

Potential Pathways for the Skookumchuck Dam

What's being considered

The Chehalis Basin Board is considering future pathways for the Skookumchuck Dam, including modifying or removing the dam, or taking no action at all.

The Chehalis Basin Board took interest in studying the dam after learning that TransAlta will be closing its Centralia steam generation plant in 2025. The dam—which sits at the midpoint of the Skookumchuck River—has stored water for the power facility since 1970. The dam could be modified to reduce flood damage and improve fish passage.



Potential to reduce flood damage

While the Skookumchuck Dam and its four mile-long reservoir were not designed and are not managed to reduce flooding on the Skookumchuck River, they have provided some flood benefit. When the catastrophic December 2007 flood struck the Chehalis River Basin, the reservoir behind the dam was unusually low, allowing it to hold back water that would have made flooding in Bucoda and Centralia even worse. A recent technical analysis pursued by the Office of Chehalis Basin (OCB) found that:

Modifying the dam's structure and operations for additional flood storage could provide significant reductions to the area and depth of flooding downstream.

Opportunity to improve fish passage

While the dam allows downstream fish passage at certain reservoir levels, it prevents fish from traveling upstream. The Washington Department of Fish and Wildlife (WDFW) has occasionally captured and hauled adult steelhead upstream of the dam during spawning season. At the same time, the dam has never been operated to make it easier for juvenile fish to pass downstream. OCB investigated potential effects of changing discharges from the dam or improving the fish transport facilities. The analysis found that:

- **Modifying dam operations** for fish passage could potentially benefit steelhead and coho salmon
- **Removing the dam** could substantially benefit steelhead, coho, and spring and fall Chinook.



Potential impacts to water rights

The dam stores water during the winter that is discharged into the river downstream during the summer, adding approximately 50 cubic feet per second (cfs) of water to the river available year-round. TransAlta currently holds the right to use that water, and has used it to power the steam generation facility. The company established a water bank in 2021 that allows it to maintain its water right and sell the right to others, once the water is no longer needed at the steam plant.

Without an alternative way to store water, modifying dam operations (and especially dam removal) could lead to a reduction of water in TransAlta's water bank. If that occurred, water right users downstream such as municipal water suppliers or some farms may also see their water availability impacted. TransAlta and other water users may have to be compensated for the lost water right. Potential options to maintain the existing water bank through off-channel water storage have also been studied.

Next steps

- There are no current planned changes to the dam, however TransAlta is also exploring future actions that would require water.
- In 2026, the Chehalis Basin Board will provide a concrete plan for answering remaining questions about future pathways for the Skookumchuck Dam as part of its recommendations on a long-term strategy.
- If the Board recommends modifying or removing the dam, any further action would require an agreement with TransAlta as well as additional design, environmental review, and permits.

For more information



Learn more at <https://officeofchehalisbasin.com/Skookumchuck-Dam-study>
Questions? Email info@officeofchehalisbasin.com

