







Session 5A: The Value of Dams in Response to a Changing Climate

#### TACOMA POWER DAMS SAVE FISH

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#### TACOMA POWER overview





- A municipal electric utility established in 1893 which provides retail electric and telecommunications services
- Part of Tacoma Public Utilities which also includes Tacoma Water and Tacoma Rail all of which is owned by the City of Tacoma
- 180 square mile service territory including: Tacoma, Fircrest, University Place and Joint Base Lewis-McChord; as well as portions of Fife, Lakewood, Steilacoom, Federal Way and unincorporated Pierce County
- Serve more than 350,000 residents in Pierce County (about 50% inside City of Tacoma) plus joint base Lewis-McChord
- About ½ of the energy comes from Tacoma Power's seven dams

### Tacoma's Hydro locations





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# Tacoma Power's dams produce clean, green, renewable power and more ...

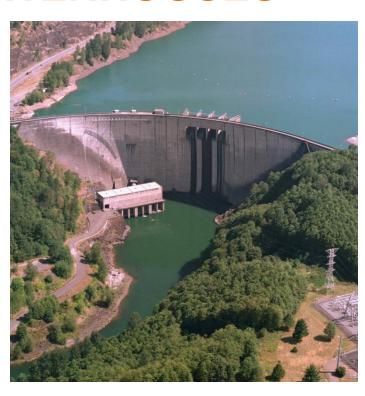


#### 7 MAJOR DAMS AND POWERHOUSES

- Nisqually River Project
- Cowlitz River Project
- Cushman Hydro Project
- Wynoochee River Project

### **3 SMALL PROJECTS**

- Hood Street Project
- LaGrande Unit 6
- Cushman North Fork Powerhouse



## Tacoma Power's fish programs create a lot of fish



- ➤ Tacoma Power owns and funds two of the largest fish hatcheries in the state which annually produce about 10 million salmon, steelhead and cutthroat in the Cowlitz River.
- ➤ Tacoma Power annually provides about a million dollars annually to help fund to state and tribal hatcheries. We completed a rebuild of our own Cowlitz salmon hatchery for \$28M.

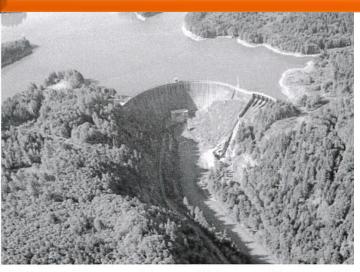




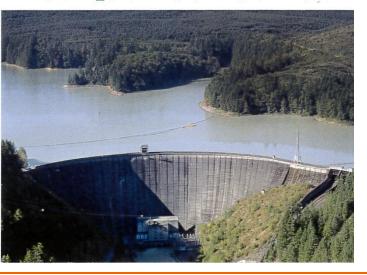
- ➤ Tacoma Power has spent about \$50M to improve fish passage at the Cushman project and construct two new hatcheries
- ➤ Tacoma Power has spent \$12M on fish collection research at the Cowlitz project since 2003 and is just commissioning a new \$37M downstream fish collector

## Clean, cold water from the Nisqually River is regulated for the benefit of fish





Green power since 1912

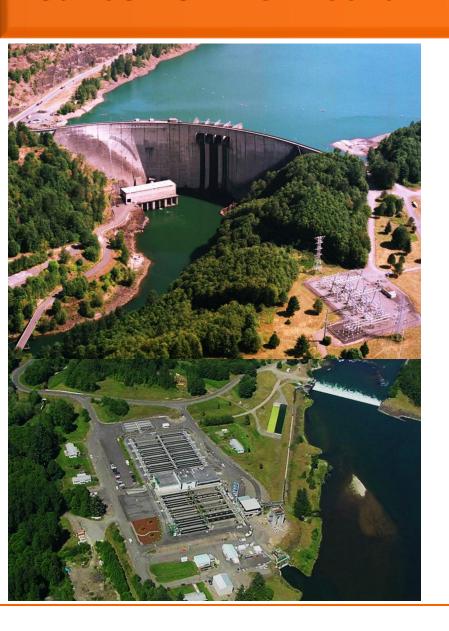


#### SETTLEMENT AGREEMENT

- ➤ 1989 with the Nisqually Tribe
- ➤ Provided for ongoing hatchery funding for a new hatchery being developed by the Tribe
- ➤ Established minimum instream flows that were incorporated into the 1997 FERC license
- ➤ Natural inflows would often drop below 200 cfs and regulated flows to 300 cfs
- ➤ New minimum is 575 cfs, Aug thru Sept. rising up to 900 cfs Dec. thru May

### Clean, cold water from the Cowlitz River saves fish from other rivers





- ➤ Two major hatcheries downstream
- ➤ 2015 was a drought year in the Pacific Northwest and river water temperatures rose significantly higher than normal
- ➤ The Washington Department of Fish and Wildlife transported fish from non-storage reservoir rivers to the Cowlitz Hatcheries to reduce mortalities due to high water temps



