



Fish Passage Improvements and Fisheries Program Update

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TACOMA  **WATER**
TACOMA PUBLIC UTILITIES

*PUB Study Session
December 11, 2024*

Agenda & Goals

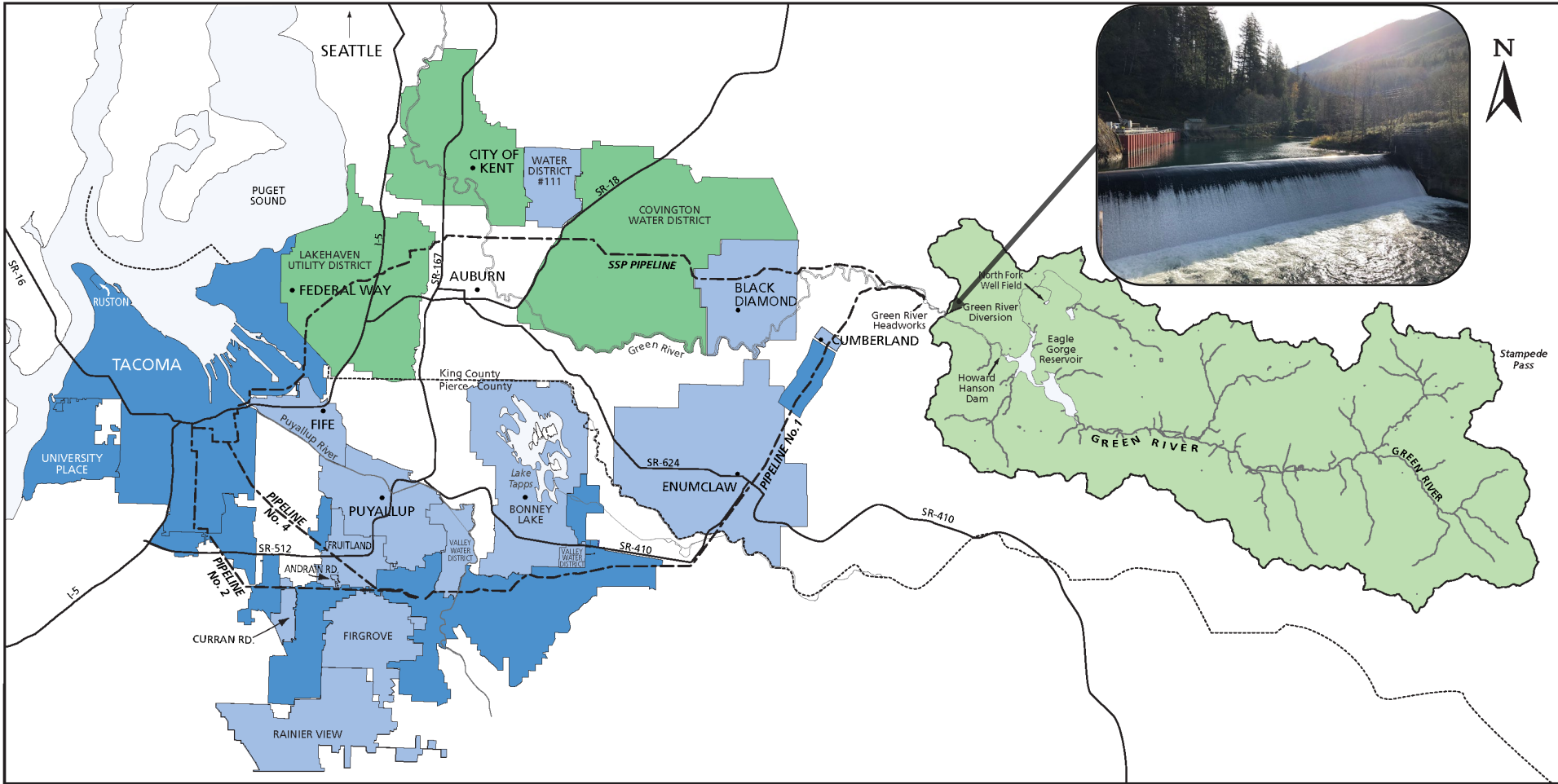
- **Fisheries Program**
 - Regulating documents
 - Authorities, stakeholders, and partners
- **Fisheries Projects**
 - What has been done?
 - What is coming?
 - *Why do we need these projects now?*
- **Questions & answers, clarification & resolution throughout**





Fisheries Program

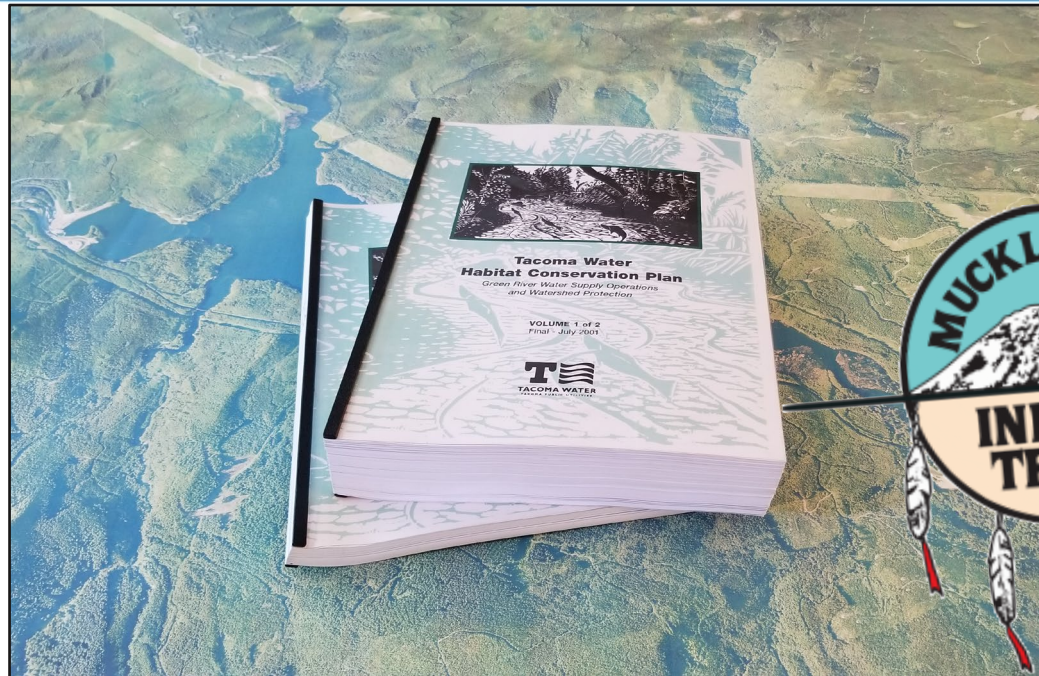
Water Supply & Service Area



LEGEND	
	Retail Service Area
	Wholesale Service Area
	Second Supply Project Partners

- NOTES:**
1. Additional current wholesale customers include Mt. Terrace Homeowners Association and Shady Haven MHP. Additional new wholesale customers include the Cascade Water Alliance.
 2. This is a graphic representation of Tacoma Water's service area only and is not intended to represent individual tax parcel location.

Regulating Documents



- Muckleshoot Indian Tribe Agreement 1995 (MIT)
- Habitat Conservation Plan 2001 (HCP)
- Additional Water Storage Project 2003 (AWSP)

MIT Agreement

- Provisions within resolve disputes over water resources (i.e., First and Second Diversion Water Rights)
- Agree to work cooperatively

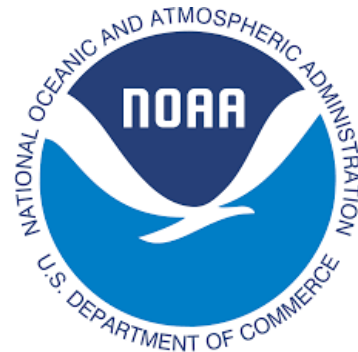
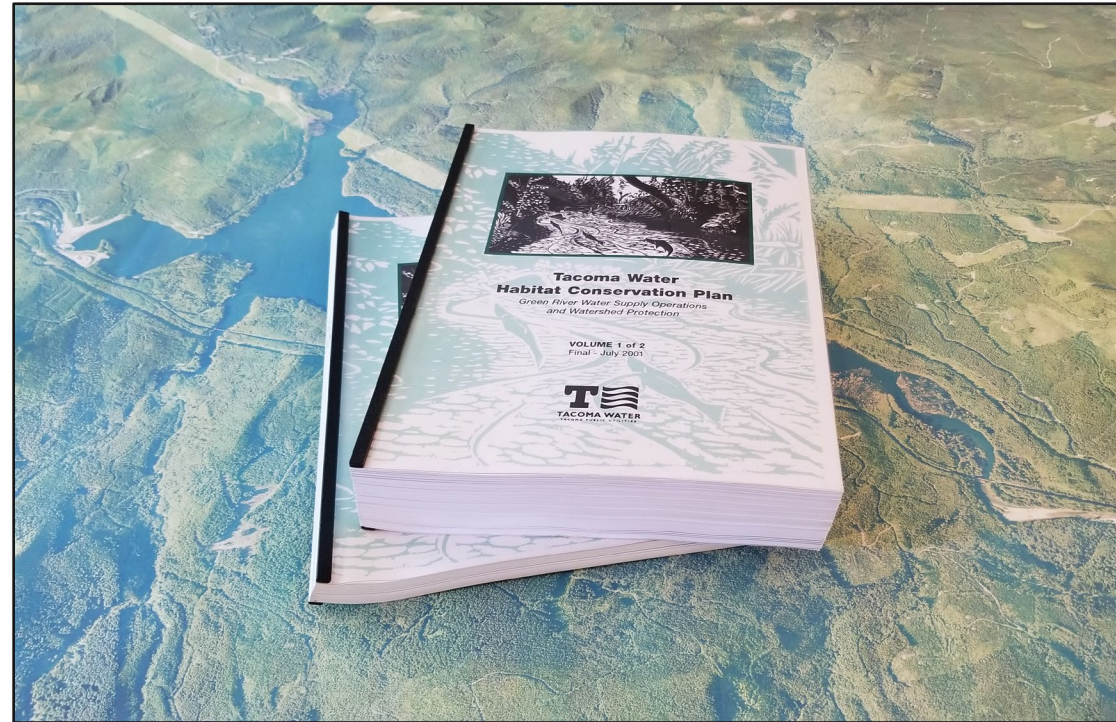


AGREEMENT BETWEEN
THE MUCKLESHOOT INDIAN TRIBE
AND
THE CITY OF TACOMA
REGARDING THE GREEN/DUWAMISH RIVER SYSTEM

1995

HCP

- Endangered Species Act (ESA) requirement
- HCP = Incidental Take Permit
- Covers water withdrawal and watershed management activities
- 99 conservation, monitoring, and funding measures – including fish passage



AWSP

- 20,000 acre-feet of water storage above Howard A. Hanson Dam (HAHD)
- Mitigation and ecosystem restoration measures are ESA requirements
- Project Cooperation Agreement signed in 2003



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TACOMA WATER
TACOMA PUBLIC UTILITIES

Authorities, Stakeholders, Partners



RWSS

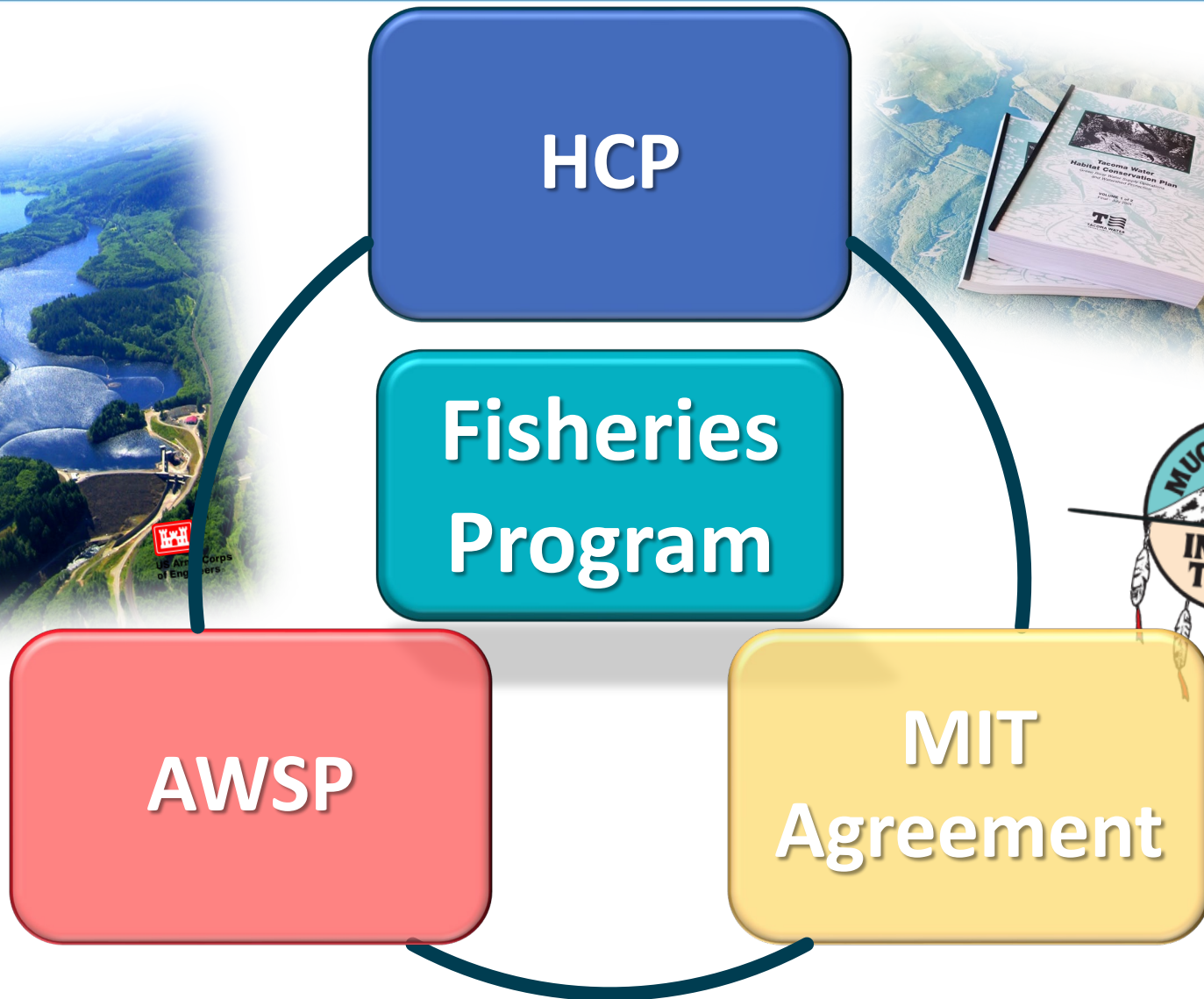


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Washington
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FISH and
WILDLIFE

Fisheries Program Scope of Work



But What About...?

- **Undefined / Undetermined - Resolved Through:**

- Tacoma Water Policy
- Business Case Evaluations
- Adaptive Management
- Stakeholder Input
- E.g., species specific fish passage requirement

- **Need Well Defined Goals**

- **Proactive Collaboration with Agencies**

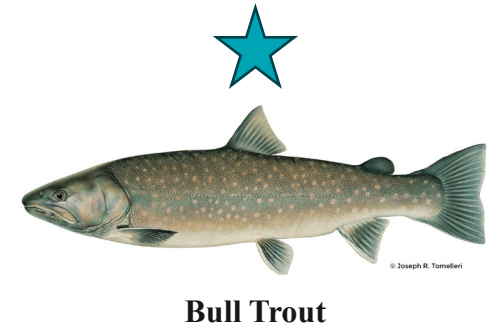
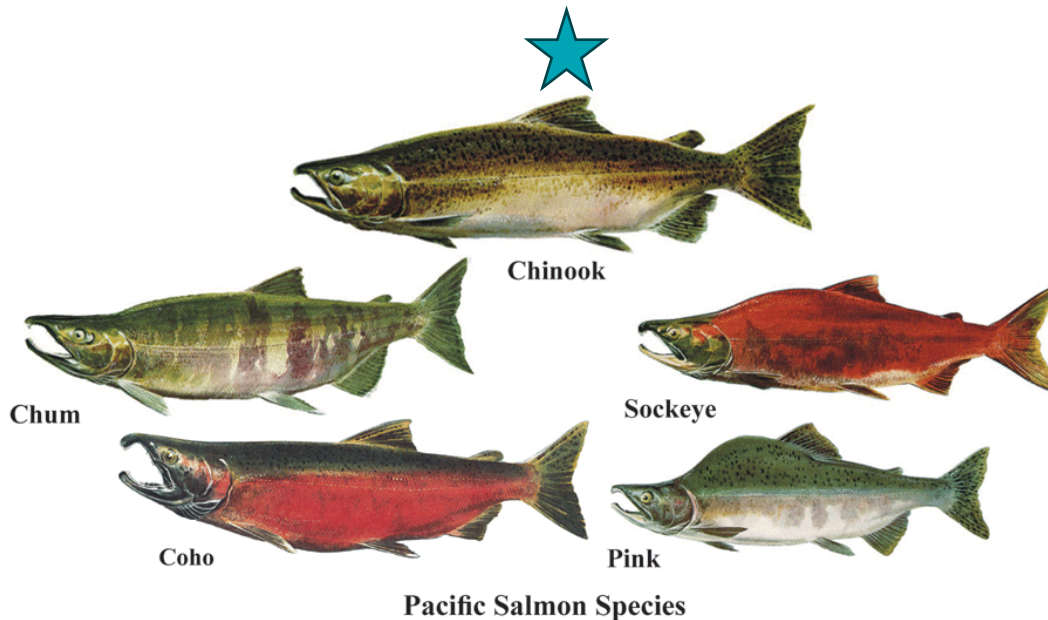




Which law requires fish passage?

Answer

- Endangered Species Act (ESA)
- Chinook salmon, steelhead trout, and bull trout are listed in the ESA





Fisheries Projects

Interrelated & Interdependence

HCP

- ❖ Green River Headworks Fish Passage Facility Upgrade



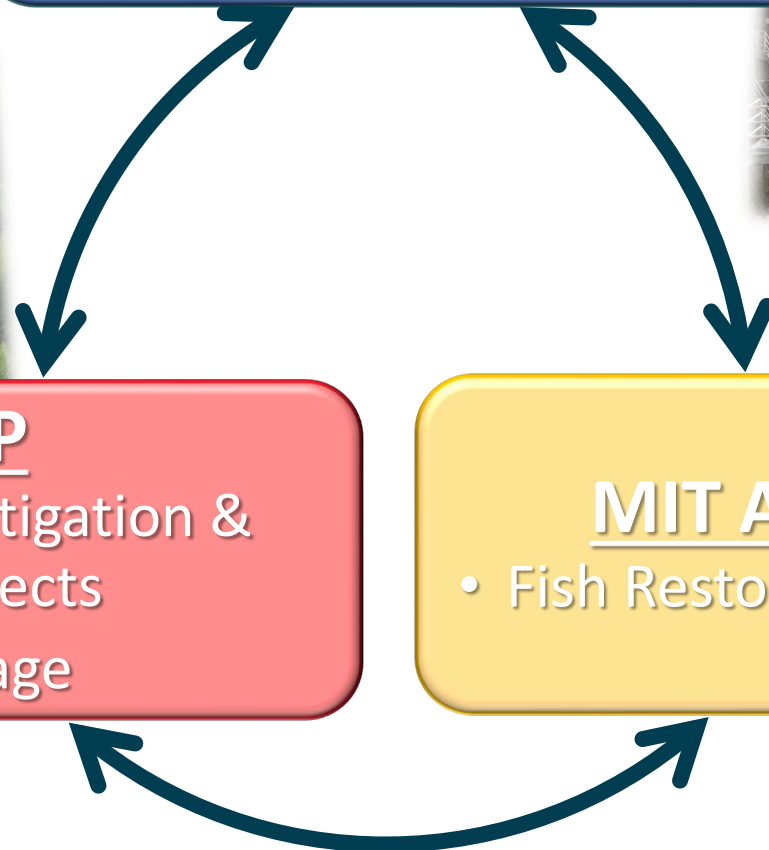
AWSP

- ❖ Fish Habitat Mitigation & Restoration Projects
- HAHD Fish Passage

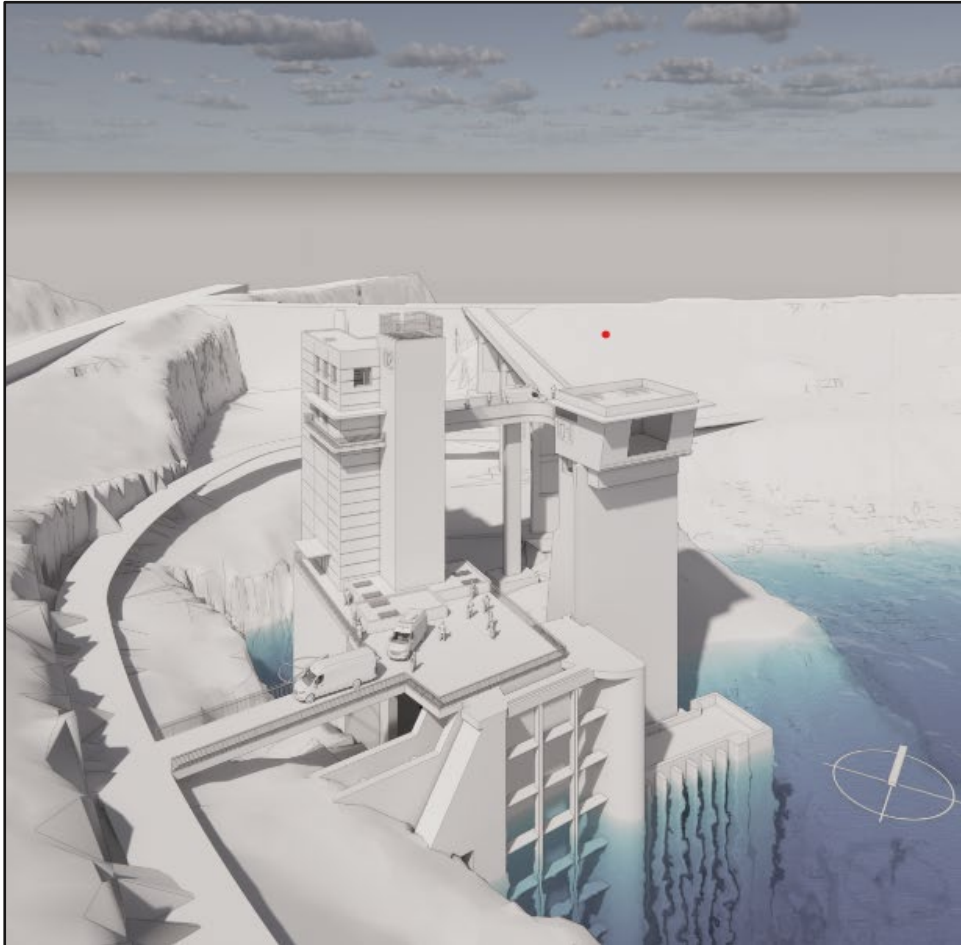


MIT Agreement

- Fish Restoration Facility



AWSP – HAHD Fish Passage



IN-PROGRESS SCHEDULE

Anticipated completion in 2024

- Data collection
- Hydraulic Modeling
- 35% Design
- Contract Acquisition

Anticipated completion in 2025

- Design, Plans, and Specifications
- Safety and Quality Reviews

Construction 2026-2030

**Project update
February 2025**

HCP – Headworks Fish Passage

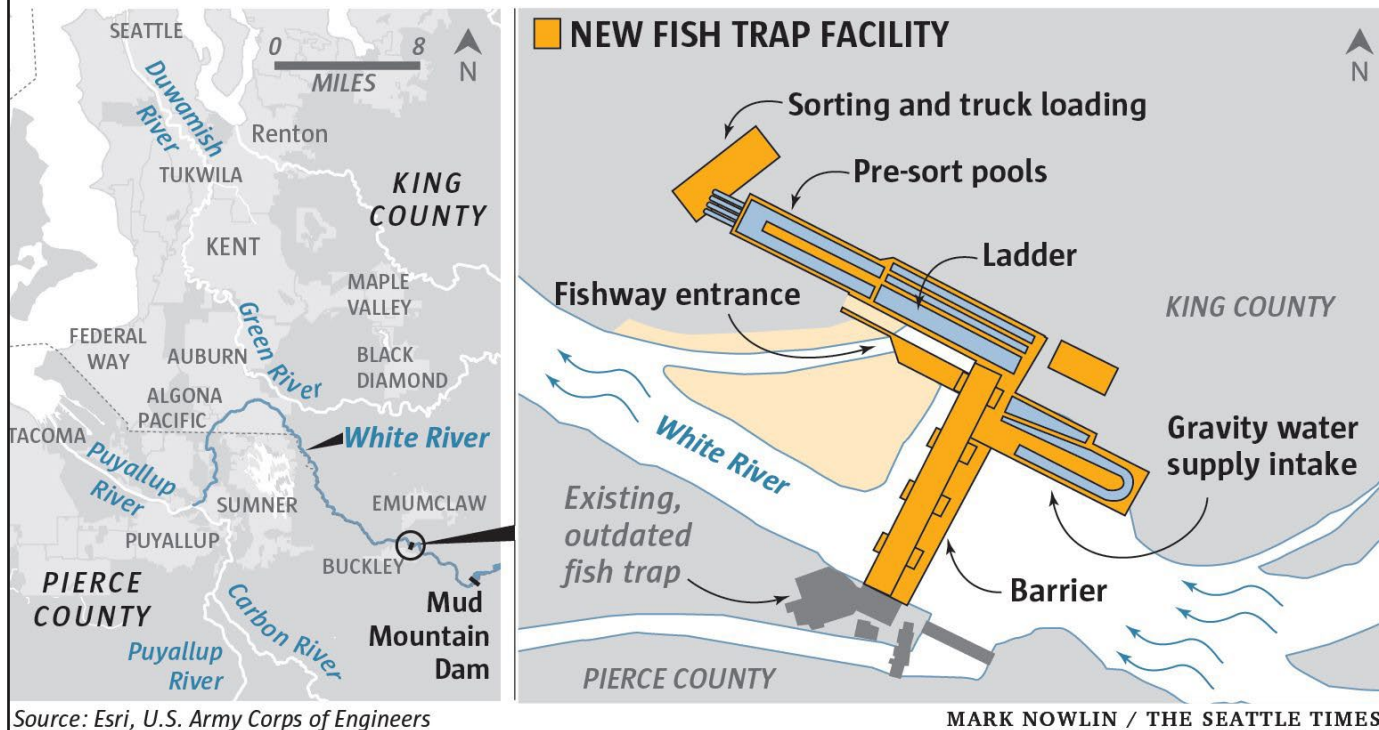


Then & Now and What We Didn't Learn

HCP – Headworks Fish Passage

New fish trap on White River nearly complete

The U.S. Army Corps of Engineers is building the biggest fish trap of its kind in North America near the Mud Mountain Dam on the White River. The new trap is much easier on the adults returning to the river, where they are captured and then hauled by truck to be released above the dam. The new trap is scheduled to be completed in October.



The Seattle Times. August 2, 2020

HCP – Headworks Fish Passage



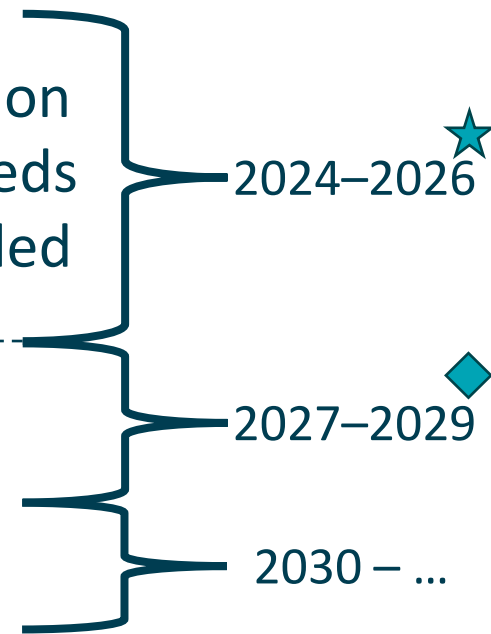
- **Project Description:**

Fully functional facility completed concurrently with passage at HAHD, ready for 2030 salmon run.

- **In-Progress Schedule:**

1. Stakeholder Engagement
2. Make existing facility operational for evaluation
3. Perform facility assessment to determine needs
4. Develop conceptual designs and recommended alternatives

5. Design and permit upgrades
6. Construction
7. Operations, maintenance, and adaptive management



★ Existing contract
◆ Contingent future contract

MIT – Fish Restoration Facility



AWSP – Fish Habitat Projects

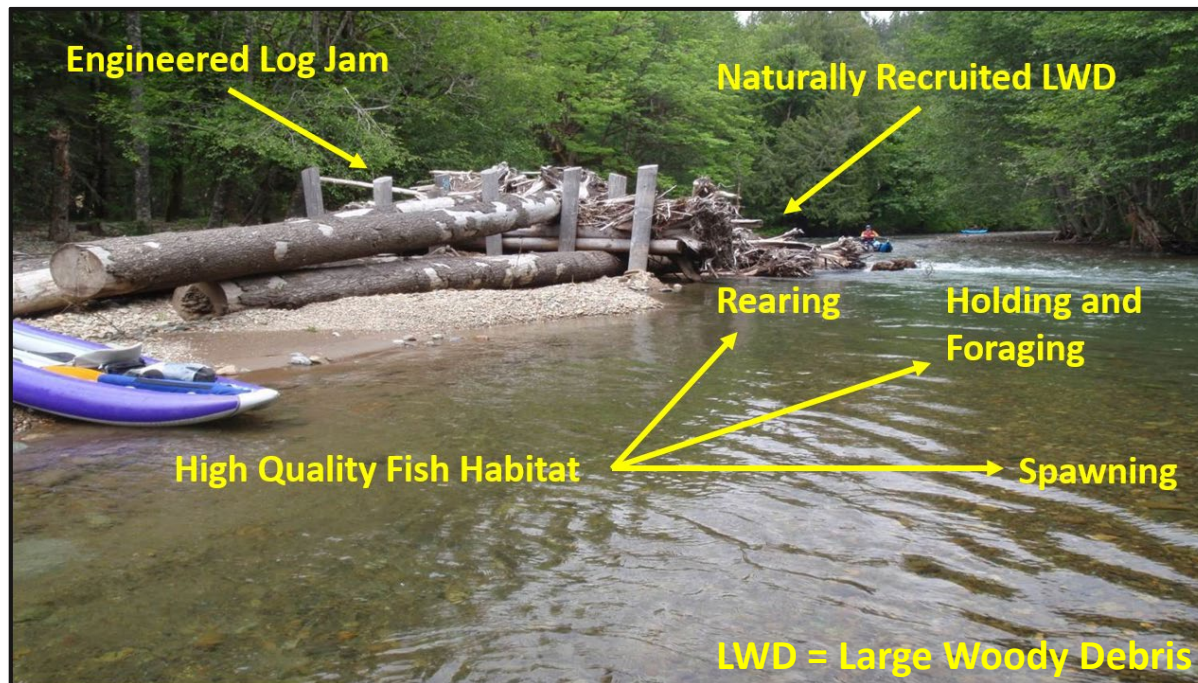
- **Mitigate for increased reservoir inundation**

Tacoma 100% construction costs

- **Address dam operational impacts through ecosystem restoration**

USACE 65% : Tacoma 35% construction costs

- **Tacoma 100% responsible for monitoring and maintenance of both, per operation and maintenance (O&M) Manual**



AWSP – Fish Habitat Projects

Construction:

2003–2010

Fish Passage Postponed:

2012

O&M?

Deferred maintenance,
just monitoring

Floods:

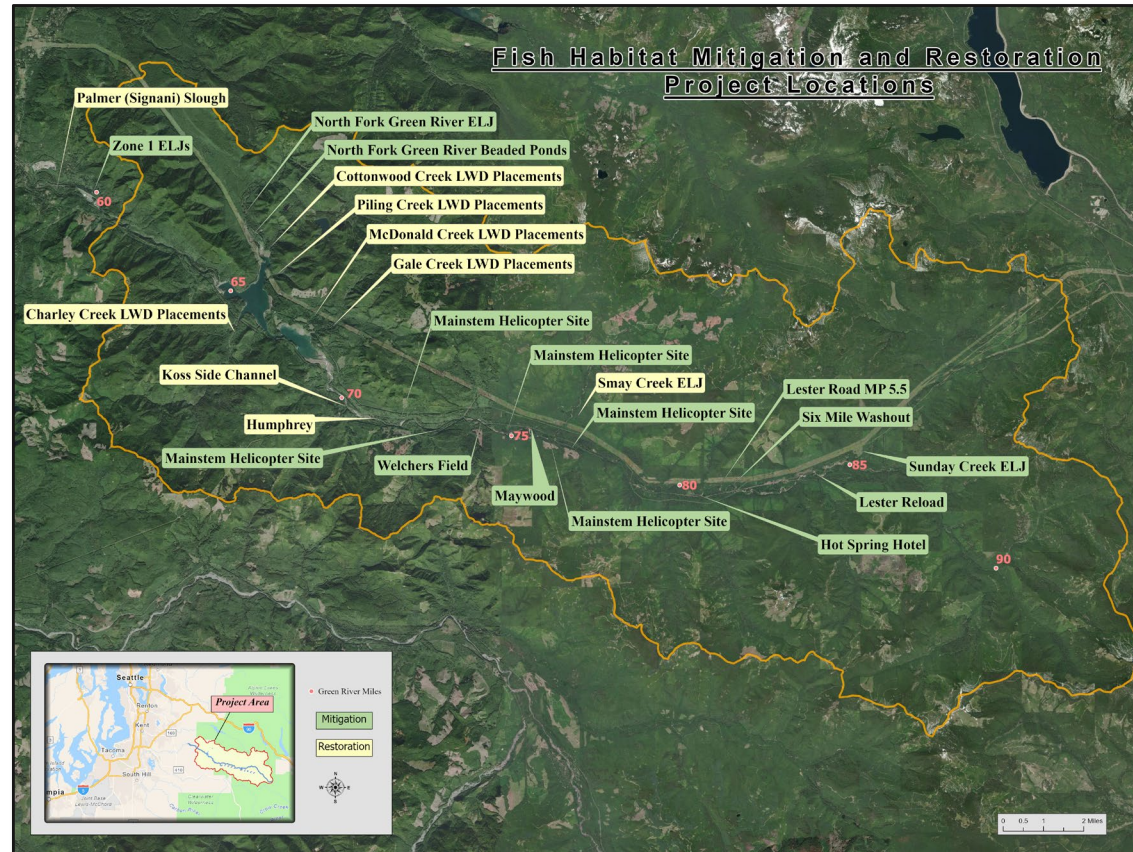
2006, 2009, 2020

Draft O&M Manual:

Does not include clear objectives or measures of success

Solution:

Tacoma developed O&M Manual



AWSP – Fish Habitat Projects

- **Project Description:**

Finalize and implement O&M Manual to meet fish habitat obligations. Watershed prepared by 2030 for reintroduction.

- **In-Progress Schedule:**

1. Stakeholder engagement
 2. Background review and workplan development
 3. Assessment of remaining projects and current habitat conditions
 4. Final O&M Manual developed and approved

 5. Design and permit
 6. Construction (implement O&M Manual)
 7. Long-term monitoring and maintenance
-
- 2024–2026 ★
- 2027–2029 ◆
- 2030 – ...

★ Existing contract

◆ Contingent future contract



Why do we need these projects now?

Answer



- **Water**

