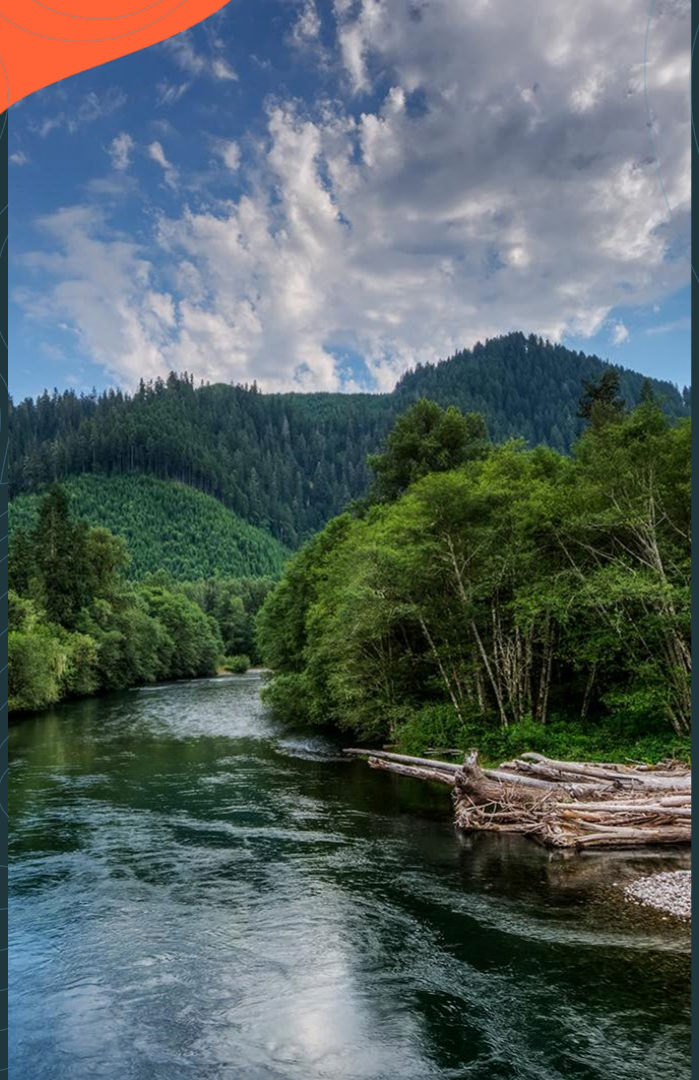


ODFW FISH HATCHERY ASSESSMENT

Large Group Meeting #3
11.13.24

WILLAMETTE PARTNERSHIP

LEONARD KRUG

AGENDA

Introductions
Meeting objectives
Hatchery assessment update
Alternatives explanation with Q&A
Lunch
Small group findings
Public input

ODFW Mission

The mission of ODFW is to protect and enhance Oregon’s fish and wildlife and their habitats for use and enjoyment by present and future generations. The Department is charged by statute (ORS 506.036) to protect and propagate fish in the state. This includes direct responsibility for regulating harvest of fish, protection of fish, enhancement of fish populations through habitat improvement, and the rearing and release of fish into public waters. ODFW maintains hatcheries throughout the state to provide fish for program needs.

WILLAMETTE PARTNERSHIP

We help people and nature thrive together.

MEETING OBJECTIVES

The specific goals for this third public meeting are to:

- Understand ODFW's hatchery assessment process
- Understand ODFW's evaluations conducted by third-party contractors
- Review work of small group: (1) factors relevant to evaluating options and (2) application of factors to ODFW's alternatives
- Receive input on factors and alternatives

HATCHERY ASSESSMENT PROCESS & REPORTING

The Department is collecting information to understand:

Economics

Financial sustainability, costs and benefits, funding models

Climate Vulnerability

Assessing the impact of climate change on hatchery infrastructure and programs, the need for these programs, and how can impacts be mitigated

Current State

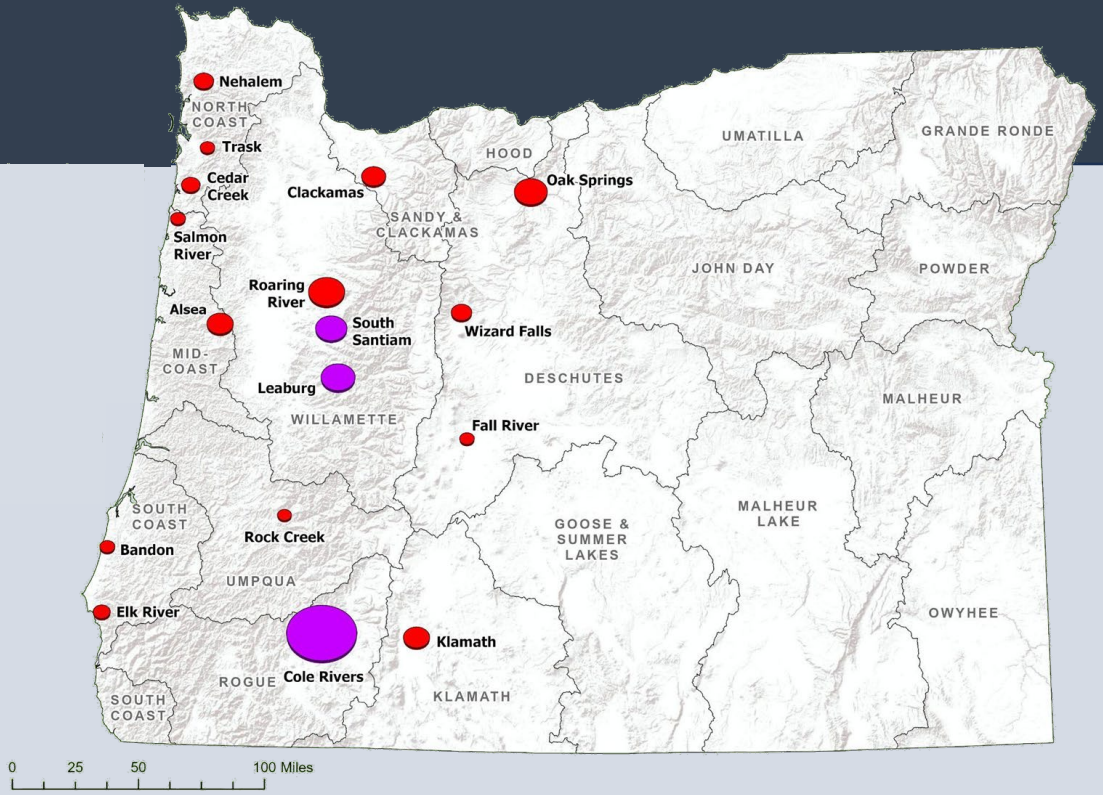
Document the deferred maintenance needs at all facilities

HATCHERIES

Under review

Focus on 17 facilities

- 14 state-owned
- 3 federally-owned



Phase 1

Contractor Reports:
Winter 2023-Fall 2024

Phase 2

Public Involvement:
Summer-Fall 2024

Phase 3

Reports to Legislature:
Winter 2024-2025

Tribal Consultation

MEETINGS & REPORTS

- Large Group Meetings
  - June 27, August 28, November 13
- Small Group Meetings
  - September 17; October 3, 17, 24; November 4
- Webinar Series
  - August 1, 8, 15
- Contractor Reports
- Survey of interested parties
- WP public involvement report (forthcoming)
- ODFW report and presentations to Joint Committee on Ways and Means (forthcoming)

PUBLIC INVOLVEMENT REPORT WITH FINDINGS

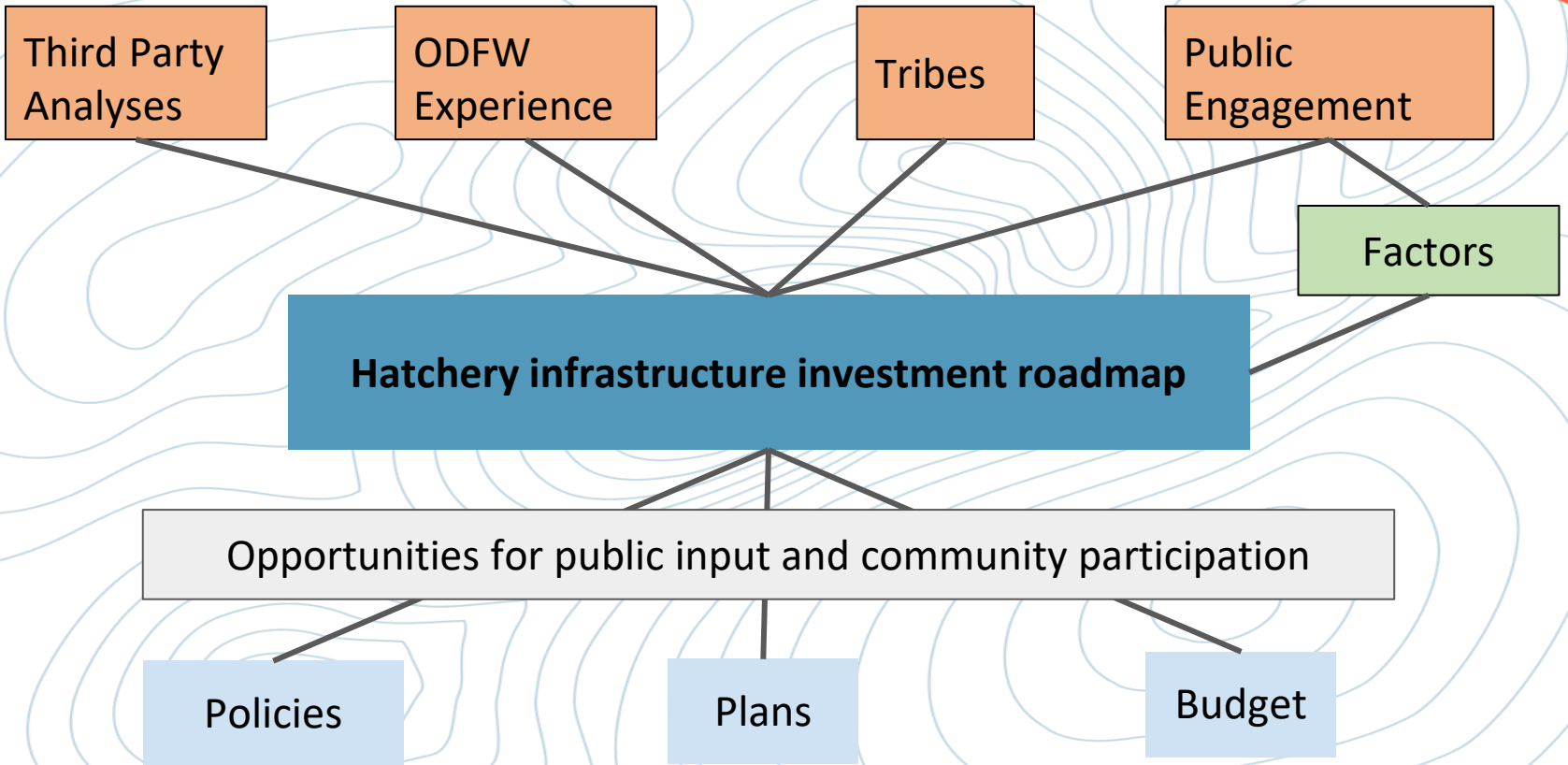
ODFW's Report on Budget Note - Jan 2025

- Will include:
  - ODFW summary of findings from contractor reports
  - Contractor reports

ODFW will use information gathered from interested parties in development of the infrastructure roadmap.

ODFW'S INFRASTRUCTURE INVESTMENT ROADMAP - JAN 2025

- ODFW will also develop an infrastructure roadmap to guide future decision making.
- The goal of the infrastructure roadmap is to guide investments in a system that is:
  - flexible to meet changing needs for harvest and conservation,
  - resilient to impacts of a changing climate,
  - a good neighbor to wild fish, and
  - financially sustainable.

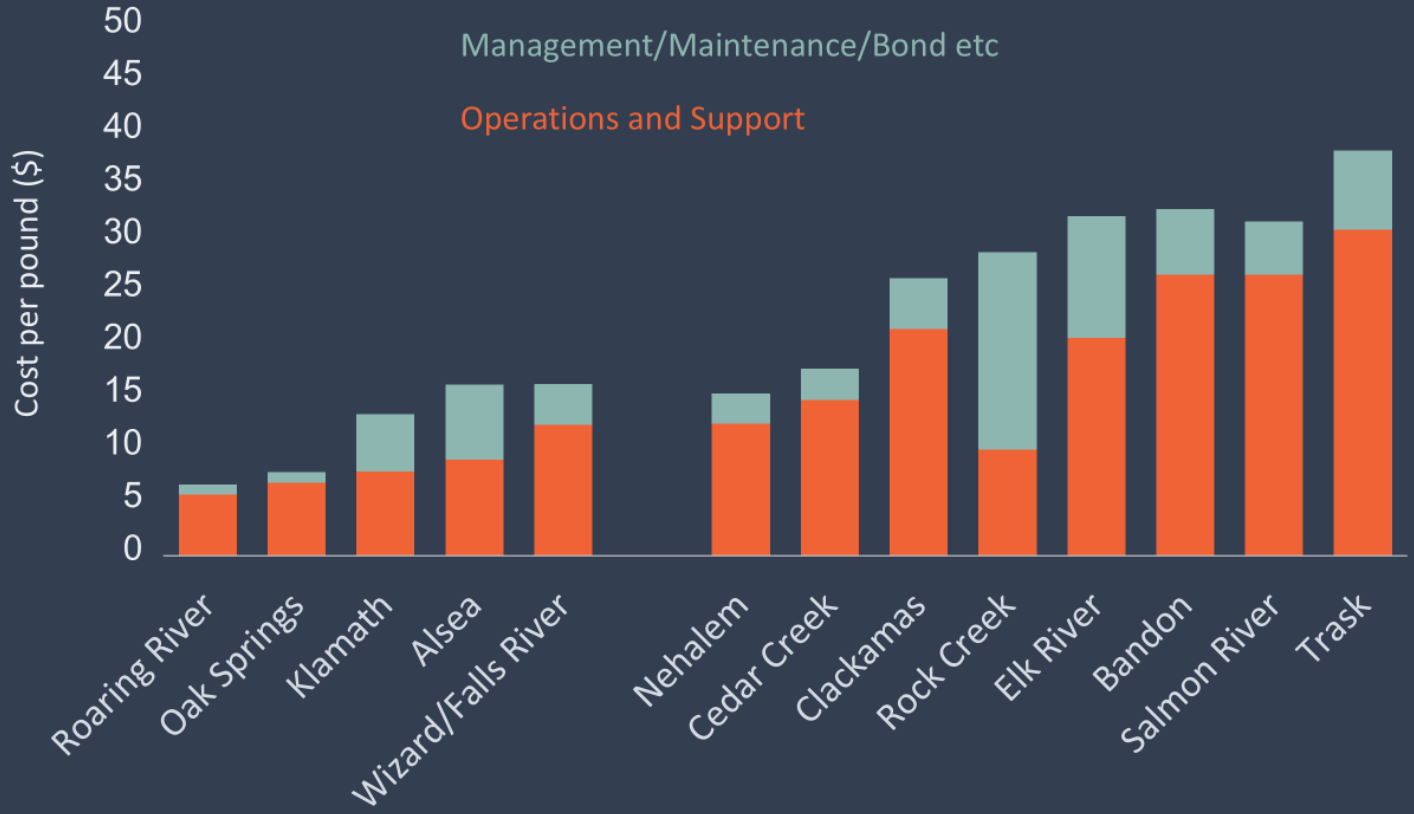

Third Party Analyses
ODFW Experience
Tribes
Public Engagement
Factors
Hatchery infrastructure investment roadmap
Opportunities for public input and community participation
Policies
Plans
Budget

CONTRACTOR REPORTS: A CLOSER LOOK

State Hatchery Economics

The Research Group LLC

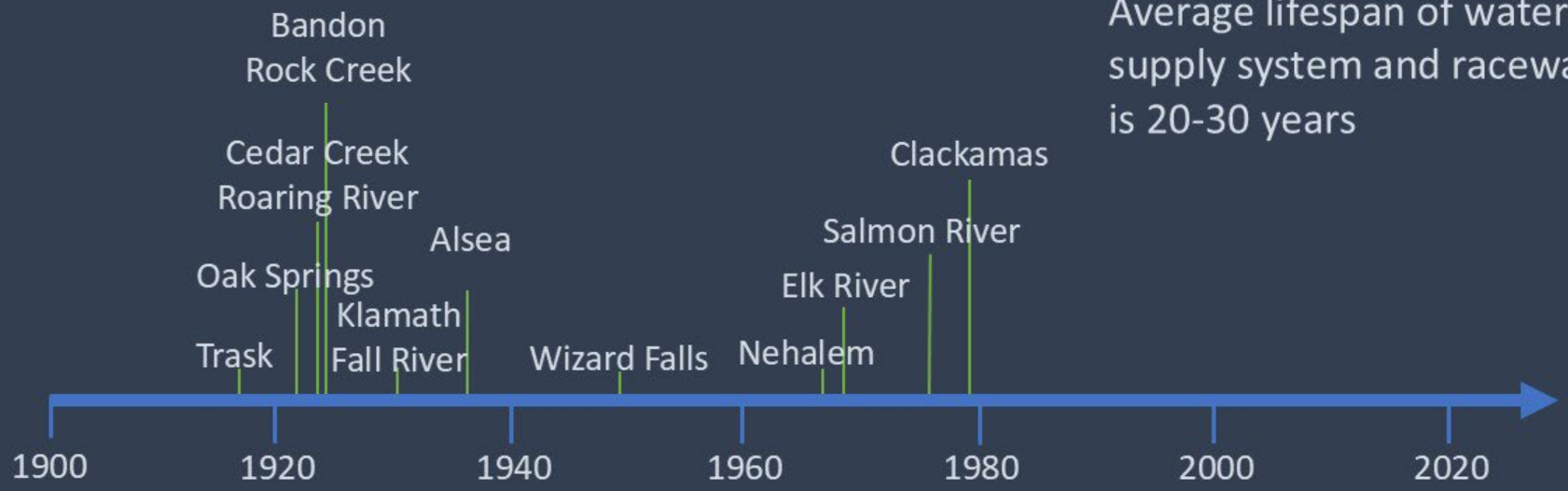
Annual Cost per Pound of Fish

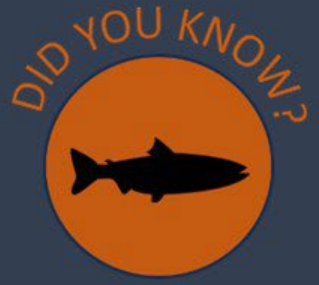


Net Benefits by Hatchery

State Hatcheries –

Original construction dates





Average lifespan of water-supply system and raceways is 20-30 years

Key assumptions at time of construction

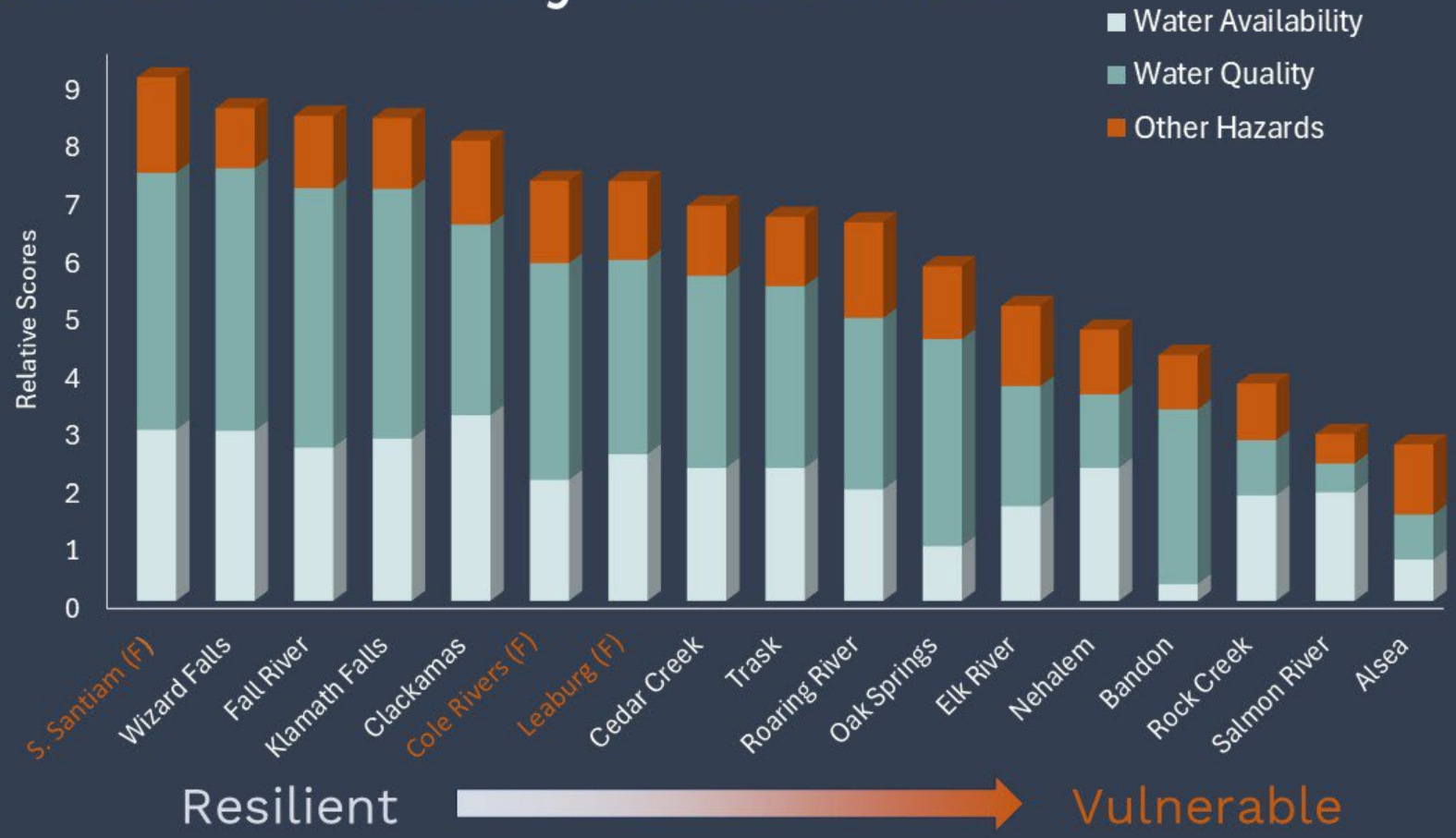
Stable environment

Abundant water, cool temperatures

Minimal fire risk

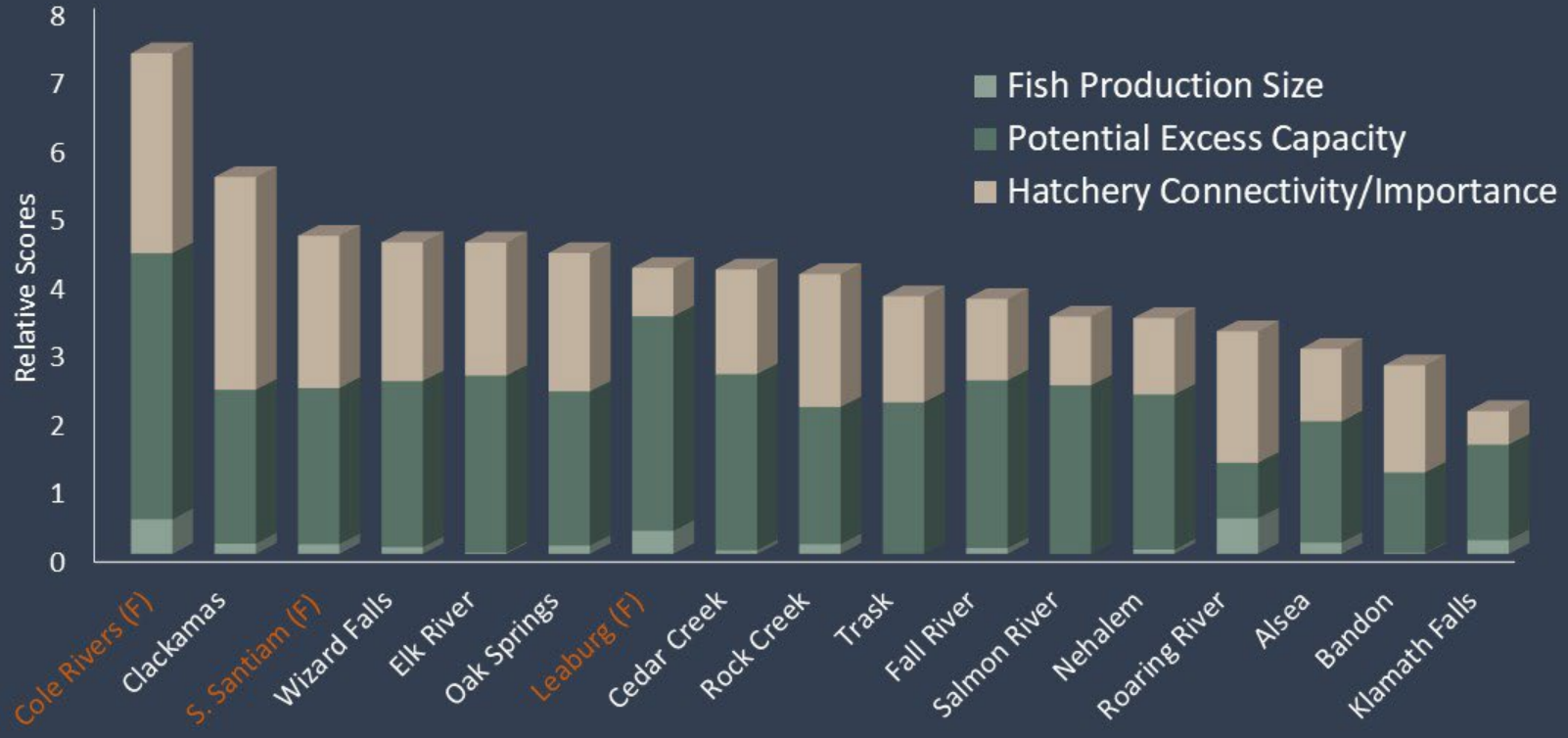
Reliable broodstock source

Overall Hatchery Resilience

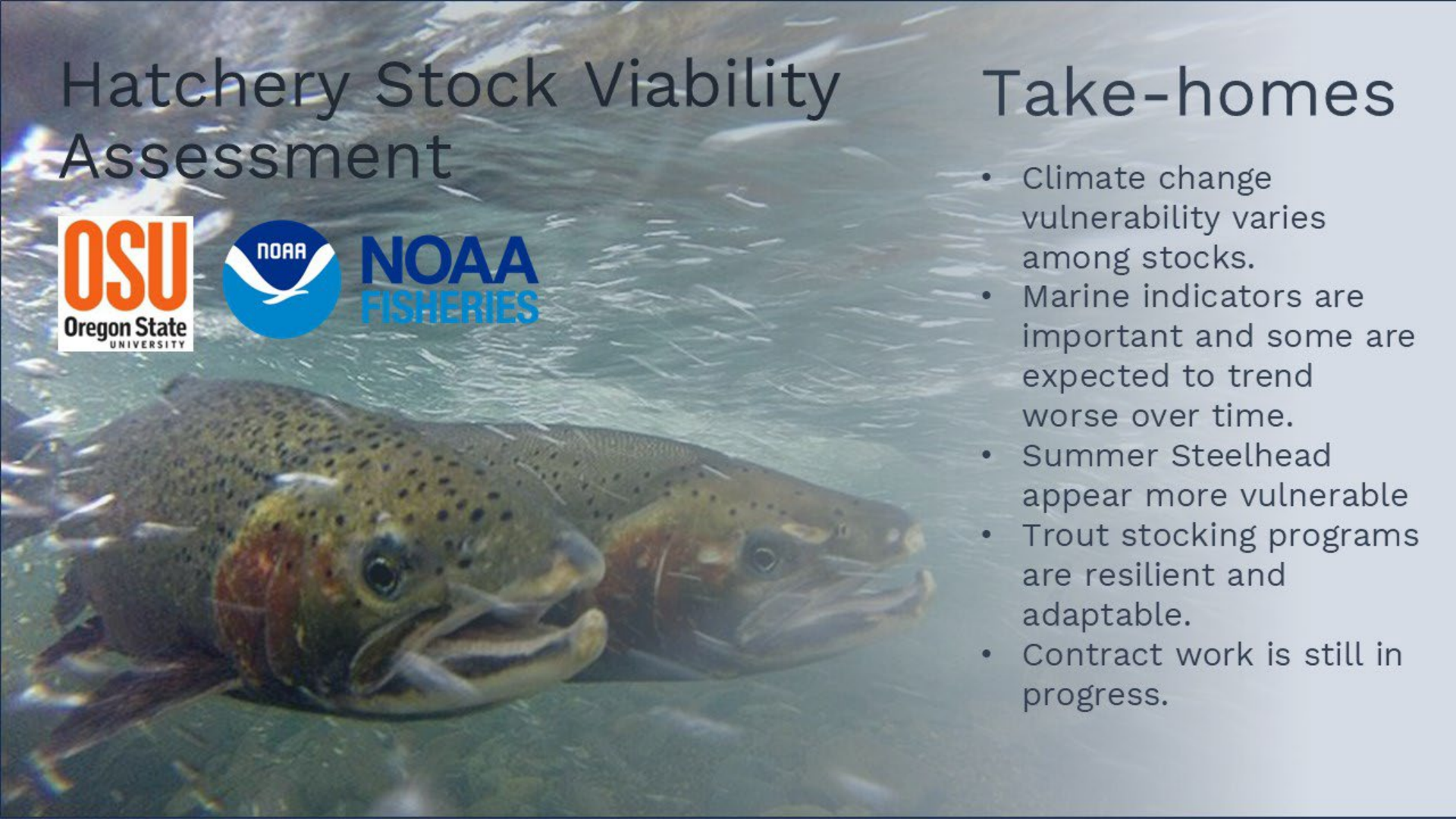


Infrastructure costs

Contribution to the hatchery system



Hatchery Stock Viability Assessment



Take-homes

- Climate change vulnerability varies among stocks.
- Marine indicators are important and some are expected to trend worse over time.
- Summer Steelhead appear more vulnerable
- Trout stocking programs are resilient and adaptable.
- Contract work is still in progress.

Future need for hatchery programs

FOUR PEAKS ENVIRONMENTAL
Science & Data Solutions®

Take-homes

Contractor assessment indicates no change in need for mitigation programs and some increasing need for harvest and conservation programs based on expected declines in wild fish status in some areas

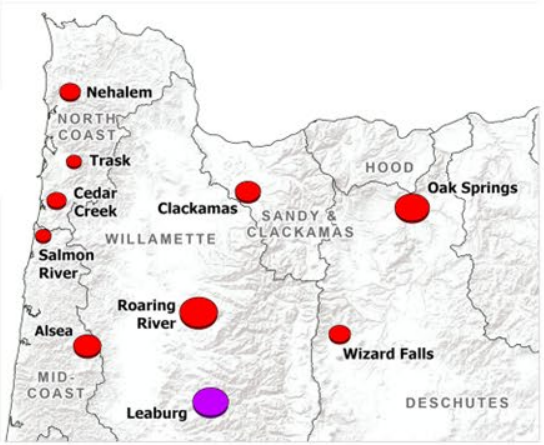
Policy and Planning context

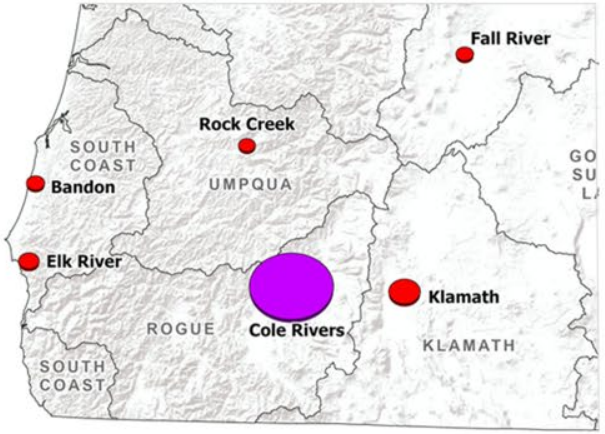
FOUR PEAKS ENVIRONMENTAL
Science & Data Solutions

Take-homes

- Hatchery programs have benefits and risks
- Policy and planning framework in place to achieve benefits while minimizing risk
- Thorough federal process to address risk to listed stocks
- These sideboards will govern future programs

ODFW ALTERNATIVES





Alternative 1

Upgrades at all existing facilities

Alternative 2a

Northwest:

- Expand Cedar Creek, Oak Springs & Fall River
- Shift Nehalem production to Cedar Creek, Trask, Salmon River & Clackamas
- Shift trout production to Oak Springs & Fall River

Southwest:

- Expand Bandon & Elk River
- Shift Rock Creek production to Cole Rivers & Elk River
- Build capacity for South Umpqua programs

Alternative 2b

Northwest:

- Expand Cedar Creek, Nehalem, Oak Springs & Fall River
- Shift Salmon River production to Cedar Creek, Roaring River & Clackamas
- Shift trout production to Nehalem, Oak Springs & Fall River

Southwest:

- Expand Bandon & Elk River
- Shift Rock Creek production to Cole Rivers & Elk River
- Build capacity for South Umpqua programs

Alternative 2c

Northwest:

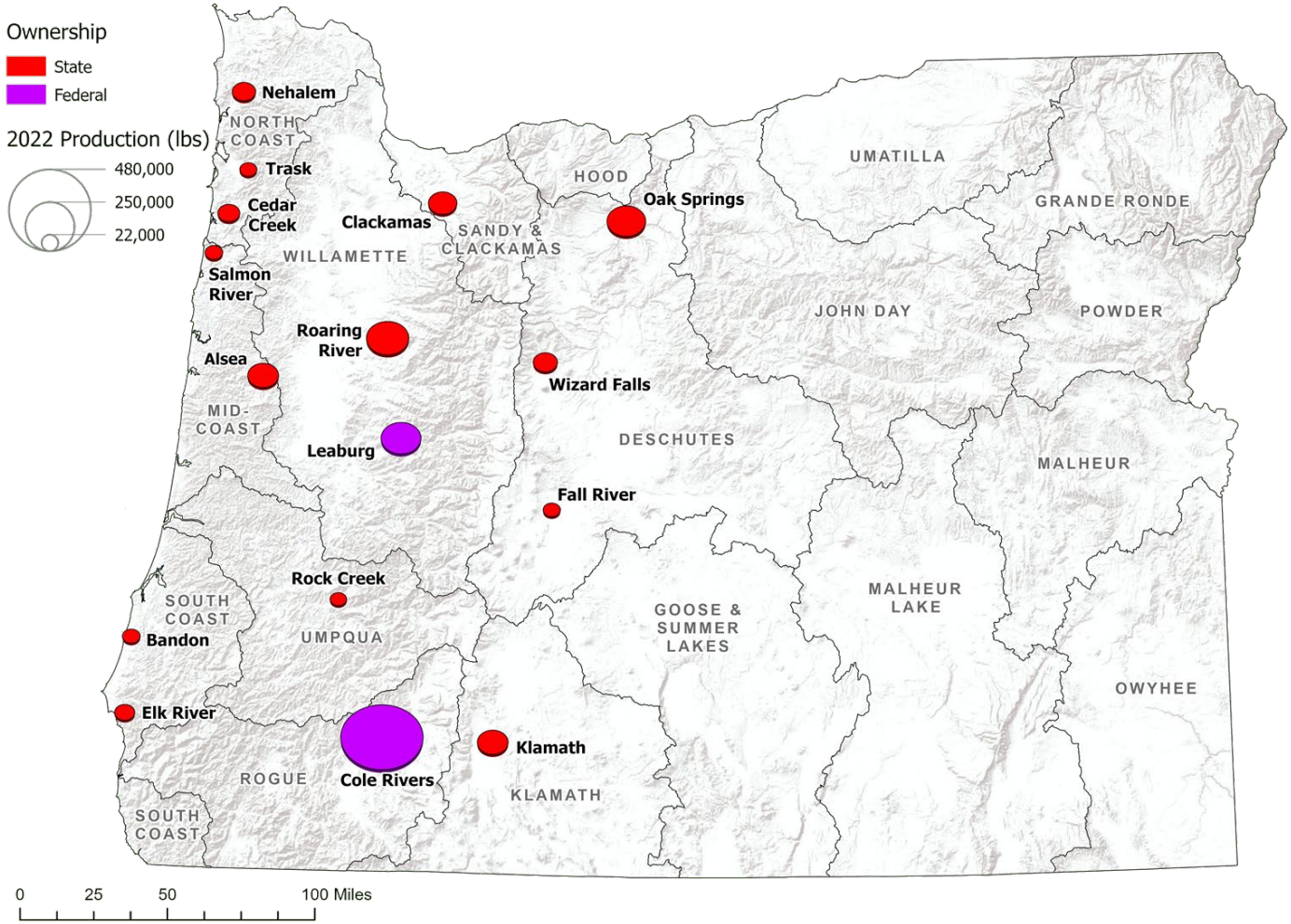
- Expand Cedar Creek, Nehalem, Oak Springs & Fall River
- Shift Alsea production to Cedar Creek, Salmon River & Clackamas
- Shift trout production to Nehalem, Oak Springs & Fall River

Southwest:

- Expand Bandon & Elk River
- Shift Rock Creek production to Cole Rivers & Elk River
- Build capacity for South Umpqua programs

Alternative 1

Status quo



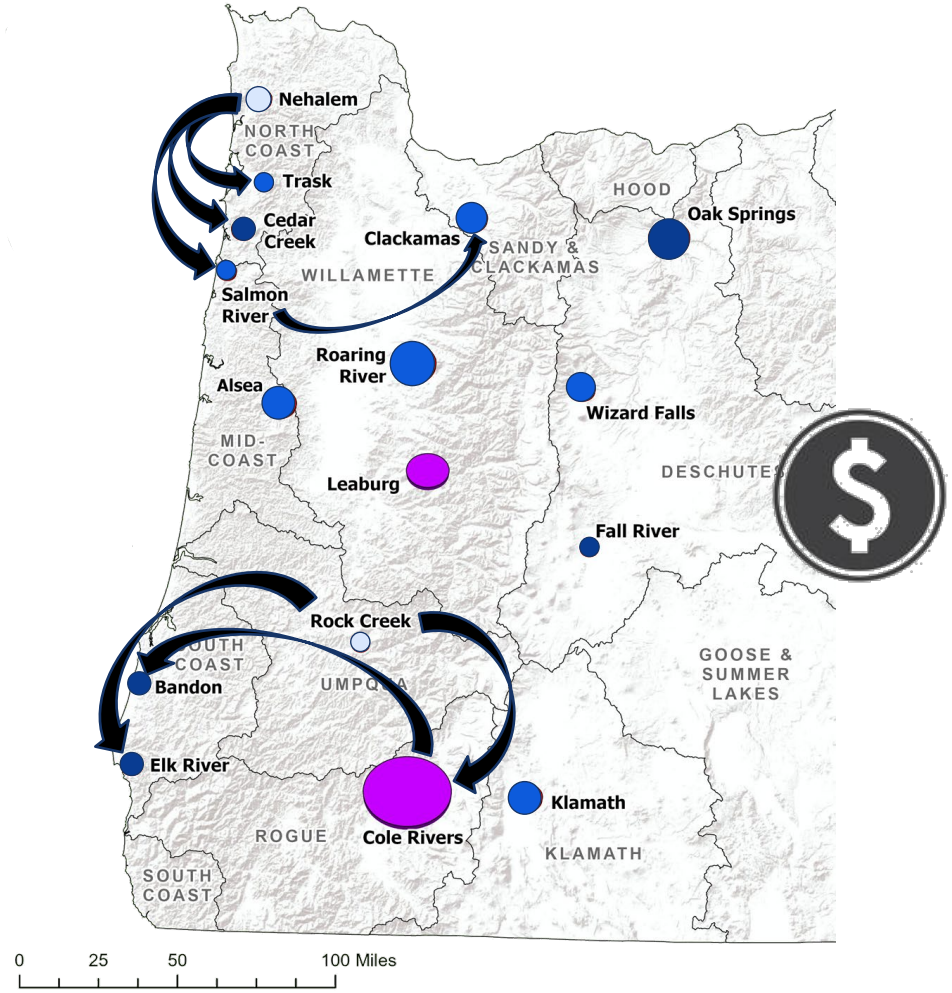
Alternative 2a

Northwest:

- Expand Cedar Creek, Oak Springs & Fall River
- Shift Nehalem production to Cedar Creek, Trask, & Salmon River
- Shift some Salmon River production to Clackamas
- Shift trout production to Oak Springs & Fall River

Southwest:

- Expand Bandon & Elk River
- Shift Rock Creek production to Cole Rivers & Elk River
- Shift some Cole Rivers production to Bandon
- Build capacity for South Umpqua programs



Potential

7 million

Capital Savings

Relative to Alt 1

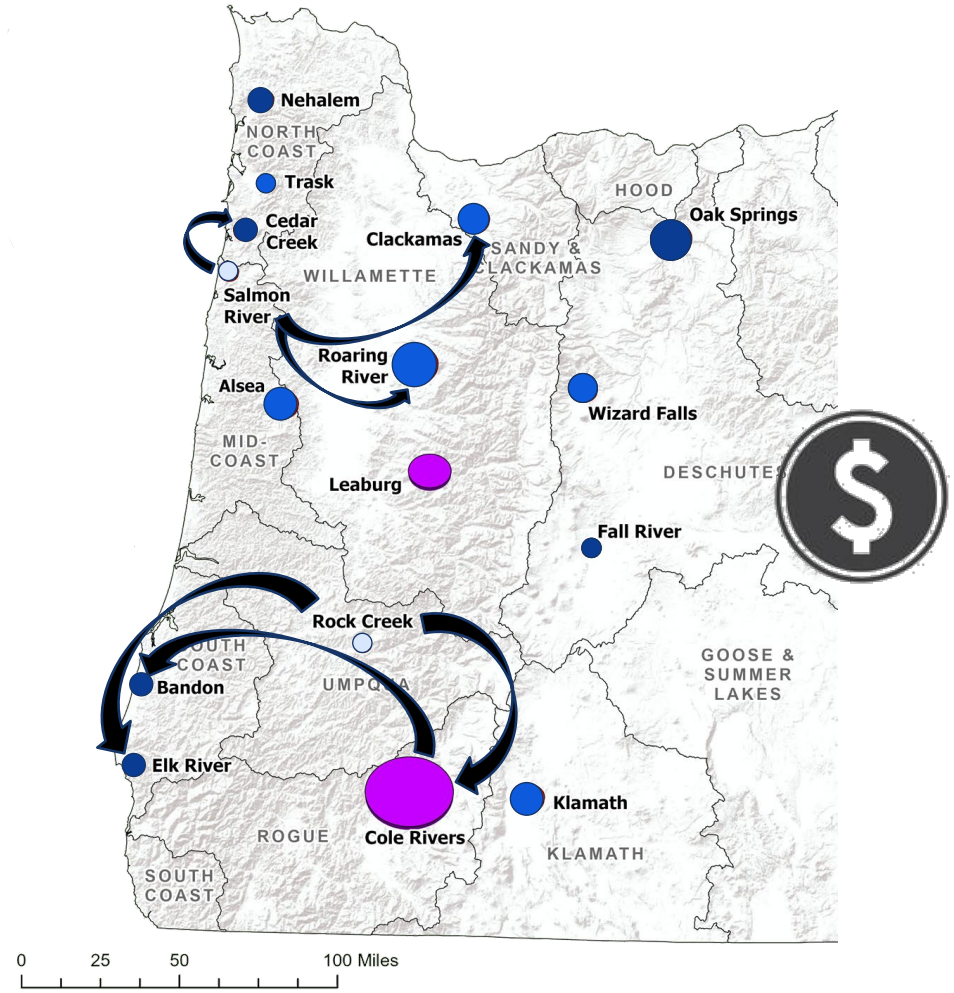
Alternative 2b

Northwest:

- Expand Cedar Creek, Nehalem, Oak Springs & Fall River
- Shift Salmon River production to Cedar Creek, Roaring River & Clackamas
- Shift trout production to Nehalem, Oak Springs & Fall River

Southwest:

- Expand Bandon & Elk River
- Shift Rock Creek production to Cole Rivers & Elk River
- Shift some Cole Rivers production to Bandon
- Build capacity for South Umpqua programs



Potential

9 million

Capital Savings

Relative to Alt 1

Alternative 2c

Northwest:

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- Shift some Salmon River production to Clackamas
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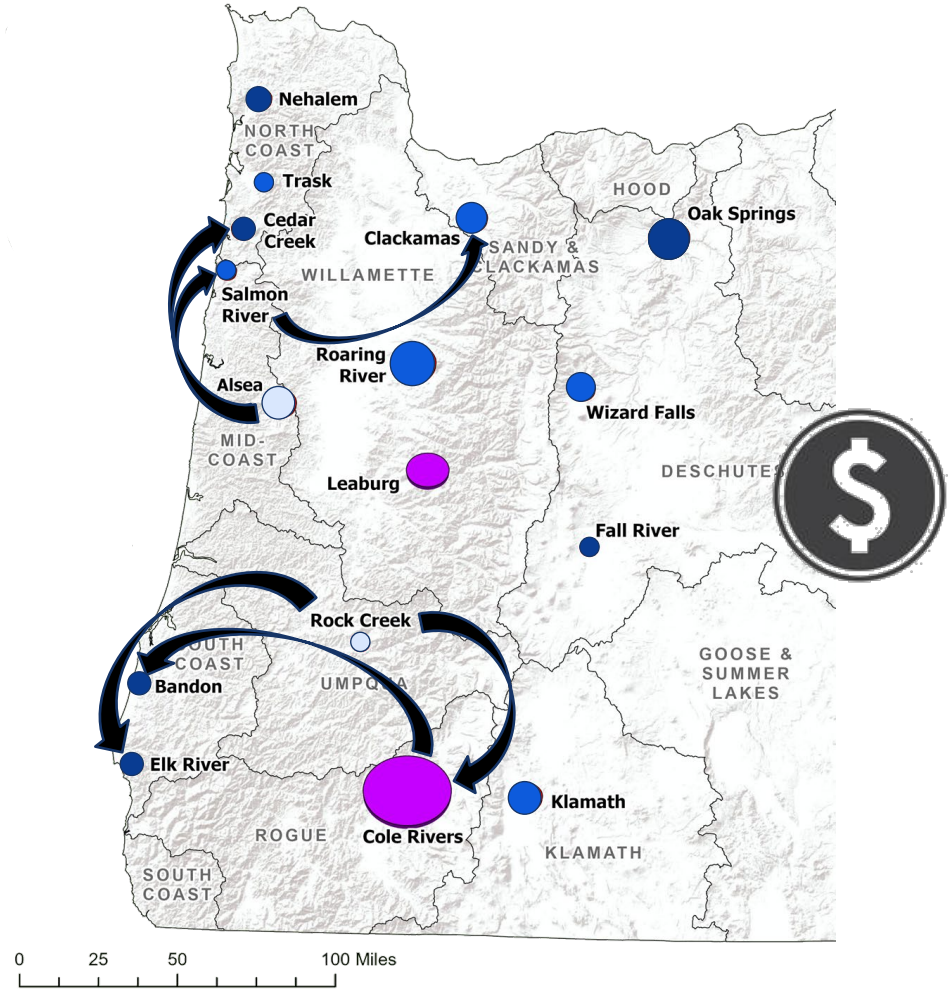


Potential

16 million

Capital Savings

Relative to Alt 1

	Status Quo Alternative 1	Consolidation Alternatives 2a-2c
Advantages	Spreads risk among more facilities	Production at more climate resilient facilities Potential cost savings in Capitol investments
Challenges	Increases future deferred maintenance and annual operations funding commitment Will require significant investments at some facilities with no guarantee of success	Increased risk of impact to system from failure of one hatchery (e.g., fire)

LUNCH

WE WILL RESUME AT 1PM

SMALL GROUP PROCESS

SMALL GROUP ORGANIZATIONS

American Sportfishing Association

Association of Northwest Steelheaders

Coastal Conservation Association

The Conservation Angler

Native Fish Society

NW Guides & Anglers Association

NW Sportfishing Industry Association

Oregon Anglers Alliance

Trout Unlimited

Wild Salmon Center

FACTORS

- Environmental conditions
- Wild fish
- Hatchery performance
- Local community value and economics
- Hatchery cost

Factor: Environmental conditions

Considerations

- Water quality (temps)
- Water quantity
- Habitat - food
- Wildfire risk
- Marine conditions

Data

- Water temperature
- Water quantity
- Wildfire risk
- Habitat status - inv spp
- Marine survival

Factor: Wild fish

Considerations

- Current abundance
- Abundance trends
- Projected abundance (with climate change)
- Limiting factors (barriers, habitat)
- Productivity
- Diversity
- Spatial distribution
- Listing status
- Educational opportunities
- Capacity

Data

- Redd counts
- Carcass counts
- Fish ladder counts
- Creel surveys
- Screw trap data
- Recovery plans and related updates
- Juvenile salmon abundance

Factor: Hatchery performance

Considerations

- Size/capacity of hatchery (potential for expansion)
- Required technology
- Program(s): species and quantity
- Contribution to OR fisheries
- Quality of fish raised
- Watershed(s) of release and capture
- Hatchery management plan
- Current and future legal and policy context for programs

Data

- pHOS
- SARs
- Egg to smolt
- Prespawn mortality
- Harvest rate in Oregon
- Harvest rate out of Oregon

Factor: Hatchery cost

Considerations

- Cost of infrastructure upgrade
- Cost of maintenance
- Cost of operation
- Opportunity cost

Data

- Upgrade costs
- Annual costs of operation
- Annual costs of maintenance

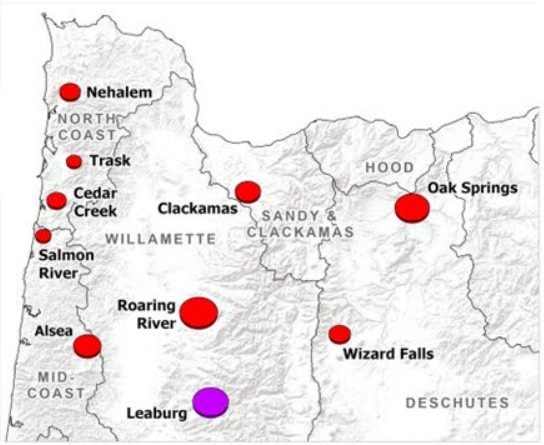
Factor: Local community value and economics

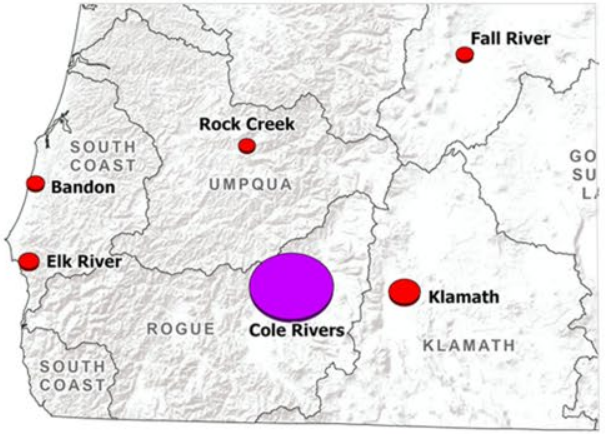
Considerations

- Educational value of facility
- Community service and social events
- Angler demand (visits/trips)
- Subsistence fishing
- Impacts on local jobs
- Tourism impacts
- Cultural significance (e.g., Tribal and generational value)
- Local volunteerism
- Non-fishing recreational participation
- Access to the resource

Data

- Economic studies
- Annual visitors
- Educational and cultural events/year
- Angler trips
- Volunteer time





Alternative 1

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Alternative 2a

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Southwest:

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- Shift Rock Creek production to Cole Rivers & Elk River
- Build capacity for South Umpqua programs

Alternative 2b

Northwest:

- Expand Cedar Creek, Nehalem, Oak Springs & Fall River
- Shift Salmon River production to Cedar Creek, Roaring River & Clackamas
- Shift trout production to Nehalem, Oak Springs & Fall River

Southwest:

- Expand Bandon & Elk River
- Shift Rock Creek production to Cole Rivers & Elk River
- Build capacity for South Umpqua programs

Alternative 2c

Northwest:

- Expand Cedar Creek, Nehalem, Oak Springs & Fall River
- Shift Alsea production to Cedar Creek, Salmon River & Clackamas
- Shift trout production to Nehalem, Oak Springs & Fall River

Southwest:

- Expand Bandon & Elk River
- Shift Rock Creek production to Cole Rivers & Elk River
- Build capacity for South Umpqua programs

APPLYING THE FACTORS

Apply the factors to alternatives considered by the Department's contractor.

- Environmental conditions
- Wild fish
- Hatchery performance
- Local community value & economics
- Hatchery cost

Southwest:

- Expand Bandon & Elk River
- Shift Rock Creek production to Cole Rivers & Elk River
- Build capacity for South Umpqua programs

Factors are a community-informed set of considerations that will be used as a starting point for ODFW's future conversations and decision making.

SMALL GROUP FINDINGS

General Learnings

- How ODFW or an interested party values or prioritizes a certain factor will change the outcome of factor application. Explaining prioritization is key!

- Factors are useful when considering geographies, facilities, and programs, and could also be applied to higher level policy and program decisions.

Each alternative presents trade-offs between financial savings, community impacts, and long-term sustainability goals.

The system can currently only accommodate shifting production from one facility while maintaining production levels.

SMALL GROUP FINDINGS

Northwest - Comparing 2a, 2b, and 2c

- **2a and 2b:** Perception that fisheries in both basins have challenges as currently run (access, program performance etc.), but potentially more community value in Nehalem basin. Challenges to relocating production in both instances (e.g., maintaining disabled access in Nehalem vs maintaining PST indicator at Salmon). Future habitat values for wild fish highest in Nehalem.

- **2c:** Highest capital cost savings of the three alternatives ($15M of $220M total). Strong local support for winter steelhead program and an important early-season steelhead fishery on coast.

Uncertainties in funding, challenges in hatchery production due to environmental factors, and high operational costs at Rock Creek led to consideration of new alternatives like acclimation sites, moving production, as well as ancillary benefits like an interpretative center, alongside rebuilding.

Studies are needed to assess the impacts of different strategies.

SMALL GROUP FINDINGS

Southwest

- The North Umpqua fishery has a high value for both wild and hatchery spring chinook. There were concerns about hatchery fish straying. Also challenges related to broodstock collection and acclimatation, particularly without Rock Creek.
- The local economy is recovering from fire impacts, increasing the importance of economic contributions from the spring chinook fishery. There is a need for clear community engagement, partnerships, and communication about funding and alternatives.
- Like any investment decision, higher investment at Rock Creek limits investment elsewhere in the SW system.
- Investments and expansion could be prioritized at Bandon to have highest benefit for SW system.

LARGE GROUP INPUT

SURVEY

Survey of large group participants and other interested parties will be available online. Please complete it by 11/26/24 and share it with other interested parties!

https://www.dfw.state.or.us/fish/hatchery/resilience.asp

QUESTIONS & DISCUSSION

Floor is open for questions and discussion regarding the factors, ODFW's alternatives, the process, contractor reports, and other related topics.

- Are there other factors that should've been considered?
- How would you prioritize the factors?
- Other questions?

NEXT STEPS

Review website materials.

Complete the survey online by 11/26.

Keep eye out for upcoming reports.

WELCOME!

ODFW LARGE GROUP MEETING #3
11/13/24

The meeting has ended, but you can watch the recording on the ODFW hatcheries website:

https://www.dfw.state.or.us/fish/hatchery/resilience.asp