

Watershed Plan Implementation Assessment for the Chehalis Basin (Chehalis Watershed)

The Washington Department of Ecology adopted the Chehalis Basin Watershed Plan Addendum on January 28, 2021, as a part of the Streamflow Restoration law (RCW 90.94.020). The Chehalis Watershed is also known as Water Resource Inventory Areas (WRIA) 22 and 23. Plan implementation is ongoing as local entities secure funding and develop their projects intended to offset impacts to streamflows from new domestic permit-exempt (PE) wells and achieve a net environmental benefit (NEB).

Ecology assesses plan implementation periodically and conducts outreach to WRIA 22 and 23 partners and project sponsors to present information to the best of our ability. This assessment provides an update on the best available information of:

- Local water offset and habitat projects (as defined in the watershed plan).
- Current and projected new domestic PE wells.
- Current estimated and projected consumptive water use impacts from these new wells.

Watershed plan implementation

Ecology is using the following parameters to track progress on plan implementation.

Number of new PE wells installed



Water offset from completed projects

We estimate the current offset benefit of completed projects is 24 acre-feet per year.



Consumptive water use from PE wells



Secured funding sources

Projects have received funding from Ecology's streamflow restoration grants or other sources.





Funded projects in WRIAs 22 and 23 (Chehalis Watershed)



Approximate locations of funded projects in WRIAs 22 and 23 from the adopted plan. Projects contribute to the anticipated net ecological benefit and offset the impacts from new PE wells. Projects are funded through either Ecology's Streamflow Restoration (SFR) grant or other funding sources. Basin-wide projects are not shown on the map.



Benefits of WRIA 22/23 plan implementation





Improves rivers and streams for salmon.



Offsets consumptive water use from rural homes.

Implementation snapshot

- Installation of new PE wells in WRIA 22/23 (Chehalis Watershed) is proceeding at a slower rate than the local watershed plan projected (51% below the projected rate). Using the plan's assumption of consumptive water use per new PE well, Ecology estimates the consumptive water use impacts from these new wells is also 51% below the projected rate.
- In 2019, 2020, and 2022, Ecology received a total of 11 applications seeking competitive streamflow restoration grant funding for projects in the Chehalis Basin watershed plan. Five projects, totaling \$6.3 million, earned sufficient scores to receive a funding offer. Ecology awarded nearly \$1.2 million to Thurston County to complete the Albany Street Stormwater Pond with a water offset benefit of 24 acre-feet per year.
- Ecology awarded \$148,500 to the Quinault Indian Nation to complete a feasibility study for the TransAlta water right acquisition. This study is the first phase to placing a portion of this water right into Ecology's Trust Water Rights Program, with an expected water offset benefit of 2,898 acre-feet per year.
- Other Ecology funded projects are underway such as the Cook Water Right feasibility study, Beaver Dam Analog pilot project in Newaukum Creek, and Scatter Creek groundwater-surface water assessment.
- Twenty-eight additional habitat projects have been funded by other local and state funding sources including floodplain restoration, stream restoration, fish passage, land acquisition, and beaver dam analogs.

WRIA partners and project sponsors can update Ecology on the status of plan implementation by emailing <u>WRProjects@ecy.wa.gov.</u>

Watershed plan summary

The Chehalis Basin Partnership met from June 2018 – November 2020 to develop a watershed plan addendum that:

- Projected 4,555 new PE wells from years 2018 to 2040.
- Estimated the impact of these wells on rivers and streams at 504.8 acre-feet per year.
- Identified 74 projects to provide water offset¹ and/or <u>net ecological benefit</u> to streamflows.



A volume of 504.8 acre-feet is equal to about 250 Olympic-sized swimming pools.

¹ From NEB Guidance (Publication number 19-11-079): Offset is the anticipated ability of a project or action to counterbalance some amount of the new consumptive water use over the next 20 years (2018 – 2038). Offsets need to continue beyond the 20-year period for as long as new well pumping continues.



Streamflow Restoration Law (RCW 90.94)

In January 2018, the Washington State Legislature passed the Streamflow Restoration law (RCW 90.94) to help restore streamflows to levels necessary to support robust, healthy, and sustainable salmon populations while providing water for new homes in rural Washington.

Ecology has been actively implementing this law since its passage. Ecology, in coordination with state and local agencies, Tribal governments, and non-profit organizations has funded, led, and supported a range of 15 diverse local watershed plans across the state. Ecology has also implemented a competitive grant offering to help state and local agencies, tribal governments, and non-profit organizations implement projects in their local watershed plans required by this law.

Consumptive water use in Washington State

Significant resources and collaboration went into statewide and local planning and ongoing local plan implementation to offset water use from domestic permit-exempt wells in Washington State.

Consumptive water use from these wells accounts for about 3% of water use in Washington, a small portion compared with other consumptive water uses.

Consumptive Water Use in Washington State (2015)



Data adapted from U.S. Geological Survey's report on Water Use in Washington (2015)

Webpages and Other Resources

- <u>Streamflow Restoration</u>: ecology.wa.gov/StreamflowRestoration
- Streamflow Restoration Grants: ecology.wa.gov/StreamflowGrants
- Chehalis Basin Partnership: chehalisbasinpartnership.org

Publications

- <u>Streamflow Restoration Competitive Grants Status</u>: Publication number 22-11-026
- <u>Streamflow Restoration Planning Update:</u> Publication number 21-11-015
- Final Guidance for Determining Net Ecological Benefit: Publication number 19-11-079
- WRIA 22/23 Watershed Plan Addendum (PDF)²



Streamflow restoration program WRProjects@ecy.wa.gov 360-407-6757 To request an ADA accommodation, contact Ecology by phone at 360-407-6831 or email at WRPubs@ecy.wa.gov, or visit https://ecology.wa.gov/accessibility. For Relay Service or TTY call 711 or 877-833-6341

² https://appswr.ecology.wa.gov/docs/WaterRights/wrwebpdf/watershed/wria2223/WRIAs22-23ChehalisAddendumFinal-Approved.pdf