

Hydropower in Salmon Recovery – the forgotten “H”?

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Salmon Recovery Conference

Tacoma, WA

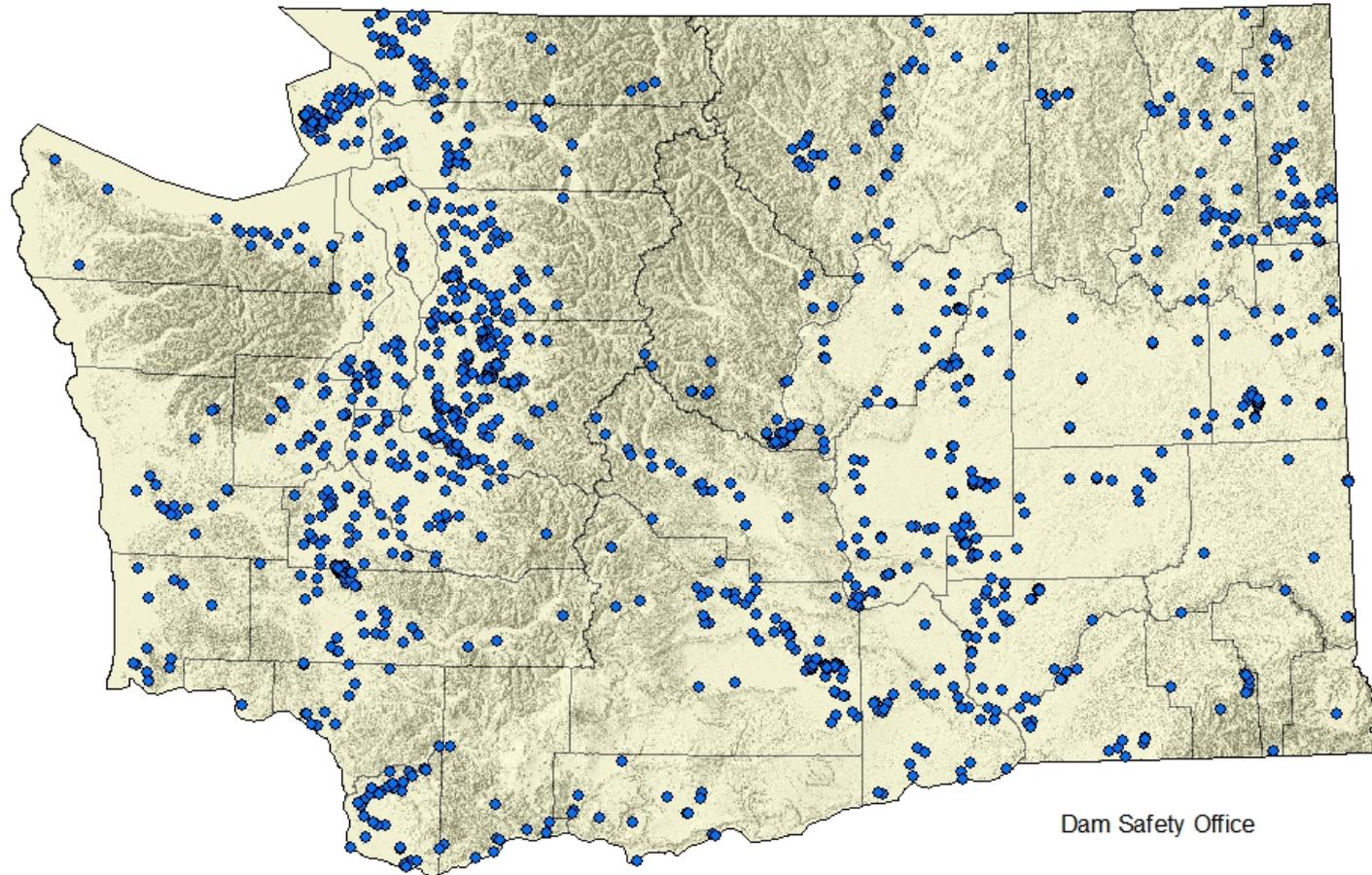
April 8, 2019



Source: BPA.gov

Washington State Dams

Washington State Department of Ecology

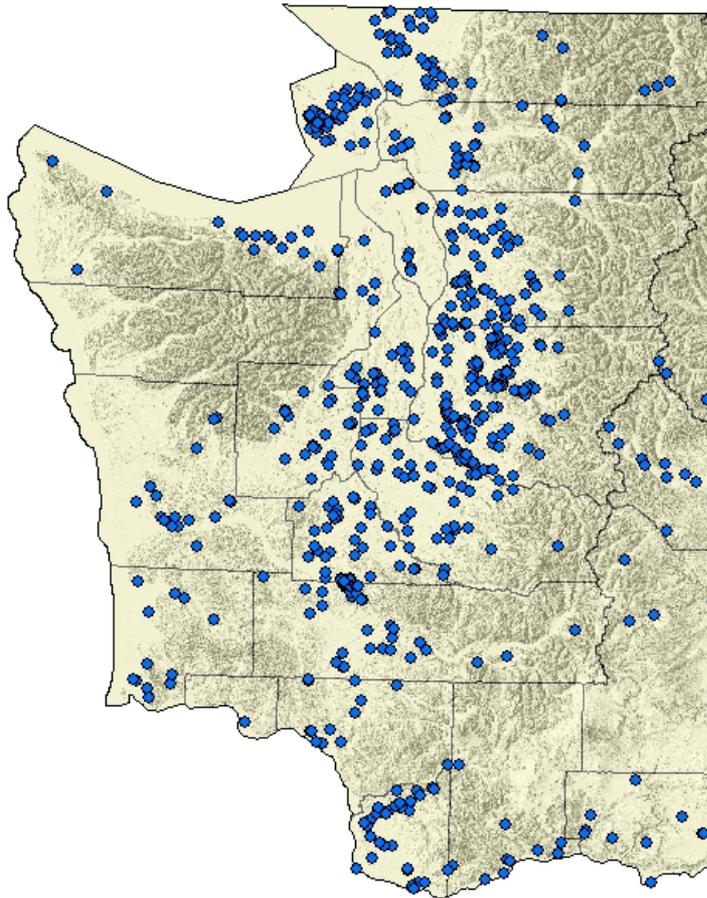


Dam Safety Office

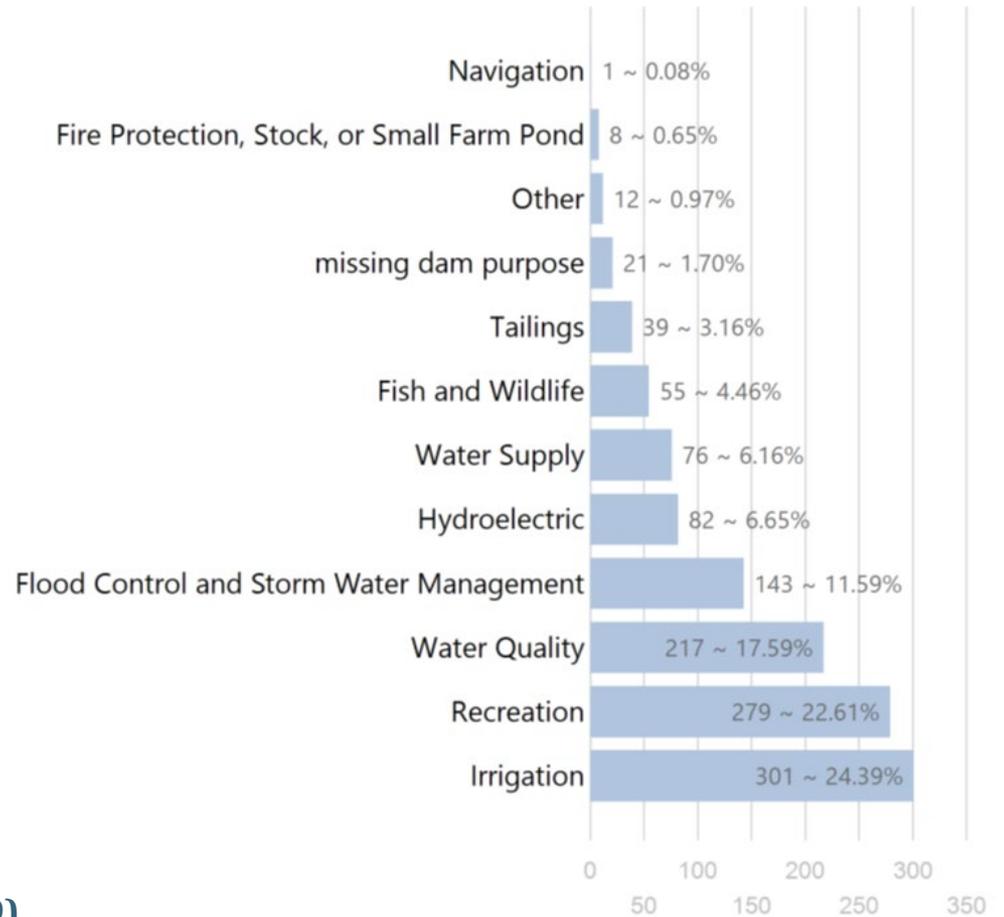
1234 dams in WA State – Dam Inventory Report – WA Dept. of Ecology (2019)

Washington State Dams

Washington State Department of Ecology



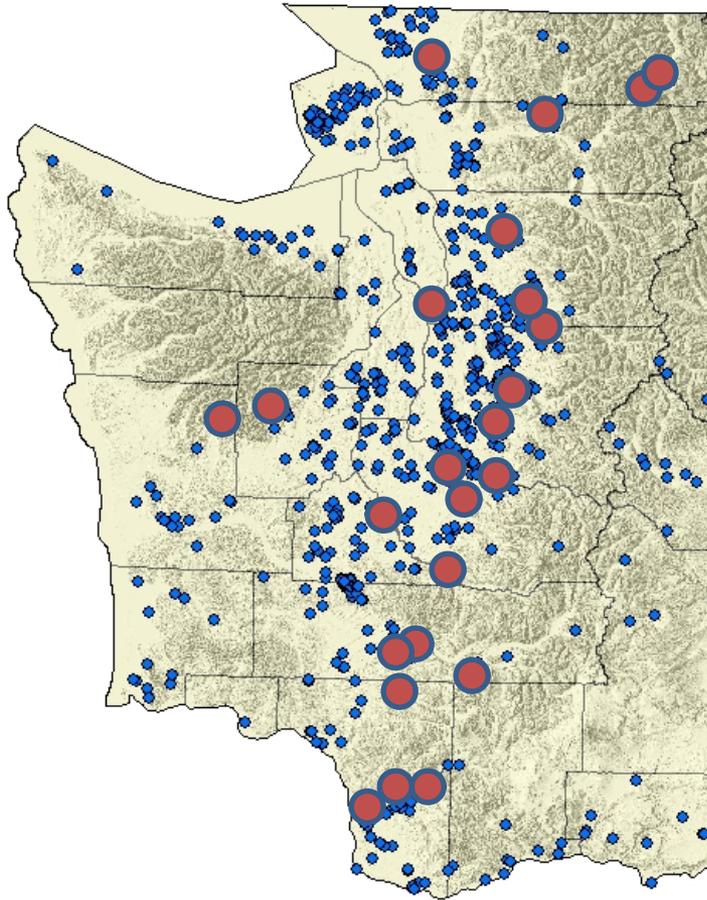
Bar Chart 3. Dam Purposes



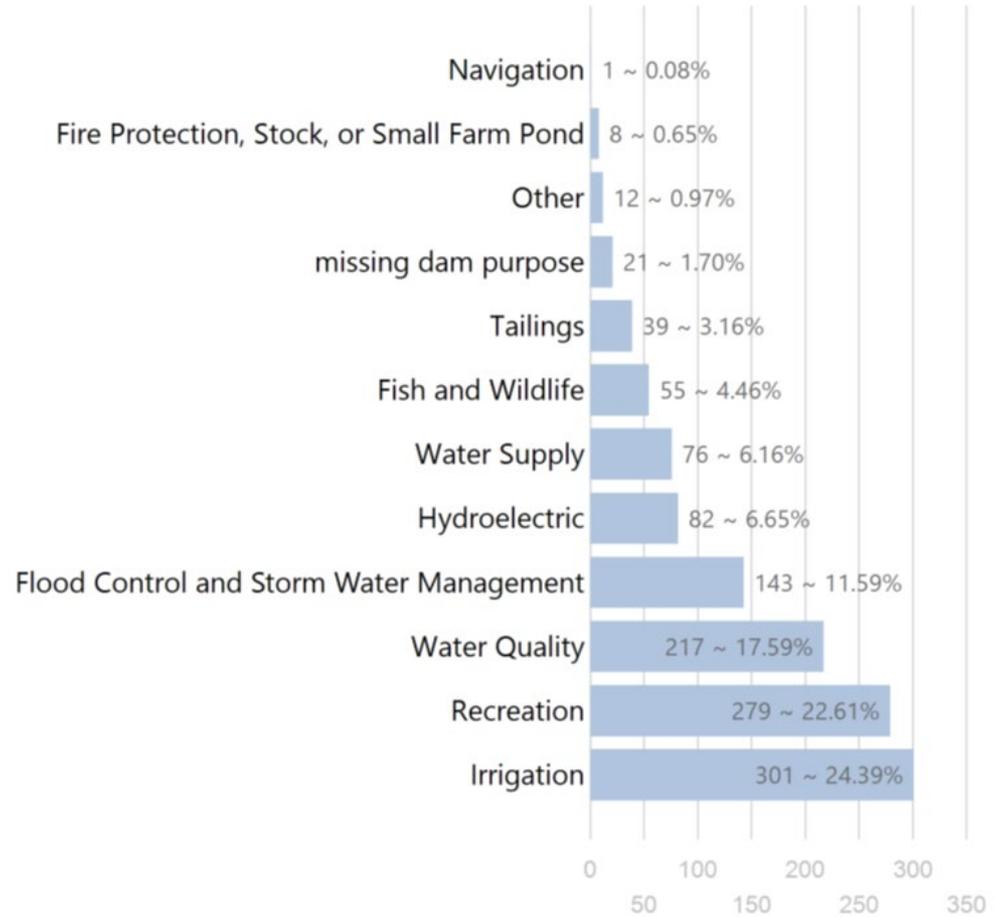
Dam Inventory Report – WA Dept of Ecology (2019)

Washington State Dams

Washington State Department of Ecology



Bar Chart 3. Dam Purposes



Dam Inventory Report – WA Dept of Ecology (201

Hydroelectric Dams in WA State

88

Total

55

FERC-licensed (30-50 year operating license)

17

Major facilities (10 MW+) in Western Washington



Impacts on habitat, processes and fish



Block fish passage



Alter sediment loading



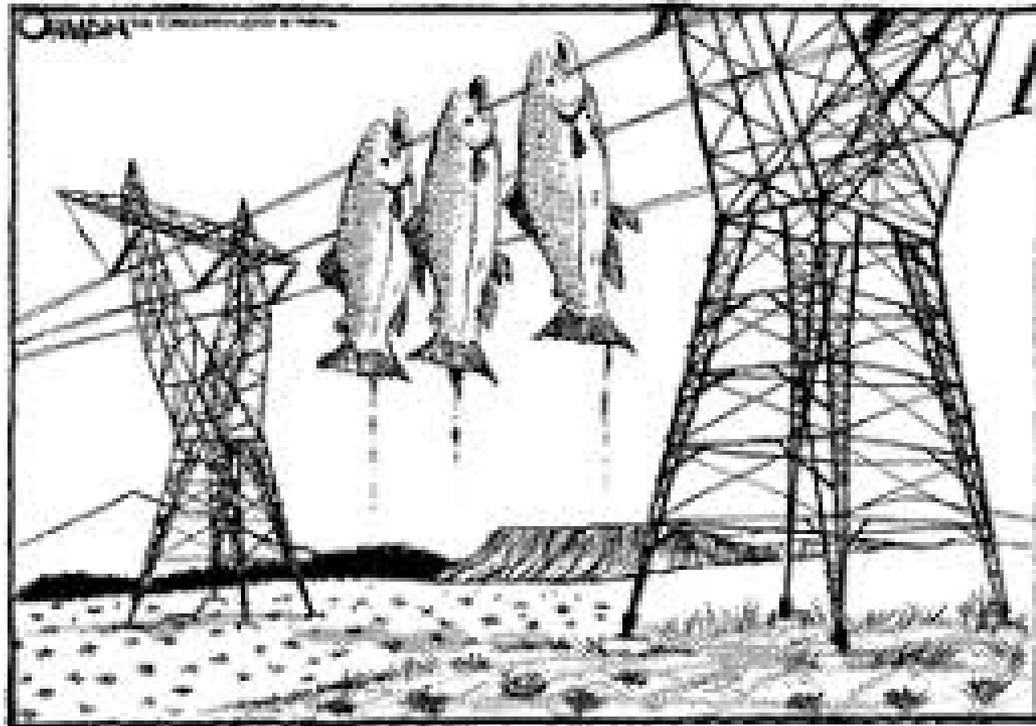
Alter LWD recruitment



Change hydrologic regime



Inundate river habitat



Jack Ohman/The Oregonian

Hydro facilities Benefits and Addressing Impacts



Reintroduction / fish passage



Habitat Restoration



Deep reservoir withdraw



Change hydrologic regime



Hatchery supplementation

Partners in Salmon Recovery

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FERC-license mandated

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- Stakeholder/ Regulatory committees
- Management for salmon recovery
 - Example: Cowlitz Fish Hatchery Management Plan
 - Example: Cushman Habitat Restoration Account

Partners in Salmon Recovery

FERC-license mandated

Operation of Fish Facilities



Partners in Salmon Recovery

FERC-license mandated

Operation of Fish Facilities



- Management, operators, and owners of hatcheries
- Management, operators, and owners of fish passage facilities
- Data collection

Partners in Salmon Recovery

FERC-license mandated

Operation of Fish Facilities

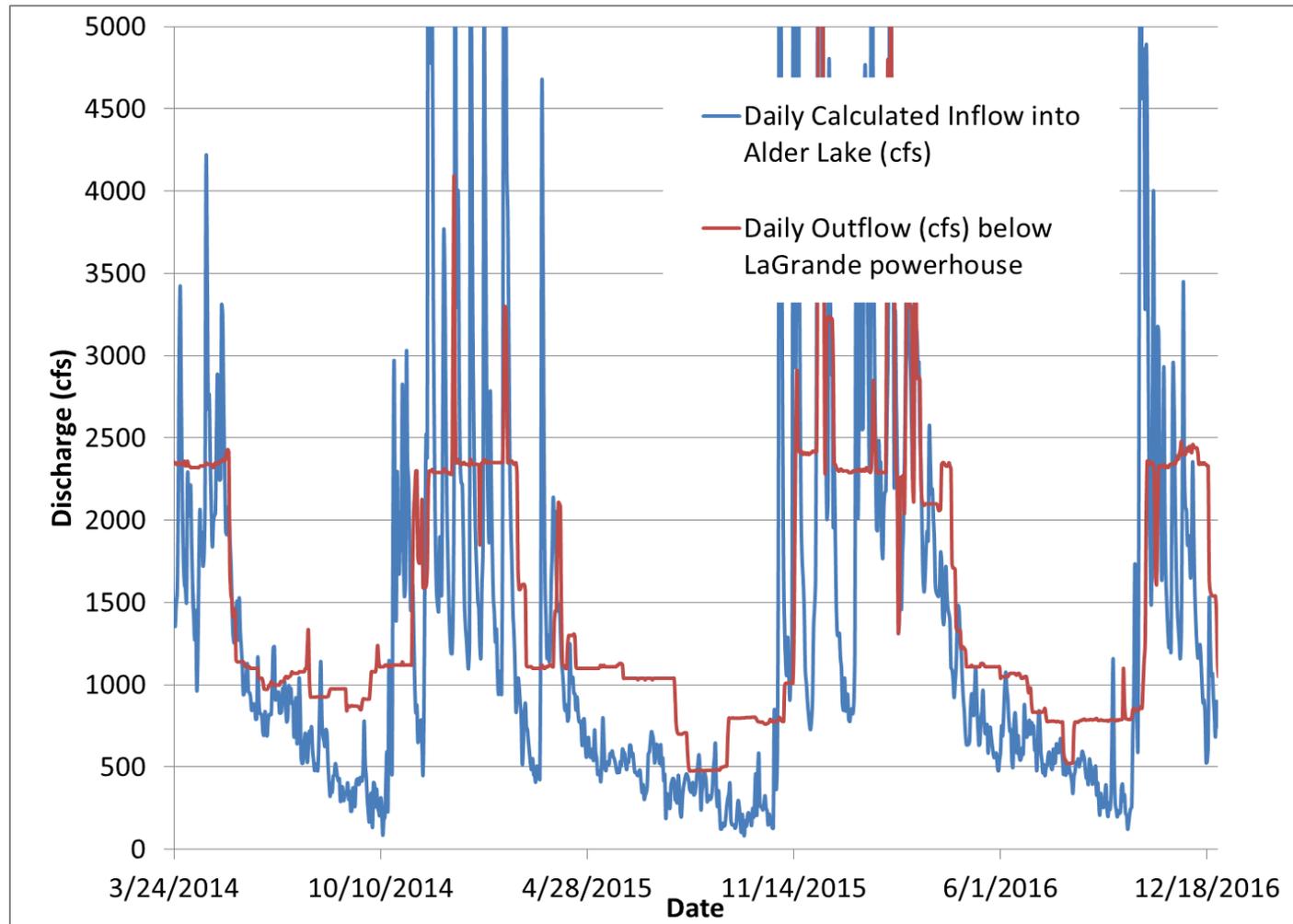
Water Managers

Climate change impact on

- water storage



Partners in Salmon Recovery



Partners in Salmon Recovery

FERC-license mandated

Operation of Fish Facilities

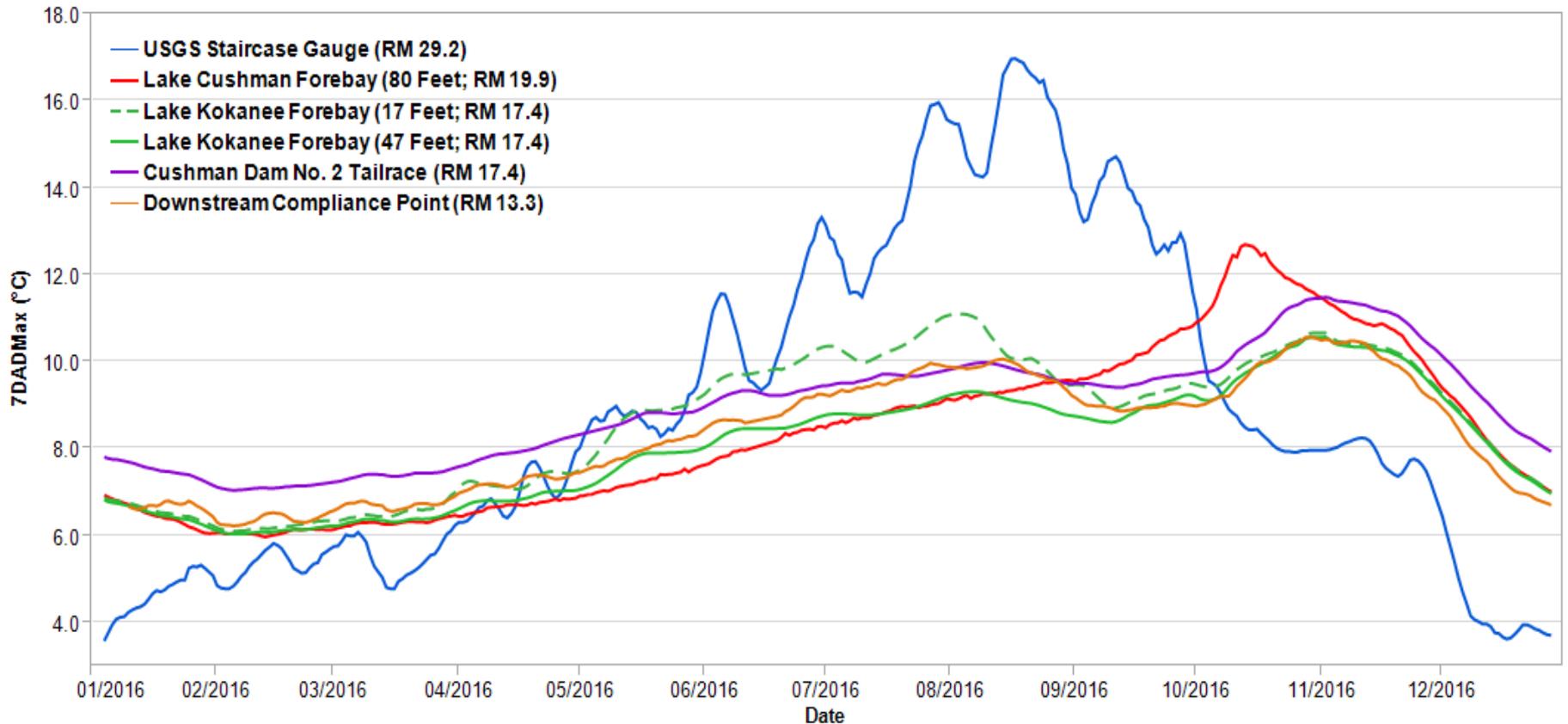
Water Managers

Climate change impact on

- water storage
- water temperature



Partners in Salmon Recovery



Partners in Salmon Recovery

FERC-license mandated

Operation of Fish Facilities

Water Managers

Want to do the right thing!



Improving partnerships with Hydro in Salmon Recovery

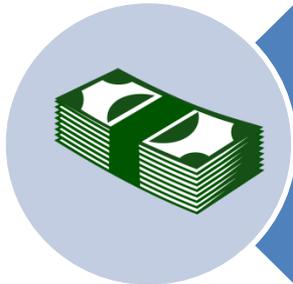


Don't rely on the FERC process
– let's be flexible and creative

Improving partnerships with Hydro in Salmon Recovery



Don't rely on the FERC process
– let's be flexible and creative



“...they should pay for it!”

Improving partnerships with Hydro in Salmon Recovery



Don't rely on the FERC process
– let's be flexible and creative



“...they should pay for it!”



Include operators early in the
planning of projects

Examples of Tacoma Power Partnerships in Salmon Recovery



Cowlitz Fish Hatchery
Management Plan



CRR Funding Partnership with
Lower Columbia Fish Recovery
Board



2017 Skokomish Basin Chinook
Recovery Plan update

Questions ?

