Frequently Asked Questions

We answer some common questions you may have regarding removal of the Pilchuck River Dam.

Where is the dam, who owns it, and what was the purpose of the dam?

The Pilchuck River Diversion Dam is located southeast of the city of Granite Falls and is owned by the City of Snohomish. The dam previously provided drinking water to the City of Snohomish. The city now uses water from the more reliable and less costly City of Everett water source in the Sultan River watershed.

What services does the dam currently provide?

This dam has no current or proposed future use and is an environmental, safety, and financial risk. Removal of this dam will be a benefit to all parties.

What are the benefits of removing the Pilchuck River Dam?

Dam removal will restore full-unimpeded access to over 37 miles and over 1/3 of the mainstem channel habitat in the Pilchuck River for salmon and steelhead. This includes large habitat gains for Endangered Species Act listed chinook salmon, steelhead, and bull trout. Dam removal will also increase safety in the area by removing a potentially dangerous structure that poses a risk to downstream landowners. Finally, dam removal will be a cost savings to the City of Snohomish, and has already led to a strong relationship between the Tulalip Tribes and the city.

How can the Pilchuck Dam Removal Restoration Project be supported?

Great question! Projects like this require public and elected official support to provide the will and funding to proceed. Please sign up to our email list by visiting pilchuckriverdam.com and come to our public events to express support. Also, please feel free to contact your local elected officials to request prioritization of salmon recovery efforts and funding in your backyard so that we can all enjoy salmon and orcas for current and future generations!

Why is Tulalip conducting this project?

The Tulalip Tribes work to protect and perpetuate the salmon and other resources their people have depended on for thousands of years. This includes both on the reservation, and within historic territories such as the Pilchuck River watershed where Tulalip retains fishing, hunting and other rights along with deep cultural connections. The Pilchuck River is a culturally and environmentally important watershed for salmon and other species. This project is a collaboration between the Tulalip Tribes and the City of Snohomish. Both Tulalip and the city want to achieve restoration and enhancement of the shared, once abundant resources provided by the Pilchuck River such as clean water and salmon runs.
Is the dam currently passable to fish?

Fish do currently pass the dam—but not all fish species, not all fish within a species, and not all life stages. Chinook, pink and chum salmon are not known to pass the dam. In addition, fish are known to be injured or killed while attempting to jump the spillway (see our video on pilchuckriverdam.com for some examples).

If there is an existing fish ladder, why can’t it just be fixed?

The location, access for required maintenance, and variable water flows are just a few of the factors which limit the functionality of a fish ladder. However, one of the primary reasons that we are proposing to remove the dam is that it currently provides no function while limiting upstream fish access, costing money to the city, and presenting a safety risk. For these reasons, it is best environmentally, economically and from a safety perspective to remove the dam.

When will dam removal be conducted and how long will it take?

We anticipate dam removal to be conducted in summer/fall of 2020. We anticipate deconstruction to take approximately one month.

How much will dam removal cost?

The full project cost is approximately $2,000,000 including all work for analyses, designs, permitting, outreach, and deconstruction.

What is the cost relative to the benefit of this dam removal project?

Because this dam can be fully removed without the need for additional infrastructure, it is actually a very cost-effective project. This is especially true given the length of habitat that is above the dam, and the fact that the dam currently inhibits access to listed species. Other dam removals cost substantially more when additional infrastructure construction is required and removal is typically more cost efficient and cheaper than dam repair/maintenance over the long term.

What will the site look like post dam removal?

The restored channel will closely mimic the pre-dam channel, allowing complete restoration to a fully natural condition. The site will look very similar to the existing conditions up and downstream of the dam.

Will dam removal cause flooding?

Since this is a run of the river diversion dam, there is no functional reservoir that would alleviate flooding. The amount of water flowing above the dam is the amount of water flowing below the dam. We will be doing dam removal during low flow periods to make sure that there is no sudden pulse of water during dam removal, and we will be conducting careful water management.

How much sediment is behind the dam?

Analyses have shown the total amount of sediment behind the dam to be approximately 6,500 cubic yards. This is a relatively small amount of sediment—less than what the river typically moves through this location on an annual basis. This sediment will likely distribute shallowly and will mostly be transported out of the immediate vicinity. For this and other reasons, sediment upstream of the dam will not negatively affect downstream properties.
Will dam removal cause flooding through downstream deposition of sediment?

We have conducted analyses that indicate this will not occur. The amount of sediment that was behind the dam is small compared to the amount of sediment that the river moves in any given year. Therefore, we do not anticipate significant sediment deposition following dam removal. However, we will be conducting thorough analyses to make sure that this project will not cause any increased flooding or other damage downstream from sediment deposition.

Will dam removal increase risks to downstream properties?

As removal is not changing the quantity of water or significantly altering the sediment load, risks will not be increased or decreased to downstream properties. However, there are inherent risks in living adjacent to a river as dynamic as the Pilchuck River. Current hazards (current flooding frequency and duration, etc.) will remain the same before and after dam removal.

How will dam removal be conducted?

The current project consists of demolition of the existing concrete and buried crib dam structures, intake, and fish ladder all in a single year work season. This will be followed by natural channel formation and sediment transport of the remaining reservoir sediment to establish connectivity and natural process restoration. The restored channel will closely mimic the pre-dam channel.

Will the project comply with all regulations, and will all necessary permits be obtained?

Yes. Tulalip will be applying for all necessary permits as part of the current planning effort. This will ensure that all environmental and safety considerations are addressed through rigorous and extensive permitting requirements.

Will stakeholders have an opportunity for project input?

Yes. We would like to hear stakeholders thoughts, concerns, and questions. We will consider this input as we develop plans for dam removal. We will be conducting a significant amount of community outreach and engagement through outreach materials, meetings, and other methods.

Are there safety concerns with truck traffic/construction equipment?

We will require safety standards to be maintained, and we will follow all applicable safety laws, standards and best management practices. Every reasonable effort will be made to reduce impacts to adjacent landowners during deconstruction.

Who is paying for dam removal?

Dam removal funding is coming from several sources including the Tulalip Tribes, the City of Snohomish, the State of Washington, and Federal sources. State sources currently include the Washington State Recreation Conservation Office Salmon Recovery Funding Board, the Puget Sound Partnership, and the Puget Sound Acquisition and Restoration Fund. The current federal source is the United States Environmental Protection Agency. We continue
to look for funding partners for this and other important restoration projects throughout the Snohomish Watershed.

**What is the future use of city property?**

There is no current plan to change the ownership or status of the City of Snohomish dam property or the water treatment plant property.

**What is the fate of the existing city residence on the dam property?**

Tulalip plans to work with the City of Snohomish to determine the fate of this residence and how we can proceed to meet community needs.

**Will dam removal affect water quantity or quality of adjacent wells?**

Dam removal will not affect adjacent well water amount or quality. Water levels are expected to remain similar and we will not be affecting the water table. Any temporary sediment related to dam removal will not affect well water quality.

**How does this project address sediment and erosion issues farther downstream in the Pilchuck River?**

The Pilchuck River is a dynamic river, especially farther downstream in the middle river. This project will not positively or negatively affect ongoing challenges downstream based on the many analyses that have been conducted. However, there are many ongoing efforts being conducted by several organizations in the middle Pilchuck River, which is vital for salmon and also home to many people. Tulalip supports finding creative multi-benefit solutions for the middle Pilchuck River, and we hope to continue engagement with this issue on future projects.

**Is there anything that can be done for drainage adjacent to 24th Street NE?**

This right of way is owned by Snohomish County. We have contacted them and are working to figure out how existing drainage can be improved adjacent to this road. The Pilchuck Dam Removal Restoration Project will not affect drainage adjacent to 24th, but we are interested in improving conditions in the local community for both people and water quality.