

# Tacoma Power's Natural Resources Program

## Public Utility Board Update

June 9, 2021



# Tacoma Power's Mission

## We Provide Affordable and Reliable Electric Services

- Nearly 100% of our power supply portfolio is clean and renewable
- About half of our supply comes from our own renewable, carbon-free hydropower



Nisqually River Project



Wynoochee River Project

# Generation's Mission

*Create Clean, Reliable, Marketable Energy While Ensuring the Stewardship of Our Resources*

## Natural Resources' Role

- Environmental Leadership (SD5)
- Collaborate with Tribes, regulators and public (SD10)
- Mitigate impacts of our operation and enhance the environment
- Create recreational opportunities
- Protect and preserve wildlife habitat on our 20,000 acres of lands

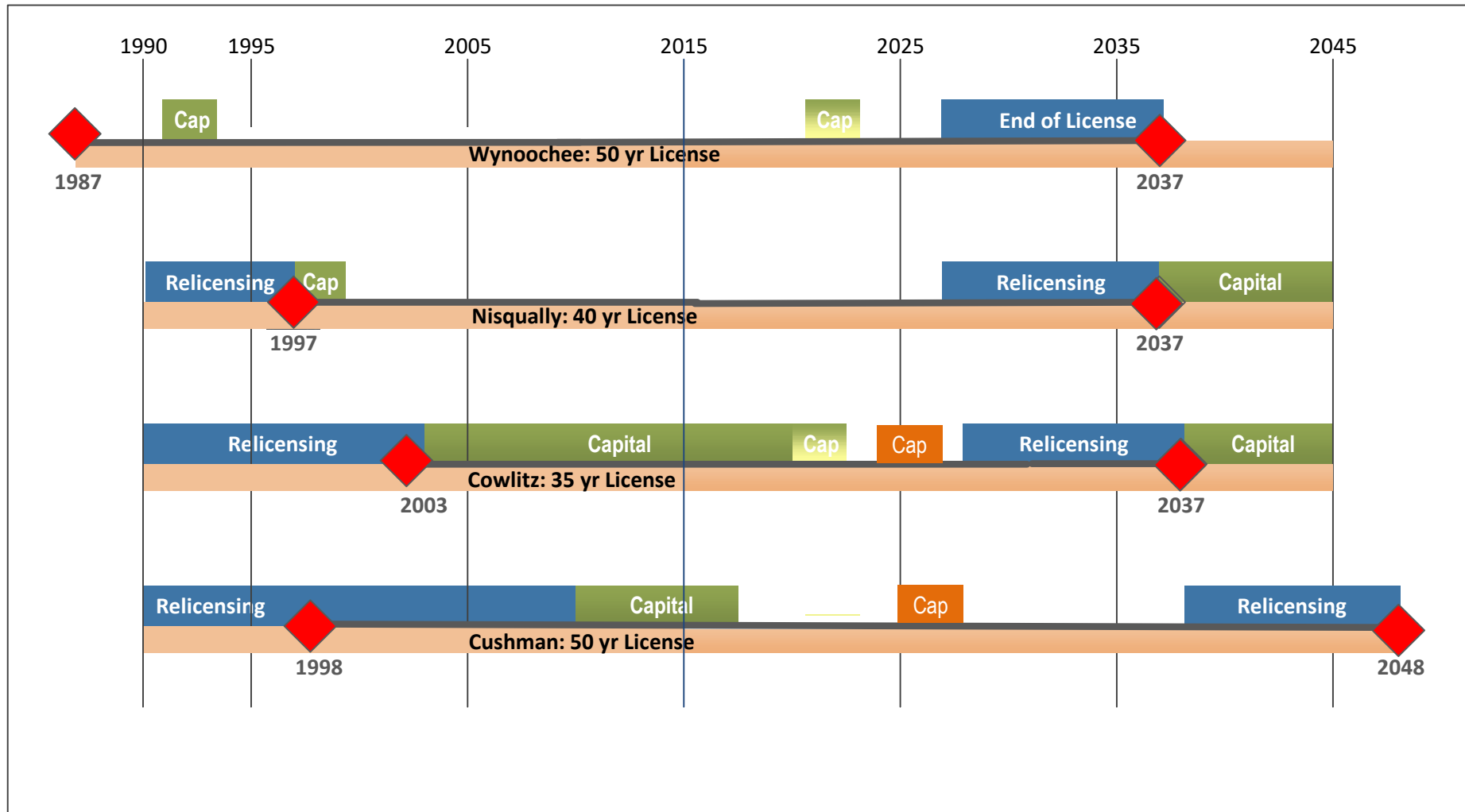




# Tacoma's Hydro Projects



# Natural Resources Responsibilities

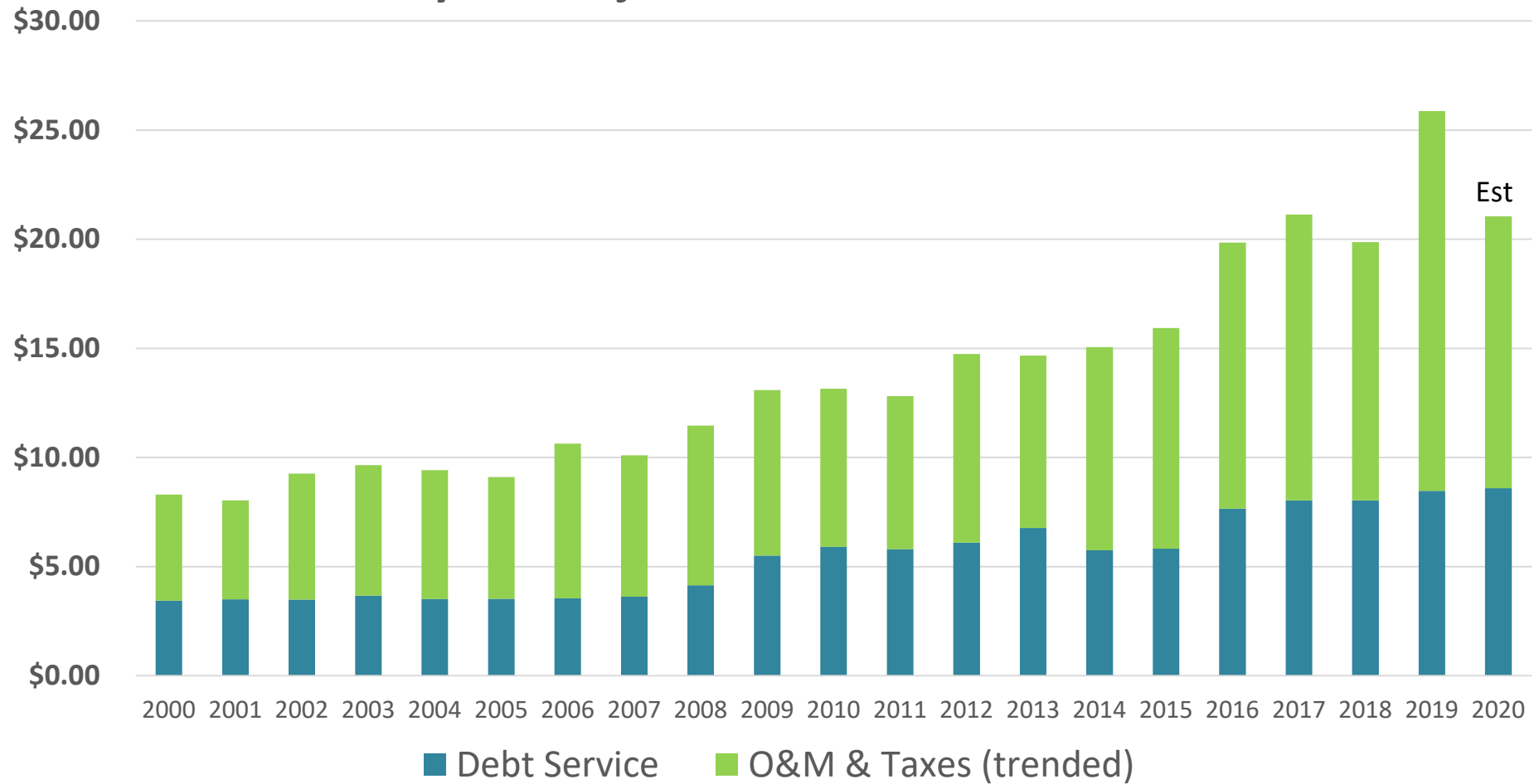


# Our Investment in Natural Resources

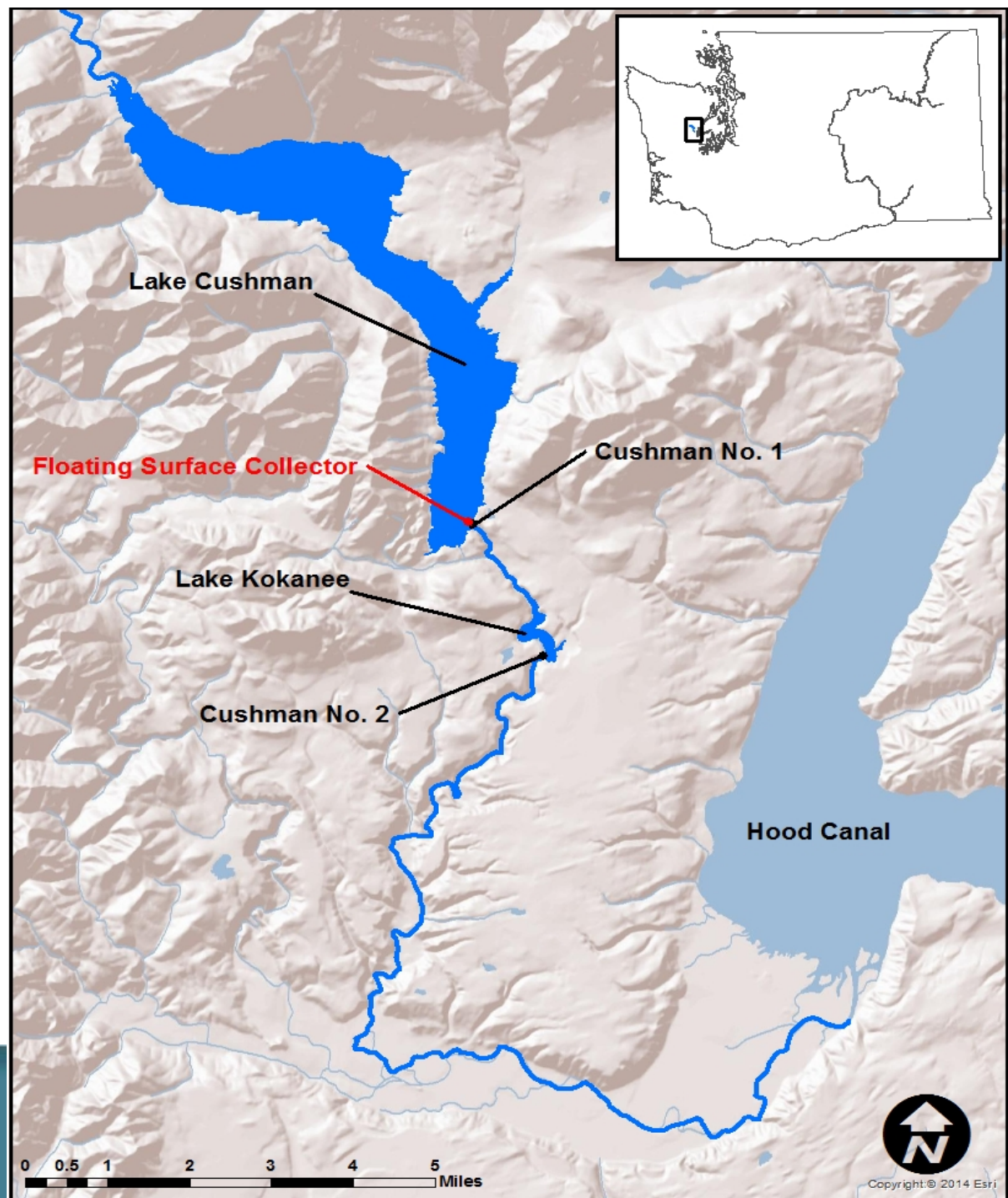
- Over **\$200,000,000** in License Implementation investments in last 20 years
  - \$120M at the Cowlitz River Project including:
    - Remodel of the Salmon Hatchery
    - New Juvenile Fish Passage Facility
  - \$80M at Cushman (Skokomish River) including:
    - Adult and Juvenile Fish Passage Facilities
    - Two new fish hatcheries

# Our Investment in Natural Resources

Tacoma's Hydro Projects Production Cost - Nominal \$/MWh

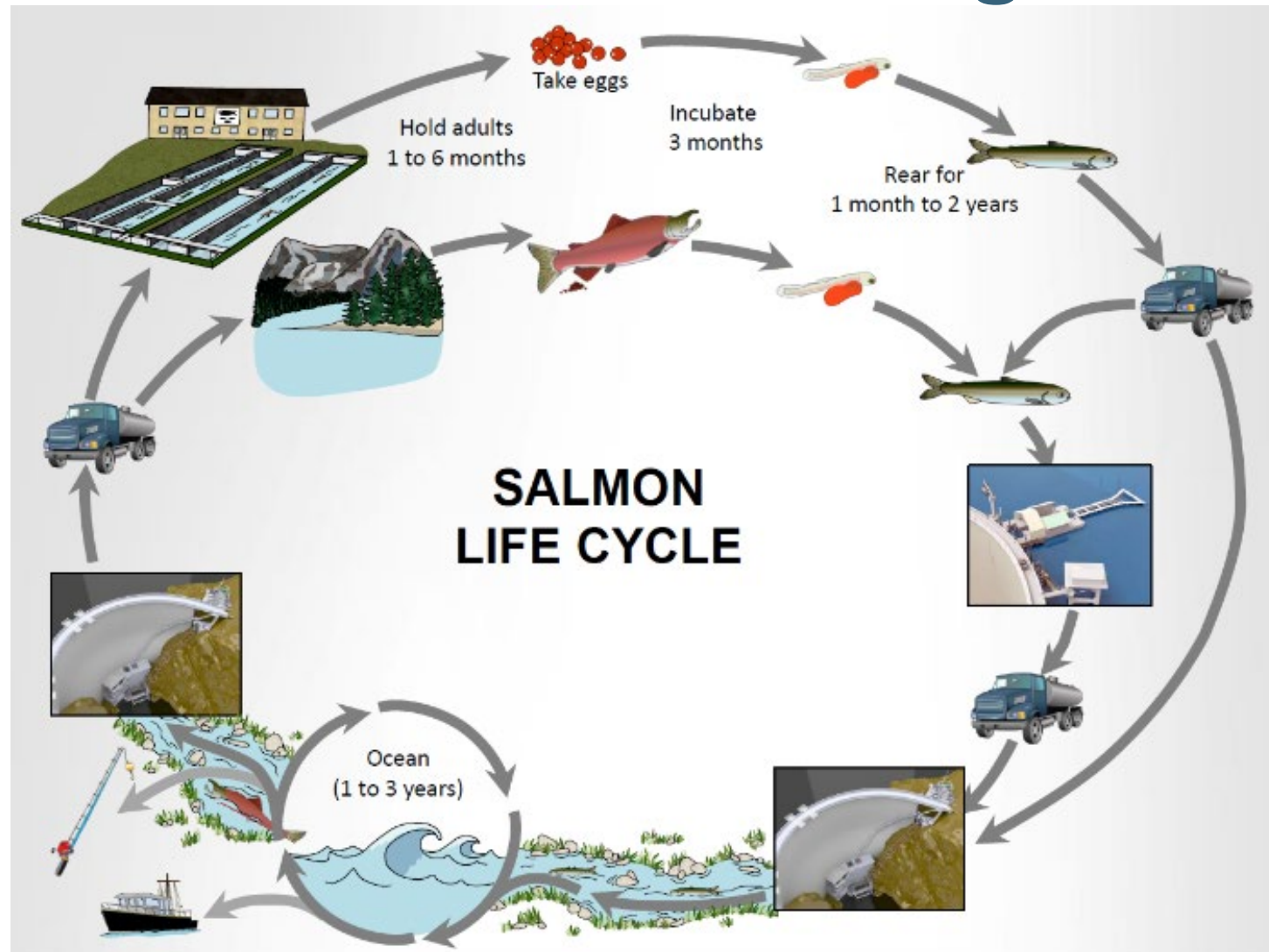


# Cushman





# Cushman Fisheries Program



# Cushman Fish Hatcheries

Our hatcheries received the Outstanding Stewards of America's Waters (OSAW) award from the National Hydropower Association in 2017



**North Fork Skokomish Salmon Hatchery**  
Raise spring Chinook, winter-run  
steelhead and coho



**Saltwater Park Sockeye Hatchery**  
Raise sockeye only



# Cushman Fish Passage - Downstream

## Downstream Juvenile Fish Collector

- Attached to Cushman No. 1 Dam
- Completed in 2015
- Received OSAW Award in 2016



# Cushman Hatchery Production

## Spring Chinook

Introduction Program

Egg Source Marble Mount in the Skagit

Fourth year of adult returns in 2021

First Year Returning To Cushman #2 Trap

- 113 adults return to trap in 2018
- collected 100,000 eggs

Released below Cushman No. 2 Dam into the North Fork Skokomish River

Regularly exceeding release goals of 375,000





# Cushman Hatchery Production

## Sockeye Salmon

Introduction Program

Egg Source: Baker in the Skagit (PSE)

First Year Returning to Adult Collector in 2020

- 125 adults
- Collected 105,000 eggs

To be released below Cushman No. 2 Dam

Challenge: Brood Source

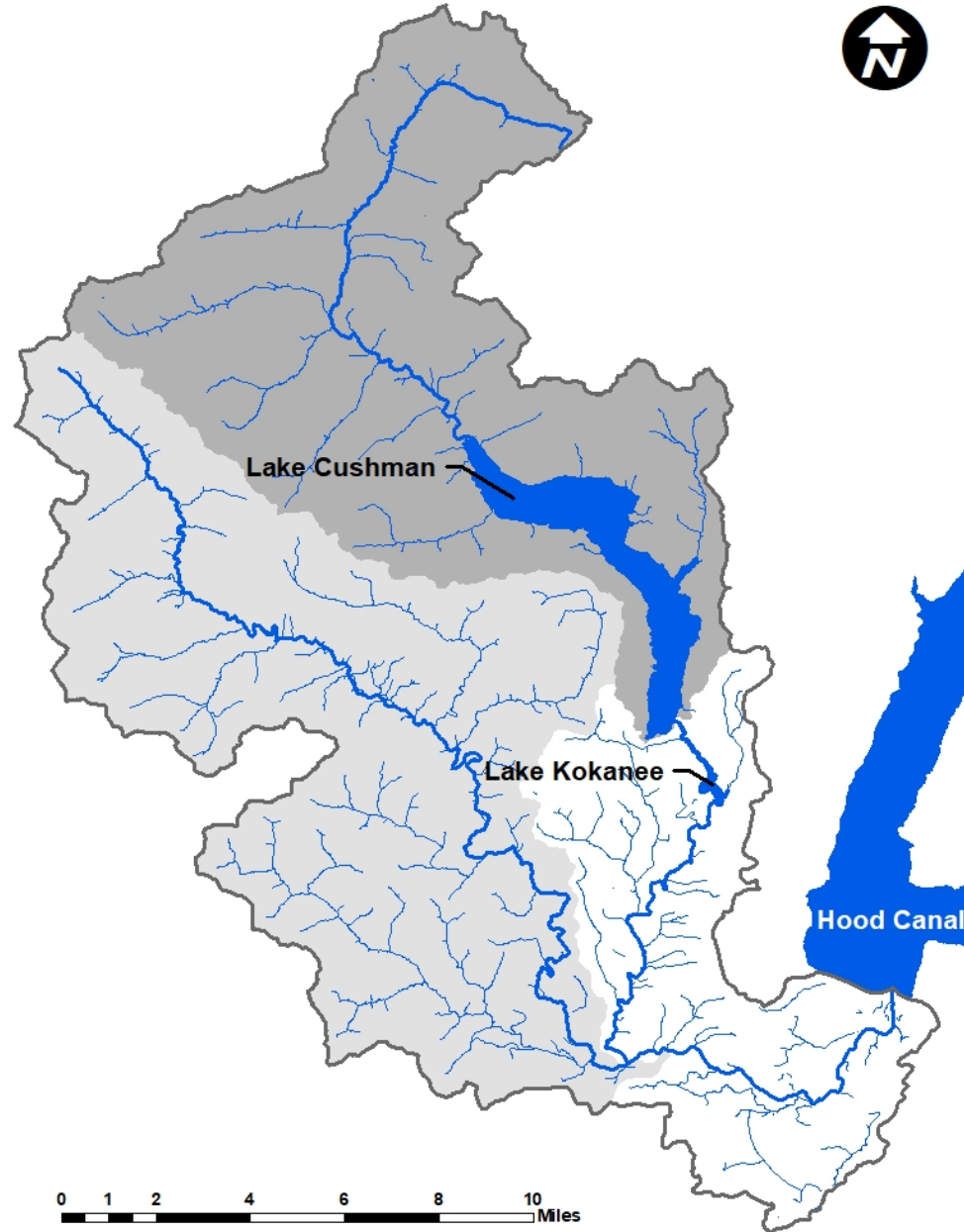
Moving to On-Site Captive Brood Program



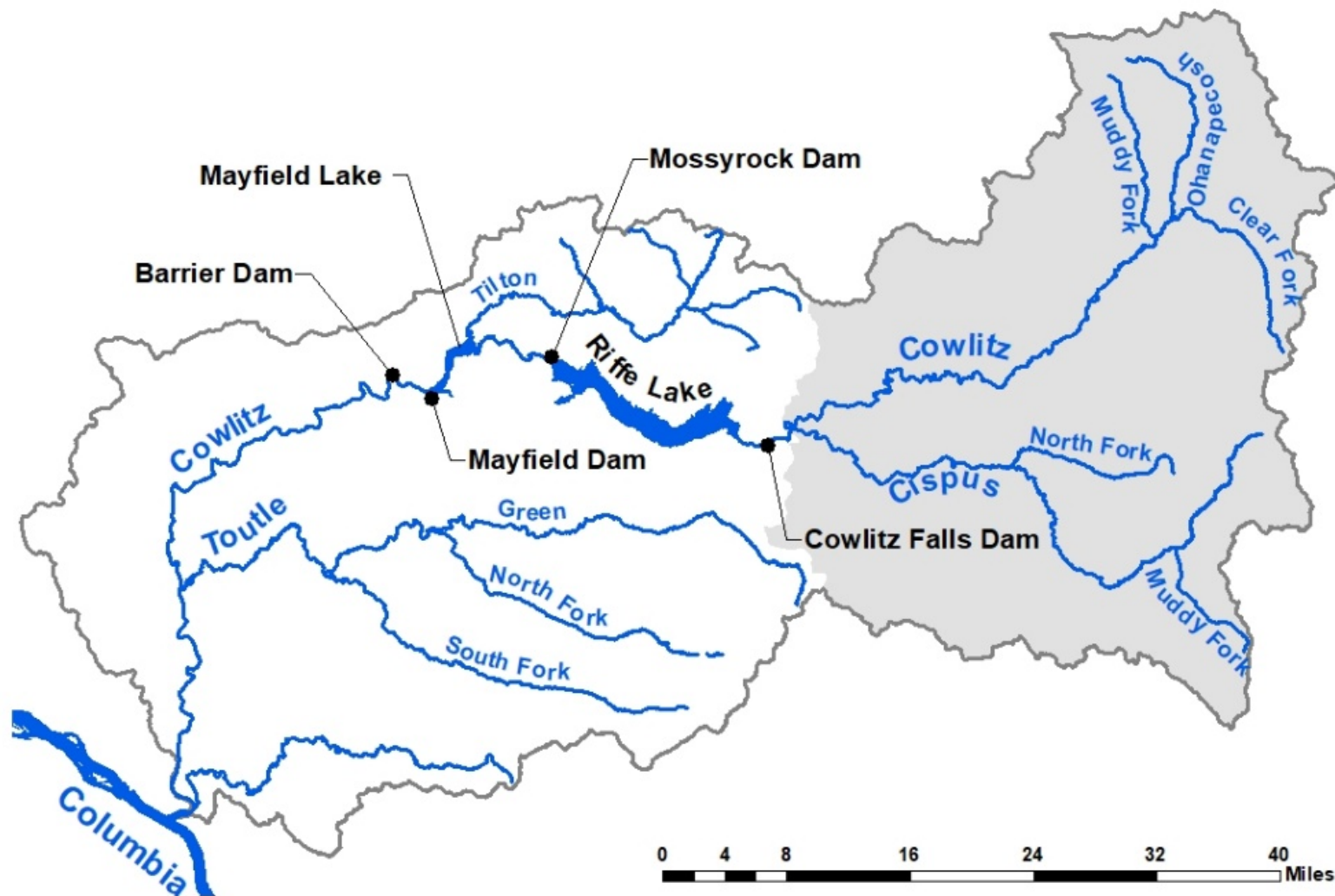
# Cushman Juvenile Fish Collection



- Goal of 75-95% collection and survival
- At 41%-66% for Sockeye
- Future focus on South Fork

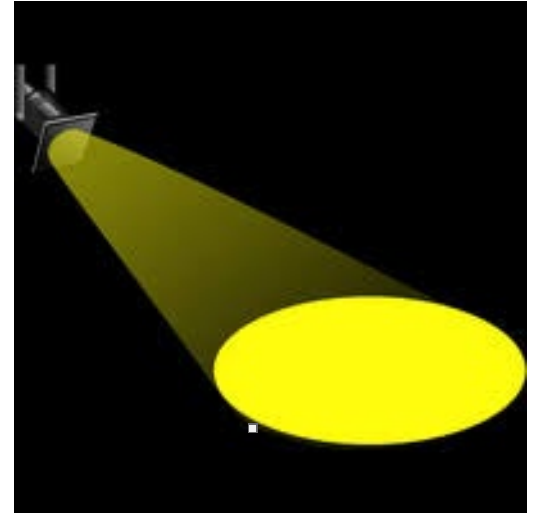


# Cowlitz



# Cowlitz Spotlight

- Most popular Salmon and Steelhead Angling River in Washington
- Key Tributary for Recovery of Lower Columbia River Salmon and Steelhead
- High levels of engagement from:
  - Tribes
  - Regulatory Community
  - Angling Public
  - Guide Organizations
  - Local Businesses
  - Local, State and Federal Representatives
  - Non-Governmental Organizations





# Fisheries and Hatchery Management Plan (FHMP)

- 2020 accomplishment
  - Multi-year effort – many stakeholders
- Result is clear alignment among stakeholders
  - Fish production
  - Fish passage
  - Fish habitat
  - Monitoring and evaluation
  - Angling opportunity
- Sets strategy for the next 10 years



# Cowlitz Fish Facilities - License Requirements

- Remodel Cowlitz Salmon Hatchery
  - Complete (2010)
- Satellite rearing facilities
  - Plan in progress
  - Potential challenges – poor definition, alignment with stakeholders
- Remodel Cowlitz Trout Hatchery
  - Business decision
  - High cost (up to \$50 million over 5-6 years)
  - Evaluating plan prior to beginning with engineering



# Cowlitz Hatchery Complex

*We are committed to restoration of salmon and steelhead populations  
on the Cowlitz River*



- Two Hatcheries are operated by WDFW (Cowlitz Salmon Hatchery and Cowlitz Trout Hatchery)
- Up to 650k lbs. annual production requirement
- Cowlitz Trout Hatchery complex remodel to maintain up to 800k lbs.
- May increase production up to 771,500 via Cowlitz Restoration Recovery (CRR) Fund

# Cowlitz River Restoration Fund

- Result of plan to abandon volitional passage accepted
- Established fund through Board approval on May 22, 2019
- First round of funding complete
- First project selected; contract being finalized with Cowlitz Tribe
- Production subcommittee
  - Potential challenge – FTC fund allocation
  - Angler interest = up to 771,500 lbs. through this fund

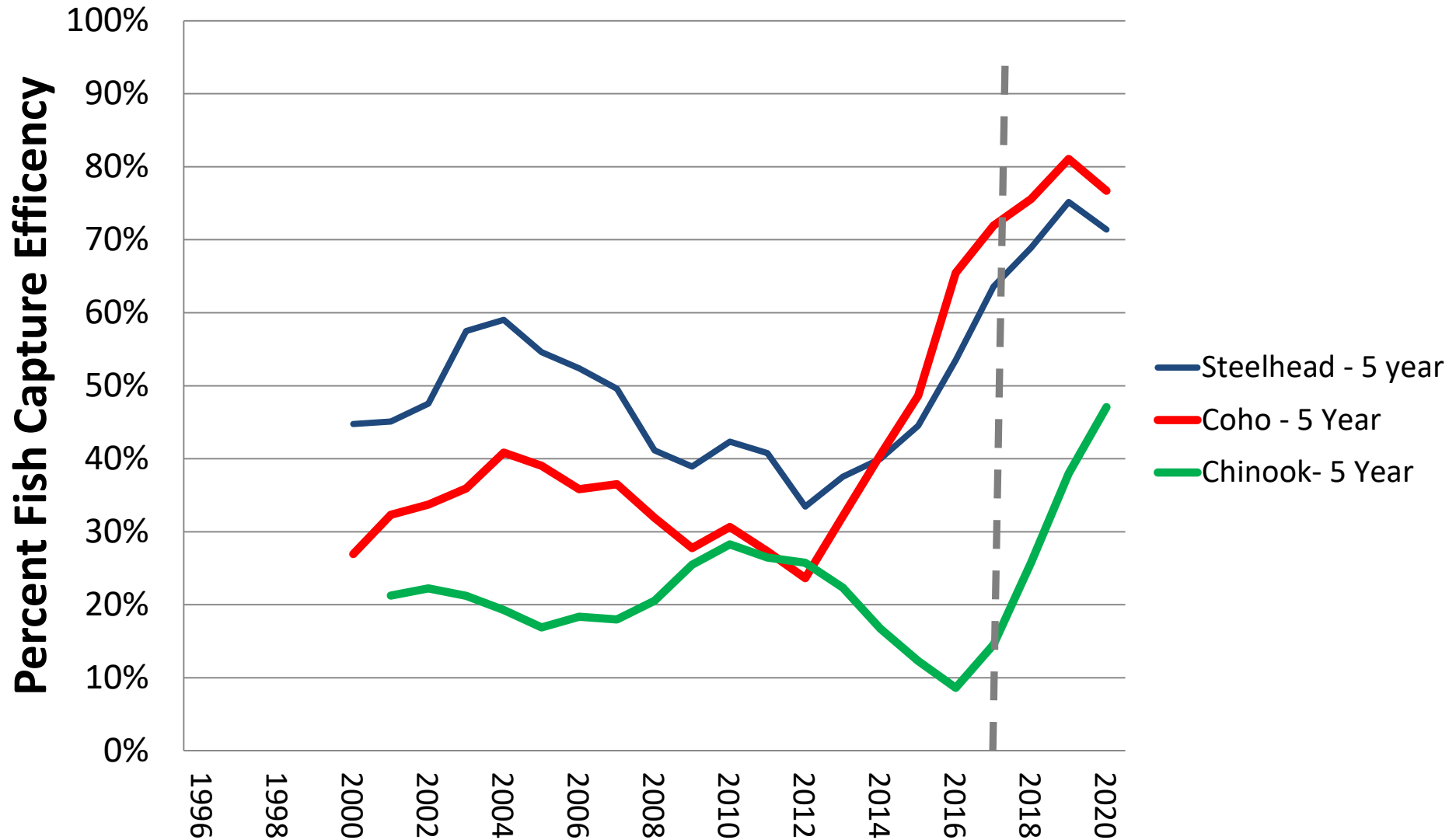




# Cowlitz Falls Fish Facility and Collector



# Cowlitz Falls Facility Performance



# Mayfield Dam Juvenile Fish Collection

- Important Passage for Tilton Recovery
  - 95% collection Requirement
  - Collecting at 65%
  - System improvements underway now
  - Alternatives Analysis underway for removing dips in conveyance pipe
    - Fish stalling for days to weeks
    - Design and Construction costs budgeted for \$1.5M, but results of analysis could result in variance (up or down)



# Natural Resources Organization

## Natural Resources Organization

- About 25 Full Time Employees
- About 20 Full Time Contract Employees
  - Skokomish Tribe
  - PSMFC
  - WDFW

## Upcoming Contracts

- Pacific State Marine Fisheries Staff
- Washington Department of Fish and Wildlife Contract



# Special Thanks

- Tribal Partners
- State and Federal Regulators
- Members of the Public

# Questions?



Thank you for your support