, store water in the reservoir, and withdraw water from Lake Tapps for municipal water supply purposes. The new municipal water supply would provide 48.5 million gallons per day ("mgd") (75 cfs) Average Day Demand for the Members of Cascade.
2. **Recommended flow regime for the Reservation Reach of the White River**, which includes minimum flow rates, diversion limits, limitations on tailrace discharge, and ramping rates. The recommended flow regime was established in the White River Management Agreement ("WRMA") negotiated between Cascade and the Puyallup Tribe of Indians and Muckleshoot Indian Tribe (Cascade 2008b).
3. **Maintenance of Recreational Lake Levels** in accordance with the 2009 Agreement Regarding Lake Tapps between Cascade Water Alliance and the Lake Tapps Community. (Cascade 2009).

Project Infrastructure

The Project would use many of the existing structures from Puget's former Hydro Project. Cascade would divert water from the White River at the location of the existing diversion dam and intake. The diverted water would travel down the existing flow line where it would be stored in Lake Tapps Reservoir. Cascade would withdraw water from the forebay of the hydropower facility or another location to be determined, and treat it to meet drinking water standards before conveying it to a regional water distribution system.

Cascade would construct the following new facilities as part of the project: raw water intake pipe, water treatment plant, and a transmission pipeline with booster pumps as needed. No changes are proposed to the diversion dam, diversion canal, or Lake Tapps Reservoir as a direct result of the Project. As part of the Project, Cascade would make improvements to minimize leakage from the former Hydro Project powerhouse that currently leaks at approximately 36 cfs. Replacement of the diversion dam is planned as a component of another project by USACE.

A Water Treatment Plant Feasibility Study was conducted as part of the Lake Tapps Reservoir Water Right Feasibility Report (HDR 2002). The Treatment Plant Feasibility Study concluded that there was a

suitable site for construction of a treatment plant and that the site had no known environmental or permitting issues that would preclude its construction. The feasibility study included the preliminary selection of a treatment process that would meet Washington State Department of Health ("DOH") standards. The selected treatment process includes an inlet control structure, screens, flocculation tanks, membrane filtration, granular activated carbon beds, wash water recovery, and solids recovery. The final treatment configuration will be subject to review and approval by DOH.

Relationship of New and Existing Rights

The Puget Claim for the Hydro Project dates back to 1895 and pre-dates the adoption of the surface water code in 1917. In June 1974, Puget filed a statement of claim to document the Puget Claim consistent with the Water Rights Registration Act, chapter 90.14 RCW. Historically, the Puget Claim has been used to fulfill a variety of purposes, including maintaining water quality and recreation in Lake Tapps, and providing flows for the fish bypass structure and for fish or wildlife habitat enhancement. Accordingly, Puget continued to divert water pursuant to the Puget Claim even after it ceased operation of the Hydro Project in 2004. In 2005, Puget submitted an application for a change in use of the Puget Claim to confirm that it continues to have the right under the Puget Claim to divert and use the water for these beneficial purposes.

Cascade would continue to use the Puget Claim in parallel with the new water rights. The Puget Claim would be used to provide multiple beneficial purposes, including, but not limited to recreation, reservoir maintenance, fish passage, flow augmentation, and water quality. The new water rights would be used solely for municipal water supply. The new and existing rights to divert water from the White River would not be additive in that the combined diversion would be limited according to the Provisions and Conditions of the 2010 ROE for S2-29920(A).

Cost Reimbursement

This application has been processed by Aspect Consulting, LLC and other consultants under two cost-reimbursement contracts. Initial processing of the Applications occurred through Ecology Cost-Reimbursement Project No. 9E52, under agreement between Ecology and Puget. This initial processing resulted in issuance of the Reports of Examination in 2003 that were appealed to the Pollution Control Hearings Board. The procedural history of the Applications and the appeal is more fully described in the 2010 ROE for S2-29920(A). Subsequent processing of the Applications was performed by Aspect Consulting under Expert Agreement with the Washington State Office of the Attorney General.

INVESTIGATION

The Investigation is described in the 2010 ROE for S2-29920(A) and is incorporated here by reference. The Investigation included evaluation of demand and supply; hydrologic, hydrogeologic, water quality, recreation and fisheries effects of the Project; and the potential effects of climate change on the Project.

Recommendation of the Department of Fish and Wildlife

RCW 77.57.020 requires that Ecology give notice to the Department of Fish and Wildlife of applications to divert or store water. Ecology initially consulted with WDFW when the Applications were filed with Ecology. Ecology periodically with WDFW throughout the evaluation of the Applications. WDFW issued three comment letters to Ecology. These letters were dated November 8, 2000, July 28, 2006, and July 16, 2010. Additional detail on the WDFW's comment letters is provided in the 2010 ROE for S2-29920(A).

WDFW's July 16, 2010 letter affirms that the most recent Draft ROEs addressed WDFW's concerns regarding minimum flows, ramping rates, stream gaging, and fish screens on lake outlets.

Consideration of Protests and Comments

Formal protests regarding the Applications associated with the Project were submitted to Ecology by the Puyallup Tribe of Indians, the Muckleshoot Indian Tribe, the City of Auburn, and the Center for Environmental Law and Policy. Comment letters were received from WDFW, the Muckleshoot Indian Tribe, Puyallup Tribe of Indians, and other interested parties. Ecology and cost-reimbursement consultant staff also engaged and interacted with protestants and commenters in multiple meetings through the course of the investigation. The protests and comments were considered during review of the Applications. A summary of issues raised in protest and comments received with responses is included in the 2010 ROE for S2-29920(A).

CONCLUSIONS

The conclusions of the investigation are described in the 2010 ROE for S2-29920(A) and are incorporated here by reference. Briefly, those conclusions found that:

1. Water is not available for appropriation as the White River is closed to further consumptive appropriation by WAC 173-510-040(3), but it is clear that overriding considerations of the public interest will be served by the new appropriation;
2. The proposed use would be a beneficial use;
3. The proposed appropriation would not impair existing water rights; and
4. The proposed appropriation would not be detrimental to the public interest.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that this application be approved to withdraw public surface water at a peak rate of 135 cfs (Qi), not to exceed an annual quantity of 54,300 acre feet (Qa), from Lake Tapps Reservoir for municipal water supply purposes, including industrial and commercial purposes, subject to the Development Schedule, and Provisions and Conditions in the 2010 ROE for S2-29920(A).



Report by: _____

Owen Reese, PE
Aspect Consulting, LLC

9/2/2010

Date

If you need this publication in an alternate format, please call Water Resources Program at (360) 407-6300. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

References

Cascade (Cascade Water Alliance). 2008a. *Determination of Significance and Request for Comments on Scope of Environmental Impact Statement and Environmental Checklist*. June 30, 2008.
[http://www.cascadewater.org/PDFs/Lk Tapps ChkList DS June 2008.pdf](http://www.cascadewater.org/PDFs/Lk_Tapps_ChkList_DS_June_2008.pdf).

Cascade (Cascade Water Alliance). 2008b. *White River Management Agreement Between The Puyallup Tribe of Indians, The Muckleshoot Indian Tribe and Cascade Water Alliance*. August 6, 2008.

Cascade (Cascade Water Alliance). 2009. *2009 Agreement Regarding Lake Tapps between Cascade Water Alliance and the Lake Tapps Community*. May 13, 2009.

Cascade (Cascade Water Alliance). 2010a. *DRAFT Environmental Impact Statement, Lake Tapps Reservoir Water Rights and Supply Project*. January 29, 2010.

Cascade (Cascade Water Alliance). 2010b. *Lake Tapps Area Water Resources Agreement between Cascade Water Alliance and the Cities of Auburn, Bonney Lake, Buckley, and Sumner*. February 5, 2010.

Cascade (Cascade Water Alliance). 2010c. *Final Environmental Impact Statement, Lake Tapps Reservoir Water Rights and Supply Project*. June 16, 2010.

Ecology (Washington State Department of Ecology). 2009. *Letter to Cascade Water Alliance Re: Water Right Application Nos. – CS2-160822CL, S2-29920, S2-29934, and R2-29935*, December 15, 2009.

HDR (HDR Engineering, Inc.). 2002. *Lake Tapps Water Right Feasibility Technical Memoranda*. Volumes I and II, March 19, 2002. TMs 12, 16, 25 and 26 are dated April 30, 2002; TM 17 is dated March 12, 2003.



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