



**FEBRUARY 28, 2014 ADDENDUM TO  
THE FINAL ENVIRONMENTAL IMPACT STATEMENT  
for the  
LAKE TAPPS RESERVIOR WATER RIGHTS  
AND SUPPLY PROJECT  
(June 16, 2010)**

**Proponent and Lead Agency:** Cascade Water Alliance

**Location of Proposal, including street address, if any:** The Lake Tapps Reservoir is located in northern Pierce County, Washington, approximately 30 miles southeast of Seattle and 18 miles east of Tacoma. Project features are located in the Cities of Bonney Lake, Buckley and Sumner as well as unincorporated Pierce County.

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## **INTRODUCTION AND SUMMARY**

Cascade Water Alliance (Cascade) issued the Final Environmental Impact Statement (the FEIS) under the State Environmental Policy Act (SEPA) for the Lake Tapps Reservoir Water Rights and Supply Project (the Project) on June 16, 2010. As a mitigation measure for the potential impacts of the Project, the FEIS included review of the donation of a portion of the former Puget Sound Energy (PSE) White River water right claim to the Trust Water Right Program. In 2012, Cascade filed applications with the Department of Ecology to donate specific portions of the water right to the State trust water rights program, as described below. As the lead agency for environmental review of the Project, Cascade evaluated the trust water applications under SEPA and determines that an addendum to the FEIS is appropriate. The trust water applications and the proposed trust water donations add information about the Project, but they do not change the analysis of impacts or alternatives in the FEIS. Accordingly, Cascade issues this addendum to the FEIS under WAC 197-11-600 for the trust water applications and the Department of Ecology's (DOE) decision action on the same.

## **FINAL ENVIRONMENTAL IMPACT STATEMENT**

The FEIS statement of the "proposed action" includes the trust water donation as an element of operating the Project in "a manner to provide enhanced flows" consistent with the White River Management Agreement between Cascade the Muckleshoot Indian Tribe and the Puyallup

Tribe of Indians(the Management Agreement). The FEIS contains this text in a footnote, with underlining added for emphasis:

Due to the timing of the closing of the Asset Purchase Agreement, the application for a donation of a portion of Puget's Claim into the State Trust Water Rights Program was for a temporary donation rather than a permanent donation. The temporary donation was accepted by Ecology on October 26, 2009 (Ecology 2009a). In anticipation of a future permanent donation application and for purposes of compliance with the State Environmental Policy Act (SEPA) for such permanent donation, the permanent donation is analyzed as a component of the Proposed Action in this Draft EIS. Cascade can provide for flows in accordance with the Recommended Flow Regime with or without Ecology's acceptance of the donation and, therefore, the donation is independent of and does not affect the remainder of the Proposed Action. The donation is intended to provide an additional legal mechanism to ensure implementation of the Recommended Flow Regime and there are no additional impacts beyond those analyzed for the Proposed Action.

In addition, the trust water donation is identified in the summary of potential environmental impacts and mitigation measures (FEIS at pp. S-12-14, Table S-1). The trust water donation is also shown on a schematic of the project site with all Lake Tapps water rights, clearly showing the historical diversion point and that a "portion" of the water right claim would be dedicated to White River flows (FEIS at Figure S-1). Thus, the permanent trust water donation was included and reviewed in the FEIS.

At the time of FEIS review, however, the trust water applications had not been filed and the specific quantities proposed for donation were not known. The Lake Tapps Community Council (LTCC) raised this point in its comment on the Draft EIS. The LTCC expressed concern about the how the donation would be "designed", possible resulting impacts, and the limited information available about the trust water donation.

While no changes were made to the DEIS in response to the LTCC comment, the FEIS stated:

Regarding Cascade's plan to donate a portion of the Water Right Claim No. 160822 (the Claim) to the State's trust water rights program, Cascade will retain a portion of the Claim sufficient to maintain Lake Tapps Reservoir's levels for recreational purposes (and other purposes). Cascade will structure the trust water donation so that it honors and meets all agreements, including that 2009 Agreement between Cascade and the Lake Tapps community (or the 2004 Reservoir Management Agreement if it remains in effect). Finally, Cascade will structure the trust water donation so that no existing water rights will be impaired.

The DOE SEPA regulations identify an addendum as one method to use existing environmental documents for a proposal. An addendum "adds analysis or information about a proposal but does not substantially change the analysis of significant impacts and alternatives in the existing environmental document." WAC 197-11-600(4)(c). The SEPA Handbook explains that an addendum "contains minor new information that was not included in the original SEPA document." The Handbook also states that an "addendum is appropriate when a proposal has been modified, but the changes should not result in any new significant adverse impact." (SEPA Handbook, at § 2.7.3 [ECY Publication # 98-114]).

The addendum approach fits the present circumstances. The trust water applications provide the details of the specific quantities to be donated and managed in relationship to the overall Project, consistent with the FEIS description of the donation as a mechanism to meet the enhanced White River flow regime proposed in the FEIS. The trust water applications do not result in any new significant adverse impact. Thus, the applications provide “minor” new information but no new adverse impacts as compared to the FEIS.

This addendum is being issued by Cascade’s SEPA Responsible Official and circulated to recipients of the FEIS. [WAC 197-11-625(4)]. There is no comment period or other process requirements for an addendum.

## **PROJECT BACKGROUND**

PSE operated the former White River Hydroelectric Project from 1911 until January 15, 2004 and during that period diverted up to 2,000 cubic feet per second (cfs) of water from the White River into Lake Tapps Reservoir. PSE’s water right for the Project is based upon claims of pre-code water dating back to 1895 (Claim #60822 filed in 1974). The diverted water was stored in the Lake Tapps Reservoir and released through a power-generating facility to the White River via a tailrace 20.7 miles downstream from the point of diversion.

These historic hydroelectric operations greatly reduced flows in the White River in the area known as the “Reservation Reach” or the “Bypass Reach” (between the diversion at River Mile 24.3 and the tailrace at River Mile 3.6), which resulted in significant impacts to fisheries and water quality. DOE closed the White River to any further appropriations in 1980 but did not establish numeric flows. A 1986 settlement agreement between PSE and the Muckleshoot Indian Tribe established a minimum instream flow for the White River Reservation Reach of 130 cfs and a 3,650 second-foot-day water budget for fish transportation.

In 2000, PSE applied for public water supply/municipal water rights at the Project. As the prospective purchaser of the Project assets, Cascade joined with PSE in pursuing Water Right Applications No. S2-29920 (diversion from the White River) and S2-29934 (diversion from Lake Tapps Reservoir), and Storage Application No. R2-29935 (reservoir storage). Cascade intended to acquire the Water Right from PSE to develop a Municipal Water Supply Project to meet the demands of Cascade’s service area. Under these three (3) applications the total combined diversion of water would not exceed the 2000 cfs hydropower claim.

In January 2004, PSE discontinued power generation. PSE continued to divert water as needed to maintain the water level in the Lake Tapps Reservoir and released water from the tailrace back into the lower White River. PSE continued to pay annual license fees for power development and, thus, according to RCW 90.14.140(2)(a), the water rights are exempt from relinquishment.

In 2005, PSE applied to DOE to confirm that PSE has the right under Claim #60822 to divert and use the water for multiple beneficial purposes, including recreation, reservoir maintenance, flow augmentation, and water quality (Water Right Change Application No. CS2-160822CL).

In 2006, PSE and Cascade entered into an agreement for Cascade to purchase the Project contingent upon PSE obtaining a municipal water right for the Project. In January 2008 Cascade and PSE entered into the Asset Purchase Agreement under which Cascade would purchase the Water Rights, the Lake Tapps Reservoir and Associated Facilities by April 2010.

In August 2008, Cascade entered into the Management Agreement. As part of The Management Agreement, Cascade agreed to:

Transfer that portion of the perfected hydropower water right that it obtains from PSE in excess of the quantity of water that it is permitted to divert into Lake Tapps under the terms of this Management Agreement ("Trust Water") to the State Water Trust for the purpose of providing instream flows in the White River.

In 2009, conditions of the Asset Purchase Agreement were satisfied such that Cascade became the owner of the Project (including the water rights applications). In 2010, DOE approved three new water rights and a change to the claim as part of the Lake Tapps Reservoir Water Rights and Supply Project (the Water Rights), which includes continued operation of Lake Tapps and its development as a new regional water supply. As a component of those authorizations, Cascade committed to donating a portion of the Claim to the Trust Water Right Program and DOE included a condition requiring Cascade to apply for trust water donation within two years of the new municipal water permit issuance.

#### **TRUST WATER RIGHT PROGRAM DONATION**

In December 2012, Cascade submitted two Applications to Enter a Water Right into the Trust Water Right Program (Cascade Application Nos. CS2-160822CL@3 and CS2-160822CL@2 to Enter a Water Right into the Trust Water Right Program). The two applications fulfilled Condition 19 of the Lake Tapps Water Rights (and obligations under section II J the Management Agreement) and provided for a portion of Claim No. 60822 to be placed into Trust Water Right Program for the benefit of instream flows for fish and wildlife maintenance and enhancement, recreational purposes and preservation of environmental and aesthetic values.

The amount of water needed to operate the Project for the purposes authorized in the Water Rights will vary from year to year (with changes in hydrologic conditions), and over time (as the Water Supply Project is developed). Cascade calculated that the amount of water needed to operate the Project under "normal" conditions, taking into account diversions necessary (or authorized) for meeting its obligations to maintain recreational Lake Levels, operate the Fish Screens, and withdrawal for municipal water supply and Tailrace releases (including consideration of precipitation, evaporation and seepage to groundwater). This "normal" year calculation is 146, 259 acre-feet per year (Qa) and 1000 cfs (Qi). Cascade will retain this amount for use under the Water Rights. Cascade also calculated that up to an additional 100,451 acre-feet of water could be necessary for operation of the Project under "extreme" conditions.

To fulfill its obligations under the Water Rights and the Management Agreement, Cascade filed the two above reference applications, which provide for:



- A portion of Surface Water Claim 160822 to be permanently donated to the Trust Water Right Program; an instantaneous quantity (“Q<sub>i</sub>”) of 988 cfs and an annual quantity (“Q<sub>a</sub>”) of 684,571 acre-feet; and
- A portion of Surface Water Claim 160822 to be donated to the Trust Water Right Program for the period January 1, 2013 to December 31, 2016; an annual quantity (“Q<sub>a</sub>”) of 100,451 acre-feet.

In order to lengthen the term of the temporary trust water donation, in November 2013, Cascade submitted an amendment to the Application for the Temporary Donation to:

- Change the End Date for Temporary Donation from December 31, 2016 to December 31, 2034; and
- Change the amount of the Temporary Trust from 100,451 acre-feet/year to 154,751 acre-feet/year.

With these applications, Cascade has retained the quantity of water it has determined is necessary to operate the Project under “normal” conditions. Water donated to the Trust Water Right Program on a temporary basis would be available for Cascade to divert if necessary to operate the Project under “extreme” conditions (with notice to DOE under the provisions of a Trust Water Right Agreement to be entered between Cascade and DOE). Extreme conditions could result from circumstances such as drier than average years, a change in Cascade’s water supply contracts, increases in the water demand for Cascade’s Members or Lake refill following extreme or emergency drawdown. Once the need to divert temporary trust water is over, the water would again be managed in the Trust Water Right Program for instream flows. No further applications, either to divert trust water or return trust water to use for instream flows, are required. Cascade would document any diversion of temporary trust water in its annual compliance reports to DOE.

Cascade recently completed updating its Transmission and Supply Plan. As a result of restructuring Cascade’s wholesale water purchase contracts with Seattle Public Utilities and Tacoma Water, Cascade is projected to be able to meet the projected 2040 demand of its Members utilizing Member Independent Supplies and purchased water. The temporary trust water application recognizes that Cascade will not be utilizing 54,300 acre-feet/year for municipal purposes for at least 20 years. The 20 year temporary donation period allows sufficient time for Cascade to plan for changing circumstances and adjust the Temporary Trust Donation as appropriate.

Attachment A shows Cascade’s calculation of the amounts of water necessary for operation under “normal” and “extreme” conditions, and summarizes the amounts donated to the Trust Water Right Program.

## **DOCUMENTATION OF HISTORICAL DIVERSION AMOUNTS**

In order to document the historical diversion under Claim 68022, Cascade conducted a review of available data from PSE’s operation of the Project. US Geological Survey (USGS) data at the White River Canal at Buckley (station 12099000) shows that at least 2000 cfs were diverted

on numerous occasions in 2001 – 2002. Records from the same USGS station indicate that 1959 is the highest year on record for annual quantity diverted (929,646 acre feet).

## TRUST WATER RIGHT BENEFITS

Under the hydropower right, Claim 60822, up to 2000 cfs and up to 929,654 acre-feet per year were diverted into the Lake Tapps Reservoir resulting in a diminished instream flow in the Reservation Reach. Under the trust water donation, a portion of the water available under Claim will no longer be diverted at River Mile 24.3. Thus, the Reservation Reach will directly benefit from the trust water that will no longer be diverted from, but will remain instream. The Reservation Reach is the primary reach impacted by the trust water donation.

A secondary reach of the White River potentially impacted by the trust water donation is the reach from river mile 3.6 to the confluence of the Puyallup River and Commencement Bay (downstream of where the diverted flows reenter the White River). This reach will be either unaffected or benefitted by exercise of the trust water donation.

Several species of salmon utilize the main channel and side channels in the White River Reservation Reach throughout the year for migration, spawning, rearing, and flood refuge. Critical habitat has been designated for the Puget Sound Chinook salmon (69 FR 74572; December 14, 2004). Portions of the Puyallup River system have been designated, including the Reservation Reach of the White River that contains several of the essential elements to sustain Chinook salmon populations, including spawning, rearing, and migration habitat (70 FR 52630; September 2, 2005).

Higher flows, in several Washington rivers have resulted in increased survival rates for juvenile Chinook and other species of salmon during downstream migration. In addition to these substantial fishery benefits, increased instream flows enhance wildlife, provide recreational benefits, and preserve aesthetic and environmental values.<sup>1</sup>

## CONCLUSION

For the foregoing reasons, Cascade Water Alliance as the lead agency for environmental review of the Lake Tapps Reservoir Water Rights and Supply Project hereby issues this addendum to the FEIS regarding the trust water right applications and the related Trust Water Right Agreement to be entered by Cascade Water Alliance and the Department of Ecology.

Date: February 28, 2014

  
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Michael A. Gagliardo, Director of Planning, Cascade Water Alliance

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<sup>1</sup> Sources:

Kerwin, J. 1999. Salmon Habitat Limiting Factors Report for the Puyallup River Basin (WRIA 10). Washington Conservation Commission, Olympia, WA.

Marks, Eric; Ladley, Russell; Smith, Blake; and Sebastian, Terry. 2007. Annual Salmon, Steelhead, and Bull Trout Report: Puyallup/White River Watershed - Water Resource Inventory Area 10. Puyallup Tribal Fisheries, Puyallup, WA.

## **ATTACHMENT A**

Calculation of the amounts of water necessary for operation under “normal” and “extreme” conditions and summary the amounts donated to the Trust Water Right Program



# White River Trust Donation Proposal

| Available under the Claim |            |
|---------------------------|------------|
|                           | 931,281 AF |
|                           | 1,988 cfs  |

| Proposed Trust Structure (AF)                                |         |         |                   |
|--|---------|---------|-------------------|
|  | cfs(Qi) | AF (Qa) | % of Available AF |
| Available for Diversion - Normal Year                        | 1,000   | 91,959  | 9.9%              |
| Temporary Trust Donation - available for diversion if needed | 0       | 154,751 | 16.6%             |
| Permanent Trust Donation                                     | 988     | 684,571 | 73.5%             |
| Total  | 1,988   | 931,281 | 100.0%            |

## Temporary Trust Donation

Through December 31, 2034

Available for diversion by Cascade when needed for purposes approved in the Water Rights, with notice to Department of Ecology

Available within the Qi limitation for Normal Year Diversion

Total maximum diversion up to 246,710 AF annually

## Permanent Trust Donation

Conveyed to the State Trust Water Right Program exclusively for instream flow purposes in the White River

Not available for another use or reallocation or reappropriation

DRAFT  
 CASCADE WATER ALLIANCE ~ LAKE TAPPS RESERVOIR ~ TRUST WATER RIGHT  
 CALCULATION OF VOLUME NEEDED BY CASCADE ~ NORMAL AND EXTREME YEARS

| Item | Element   | Qi (cfs) | Qa (cfs) | Qa (acre-ft)   | Assumptions for a Normal Year *   | Qi (cfs) | Qa (cfs) | Qa (acre-ft)   | Assumptions for an Extreme Year *   |
|------|---|----------|----------|----------------|---|----------|----------|----------------|---|
| 1    | Diversion for Fish Screen Bypass Pipeline Flow                                | 30       | 30       | 21,779         | 30 cfs to ensure proper operation. Limit to 20 cfs when MF not available in White River.  | 30       | 30       | 21,779         | 30 cfs to ensure proper operation. Limit to 20 cfs when MF not available in White River.  |
| 2    | Maintain Recreational Lake Levels   | 1.8      | 1.8      | 1,281          | Total of the six elements listed immediately below.   | 22       | 22       | 15,906         | Total of the six elements listed immediately below.   |
| 2.1  | Precipitation on Lake   | -11.4    |          | -8,262         |   | -3.7     |          | -2,673         |   |
| 2.2  | Stormwater Inflows  | -11.3    |          | -8,214         |   | -0.2     |          | -126           |   |
| 2.3  | Evaporation   | 7.2      |          | 5,234          |   | 8.5      |          | 6,182          | Uses minimum value for each month of 15-year study period, except evaporation, which uses the maximum values for each month.  |
| 2.4  | Seepage to Groundwater  | 16.0     |          | 11,615         |   | 16.0     |          | 11,615         |   |
| 2.5  | Dike Leakage  | 0.3      |          | 181            |   | 0.3      |          | 181            |   |
| 2.6  | Release to Bowman Creek   | 1.0      |          | 726            |   | 1.0      |          | 726            |   |
| 3    | Trailrace Leakage/Release   | 36       | 36       | 26,134         | Smallest amount possible with current equipment and full penstocks. (Possible to reduce to 3 cfs with penstock gates closed as much as possible.)   | 50       | 50       | 36,298         | Maximum permitted until development of water supply.  |
| 4    | Withdrawal from Tapps for M&I water supply                                    | 135      | 75       | 54,300         | Average withdrawal of 75 cfs for 365 days = 54,300 acre-feet per year.  | 135      | 75       | 54,300         | Average withdrawal of 75 cfs for 365 days = 54,300 acre-feet per year.  |
| 5    | Recreational Lake Levels, Spring Refill following Fall Drawdown               | 1,000    | 139      | 29,469         | This volume represents the difference between the normal maximum Fall drawdown level of 529.5 and the normal maximum top of pool level at 542.5 (as taken from the FEIS assumed operating level). | 1,000    | 225      | 48,000         | This volume represents the difference between a larger than normal Fall drawdown to elevation 500.0 (presumably for dike maintenance, similar to what happened in 2003) and the normal maximum top of pool 542.5. |
| 6    | Recreational Lake Levels, Refill following Drawdown for Emergency Dike Repair | 0        | 0        | 0              | Assumes zero (0 cfs).   | 1,000    | 225      | 48,000         | Emergency drawdown required after Spring Refill has occurred to elevation 500.0 (similar to 2003) followed by refill back to the normal top of pool elevation.  |
| 7    | Contingency   |          |          | 13,296         | Assume 10 percent   |          |          | 22,428         | Assume 10 percent   |
|      | <b>Grand Total</b>  |          |          | <b>146,259</b> | <b>Normal Year Water Volume</b>   |          |          | <b>246,710</b> | <b>Extreme Year Water Volume</b>  |

\* = All elevations are in NGVD True 1929 Datum