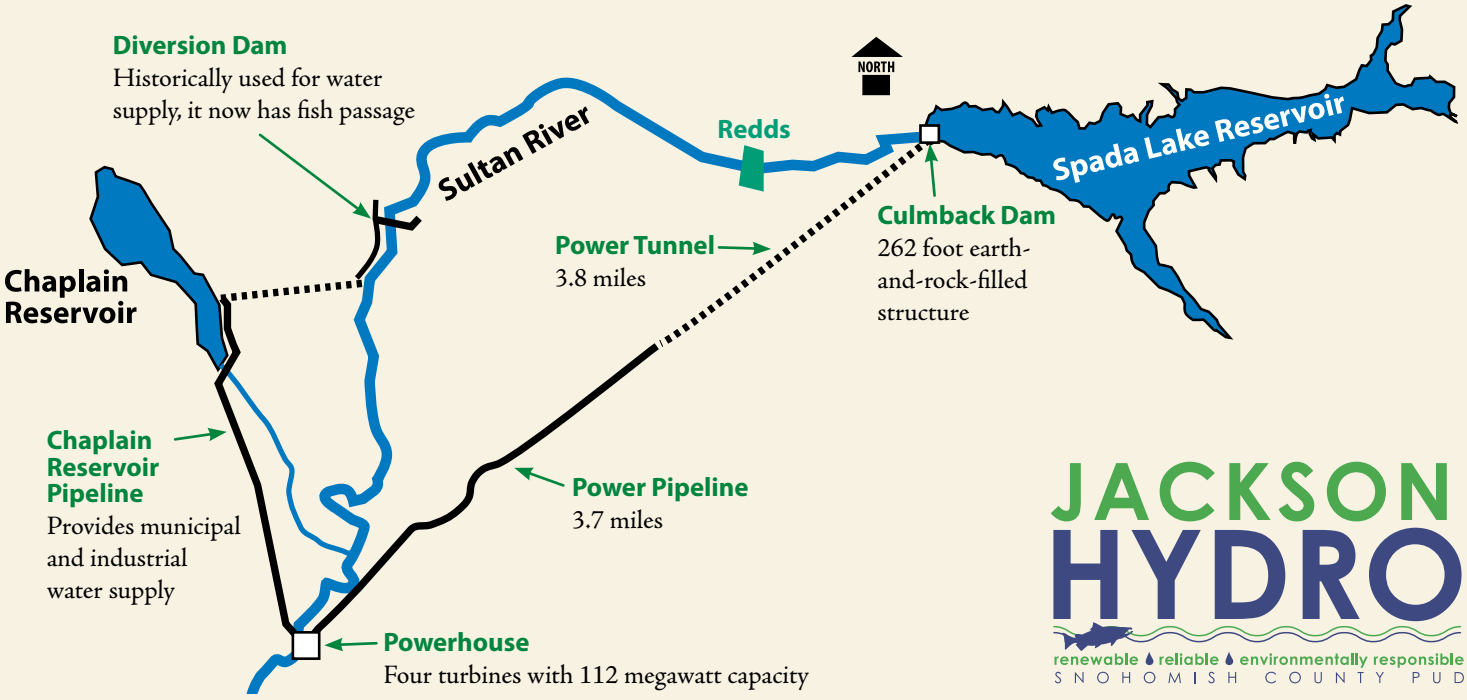
# Diversion Dam
# Volitional Fish Passage

*Modifications to the Diversion Dam, one of the key measures under the relicensing of the Jackson Hydroelectric Project, have opened up an additional six miles of fish habitat – the first time fish have been able to access the upper reach of the Sultan River in more than 85 years.*



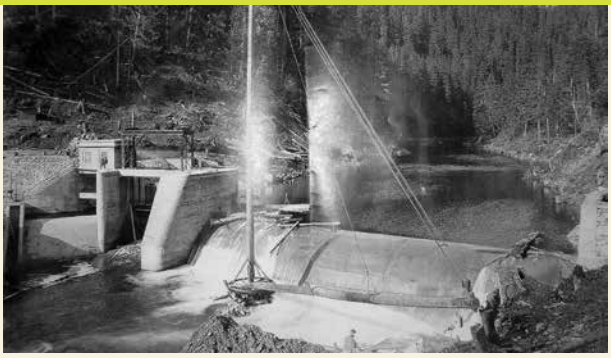

JACKSON HYDRO
renewable reliable environmentally responsible
SNOHOMISH COUNTY PUD

## Benefits of Jackson Project & Other Local Hydropower

- *A non-polluting renewable source, with no heat or noxious gas releases*
- *Generating output is naturally maximized during times of high energy demand, which complements intermittent energy sources such as wind, solar and other PUD energy sources*
- *Provides a locally-generated resource right in the PUD's back-yard, minimizing the need for new transmission systems*
- *Lowest in price compared to other renewable sources*
- *Environmental stewardship enhances fish, aquatic, terrestrial and recreational resources*

# History of Diversion Dam

- *1919 – City of Everett's first timber crib dam on the Sultan River built for water supply*
- *1929 – Everett builds new concrete dam at current location to meet water needs of growing region*
- *1964 – Culmback Dam built at Spada Reservoir; Diversion Dam still used for water supply*
- *1984 – PUD hydroelectric facilities built; Diversion Dam is used to return water to the Sultan River for instream flows by PUD, and water is routed to Lake Chaplain through the powerhouse instead of directly from the river*



*The Diversion Dam is eligible for listing on the National Register of Historic Places due to its importance to regional development.*

# Diversion Dam Today

- *In 2011, the PUD received a new 45-year hydroelectric license, requiring volitional fish passage construction at the Diversion Dam based on a biological need for more habitat*
- *In 2013, a biological need was established, with five salmon redds discovered in an index reach, indicating a high likelihood fish would access upstream habitat*
- *In the 2013-2016 timeframe, the PUD conducted additional consultation, permitting and design*
- *In May to December 2016, the Diversion Dam modifications were completed*
- *Within weeks of project completion, a coho redd was discovered five miles upstream of Diversion Dam; several more have been seen since then*

**Modifications:**

- *Removal of the former sluiceway concrete to the natural river channel elevation*
- *Addition of a new sluiceway gate that closes as a back-up means to supply municipal water to Lake Chaplain Reservoir under emergency operations*
- *Replacement of hoist, hoist structure, railings, and communication systems*

**Benefits:**

- *Allows for unrestricted access (upstream and downstream) for resident and anadromous fish to additional six miles of habitat, an area not accessible since 1929*
- *Increases access to spawning habitat in the Sultan River by about 50%*
- *Uses natural habitat through a man-made structure*
- *Is self-sustaining and low maintenance*
- *Allows for adaptive management based on species use and timing*

*In 2017, the PUD's Diversion Dam Project received the National Hydropower Association's "Outstanding Stewards of America's Waters Award" in the category of "Recreational, Historical, & Environmental Enhancement."*

***The additional habitat provided to anadromous fish with the Sultan Diversion Dam Project is of great benefit to wild salmon and steelhead.***

– J. Whitney, Washington Department of Fish and Wildlife

***The Tulalip Tribes are very excited to see salmon access restored to the Sultan River above the Diversion Dam.***

– J. Gobin, Tulalip Tribes

SNOHOMISH COUNTY PUD
PUBLIC UTILITY DISTRICT NO. 1

For more information:
**snopud.com/jhp**

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