

Ad-hoc Coastal Steelhead Advisory Group: September 12 Meeting

WDFW Fish
Management &
Triangle Associates



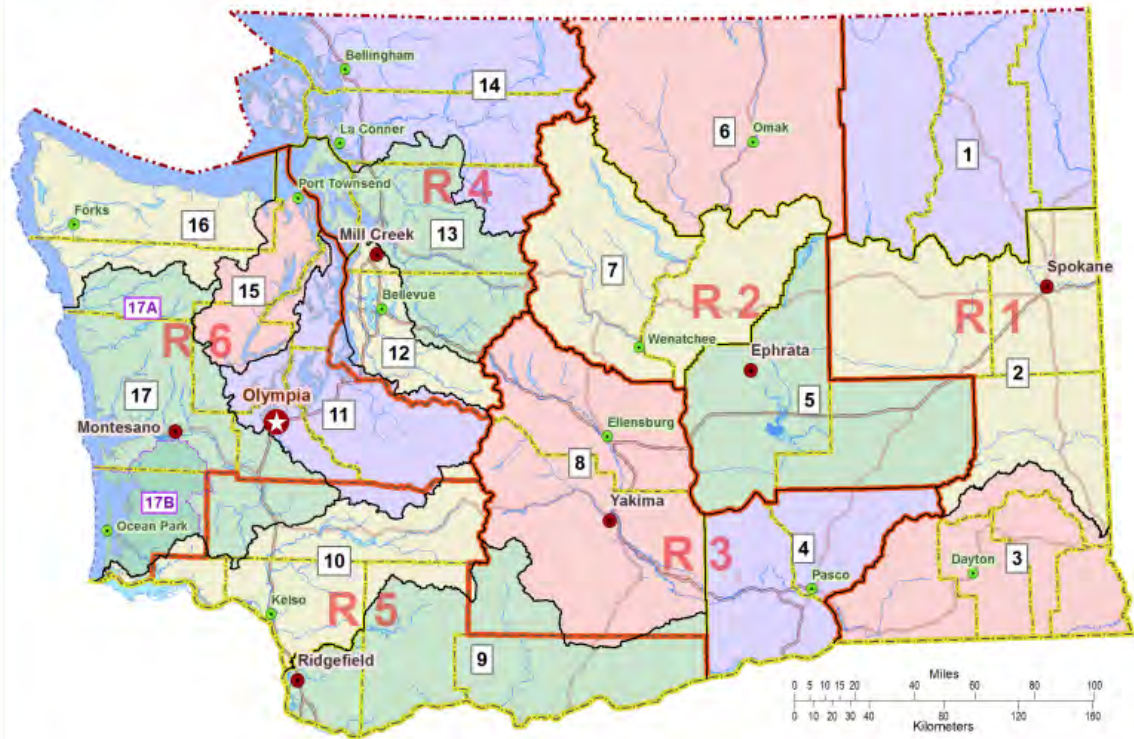
Welcome & Updates

- Meeting purpose and agenda
- Action item review
- Test fishery update
- Co-manager communications
- Public Input





Washington Department of Fish and Wildlife Fish Program District Biologists



Regional Offices		
Regional Office	Phone	E-Mail
Headquarters (Olympia)	(360) 902-2200	
Region 1 - Eastern (Spokane)	(509) 892-1001	TeamSpokane@dfw.wa.gov
Region 2 - North Central (Ephrata)	(509) 754-4624	TeamEphrata@dfw.wa.gov
Region 3 - South Central (Yakima)	(509) 575-2740	TeamYakima@dfw.wa.gov
Region 4 - North Puget Sound (Mill Creek)	(425) 775-1311	TeamMillCreek@dfw.wa.gov
Region 5 - Southwest (Ridgefield)	(360) 696-6211	TeamRidgefield@dfw.wa.gov
Region 6 - Coastal (Montesano)	(360) 249-4628	TeamMontesano@dfw.wa.gov

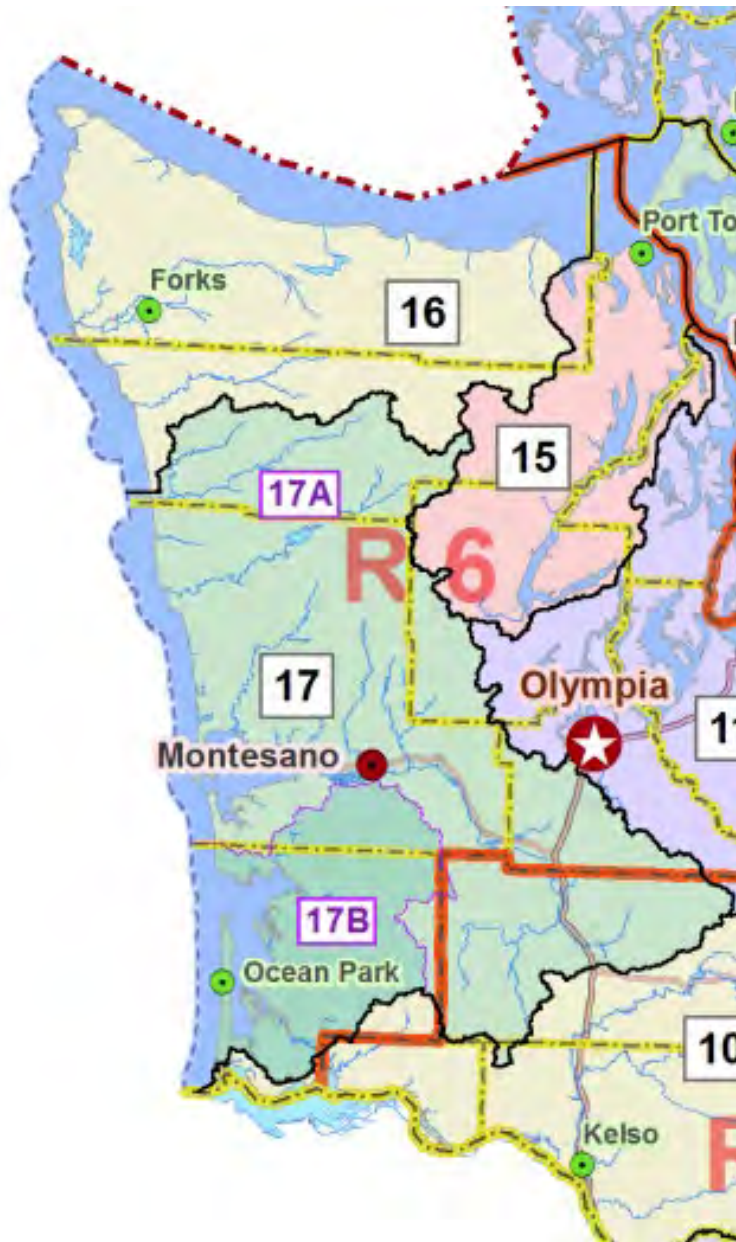
Fish Program Biologists			
District	Contact	Counties/ Rivers	Phone
1	Bill Baker	Ferry, Pend Oreille, Stevens	(509) 563-5499
2	Randy Osborne	Lincoln, Spokane, Whitman	(509) 892-1001 x302
3	Jeremy Trump	Walla Walla, Asotin, Columbia, Garfield, Snake R	(509) 382-1005
4	Paul Hoffarth	Benton, Franklin	(509) 545-2284
5	Michael Schmuck	Adams, Grant	(509) 398-7531
6	Ryan Fortier	Okanogan	(509) 997-0316
7	Travis Maitland	Chelan, Douglas	(509) 665-3337
8	Marc Divens	Kittitas, Yakima	(509) 457-9301
9	Matt Gardner	Clark, Klickitat, Skamania	(360) 906-6746
Area Bio	(Vacant)	Same as above	
10	Josua Holowatz	Cowlitz, Lewis, Wahkiakum, except Chehalis R	(360) 906-6771
Area Bio	(Vacant)	Same as above	
11	Gabe Madel	Thurston, Pierce, E Kitsap, S Mason	(360) 902-2670
Area Bio	Bill Evans	Salmon / Steelhead stock assessment D11 & D15	(360) 902-2726
Area Bio	(Vacant)	Pierce, S Mason, E Kitsap, Vashon, Bainbridge Is	
Area Bio	Riley Freeman	Nisqually R, Thurston, S Sound Tribs	(360) 810-0724
12	Aaron Bosworth	Green R, Cedar R, Sammamish R	(425) 775-1311 x102
Area Bio	Joe Short	Lake Washington	(425) 775-1311 x129
Area Bio	Nathanael Overman	Green R	(425) 775-1311 x113
13	Pete Verhey	Stillaguamish, Snohomish Basins, Whidbey Is	(425) 775-1311 x107
Area Bio	Catherine Morello	Stillaguamish, Snohomish Basins	(425) 775-1311 x304
14	Andrew Fowler	Skagit Basin N to Canada, San Juan Is	(360) 466-4345 x230
Area Bio	Julie Klacan	Nooksack R, drainages N to Canada	(360) 466-4345 x272
Area Bio	(vacant)	Skagit R	
15	Mark Downen	Hood Canal, E Straits, E Jefferson, N Mason, W Kitsap	(360) 202-7005
Area Bio	Rick Ereth	Skokomish R, Hood Canal	(360) 427-2003
16	Jenni Whitney	Clallam, W Jefferson (Dungeness to Queets R)	(360) 302-3030 x322
Area Bio	Kathryn Sutton	Same as above	(360) 878-4758
Area Bio	Randy Cooper	Same as above	(360) 302-3030 ext. 305
17 North	Mike Scharpf	Chehalis R, Grays Harbor to Queets R	(360) 870-9175
Area Bio	Curt Holt	Same as above	(360) 249-1212
Area Bio	Kim Figlar-Barnes	Same as above	(360) 249-4628 x 235
17 South	Jody Pope	Willapa Bay and Tribs, Pacific	(360) 660-2978
Area Bio	Barbara McClellan	Same as above	(360) 249-1213
Area Bio	Lyle Jennings	Same as above	(360) 249-4628 x 270

Revision date: November 15, 2021
Fish Program, Leah Snyder

https://wdfw.wa.gov/sites/default/files/2021-11/wdfw_fish_district_bios.pdf



Larger Team

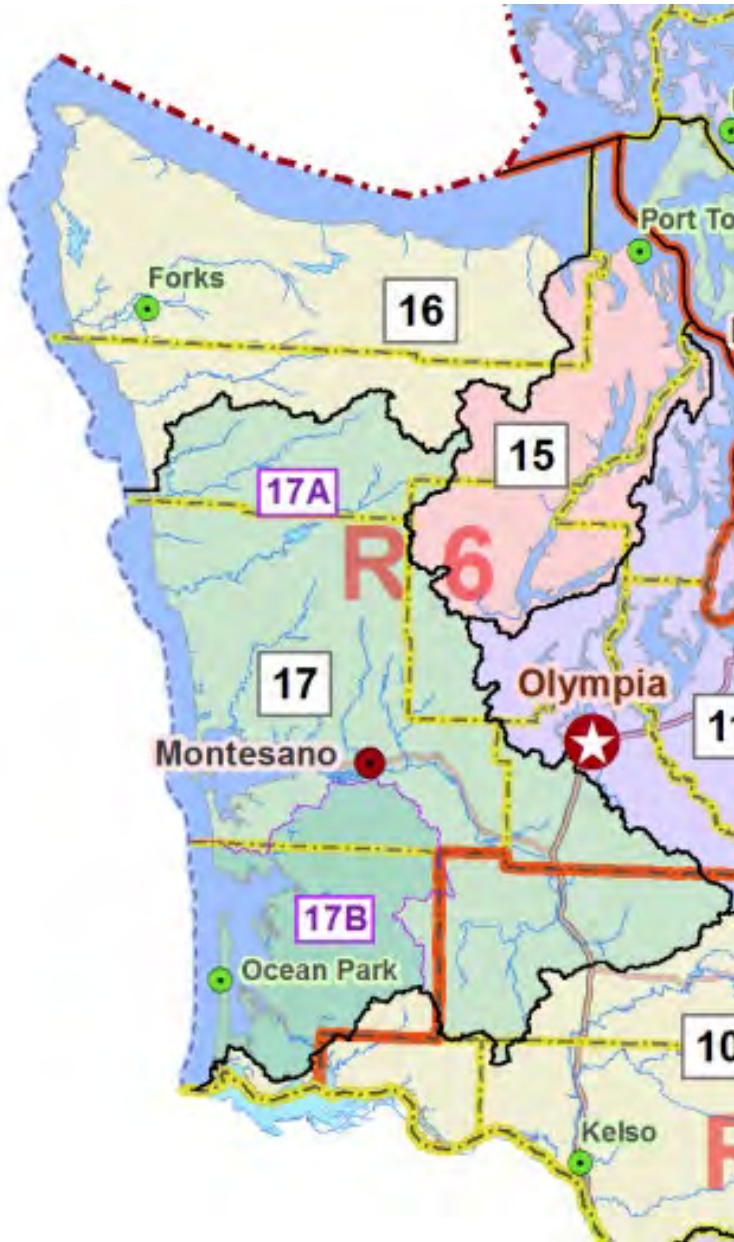


- District 16: **Jenni Whitney**, Kathryn Sutton, Randy Cooper
- District 17 North: **Mike Scharpf**, Curt Holt, Kim Figlar-Barnes
- District 17 South: **Jody Pope**, Barb McClellan
- **Amy Edwards**, Stock Assessment Biologist

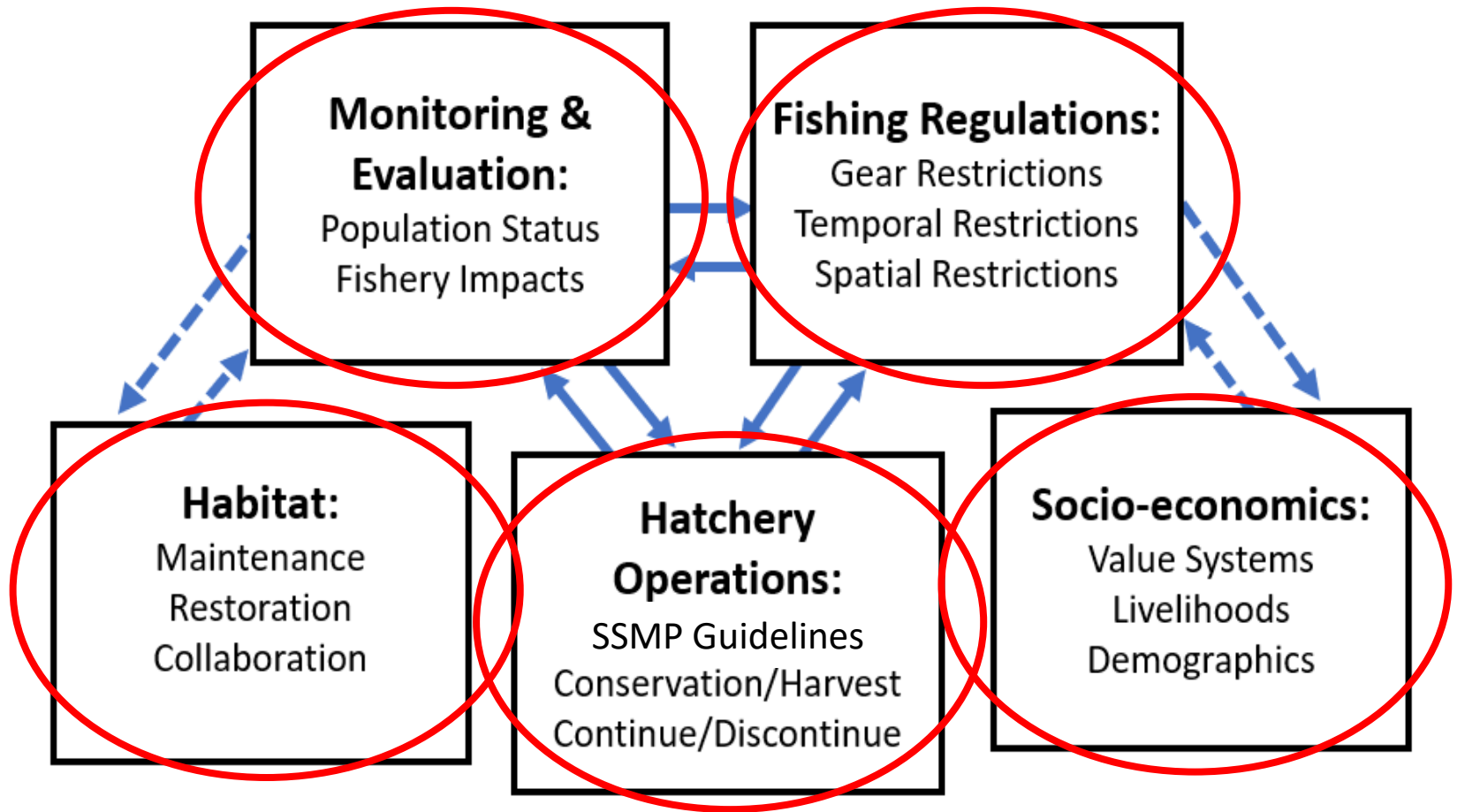


Larger Team

- **Science Division:**
Fish Science,
Quantitative
Modeling, HEAT Unit
- **Habitat Division**
- **Olympic National
Park**
- **NOAA**
- Communication w/
Tribal Co-Managers



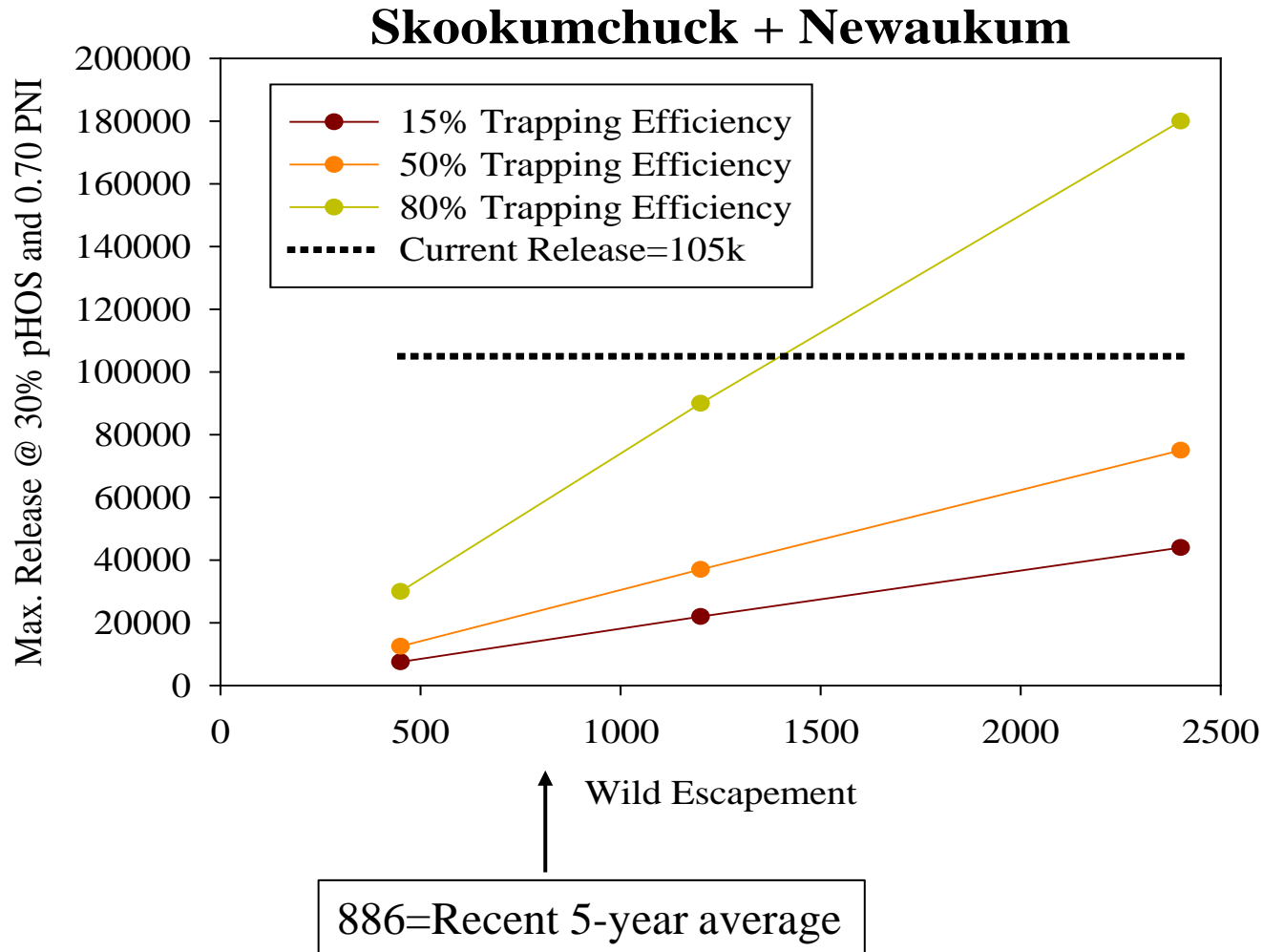
Proviso Implementation Strategy





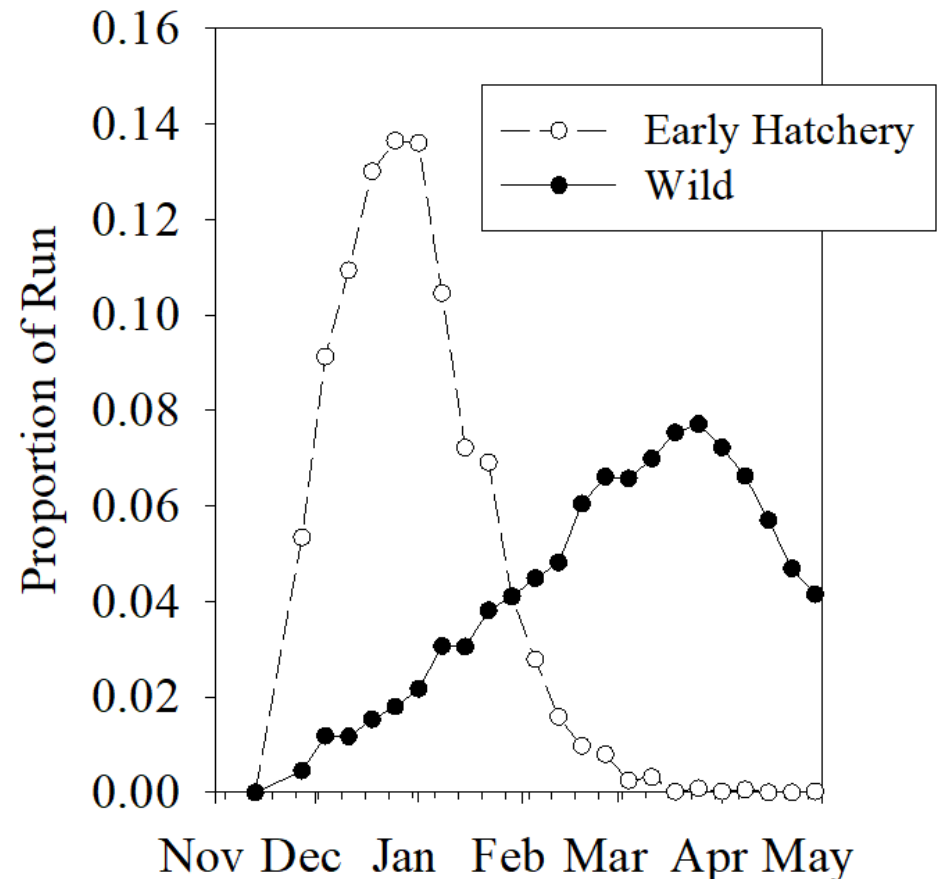
Hatcheries Wrap-Up

Hatchery Scaling



Additional Considerations

- Discontinue out-planting for segregated programs without trapping facilities
- Consider mandatory retention of hatchery fish, especially during years of low natural-origin returns
- Prioritize research on short and long-term impacts of integrated (“broodstock”) vs. segregated programs as well as risks and benefits
- Improve certainty around DGM and AHA model input parameters, including research on productivity to validate literature values
- Explore implementation of conservation – oriented hatchery programs



Naselle Hatchery, 1963



Wild Gene Banks (aka Wild Steelhead Management Zones)

- **SSMP** calls for one WGB per major population group (MPG) in each distinct population segment (DPS) → at least one MPG per WRIA
- Sufficiently abundant and self-sustaining
- Fisheries permitted if management objectives are met
- Stakeholder & co-manager process



WSMZ Criteria

1. Areas must contain populations with relatively stable population abundance trends and a **six-year average of >300 spawners**



WSMZ Criteria



2. Areas may **not contain on-station hatchery production** or releases; however, they may contain streams that currently support off-station releases



WSMZ Criteria

3. Consider relative usefulness of given locations as control streams for research



WSMZ Criteria

4. Consider designation of given locations as WSMZs for other salmonid species



WDFW WSMZ Criteria Met

- North River/Smith Creek Winter Steelhead
- Nemah River Winter Steelhead
- Wishkah River Winter Steelhead
- Hoquiam River Winter Steelhead
- Chehalis River Winter / Summer Steelhead
- Clearwater River Winter/ Summer Steelhead
- Dickey River Winter Steelhead

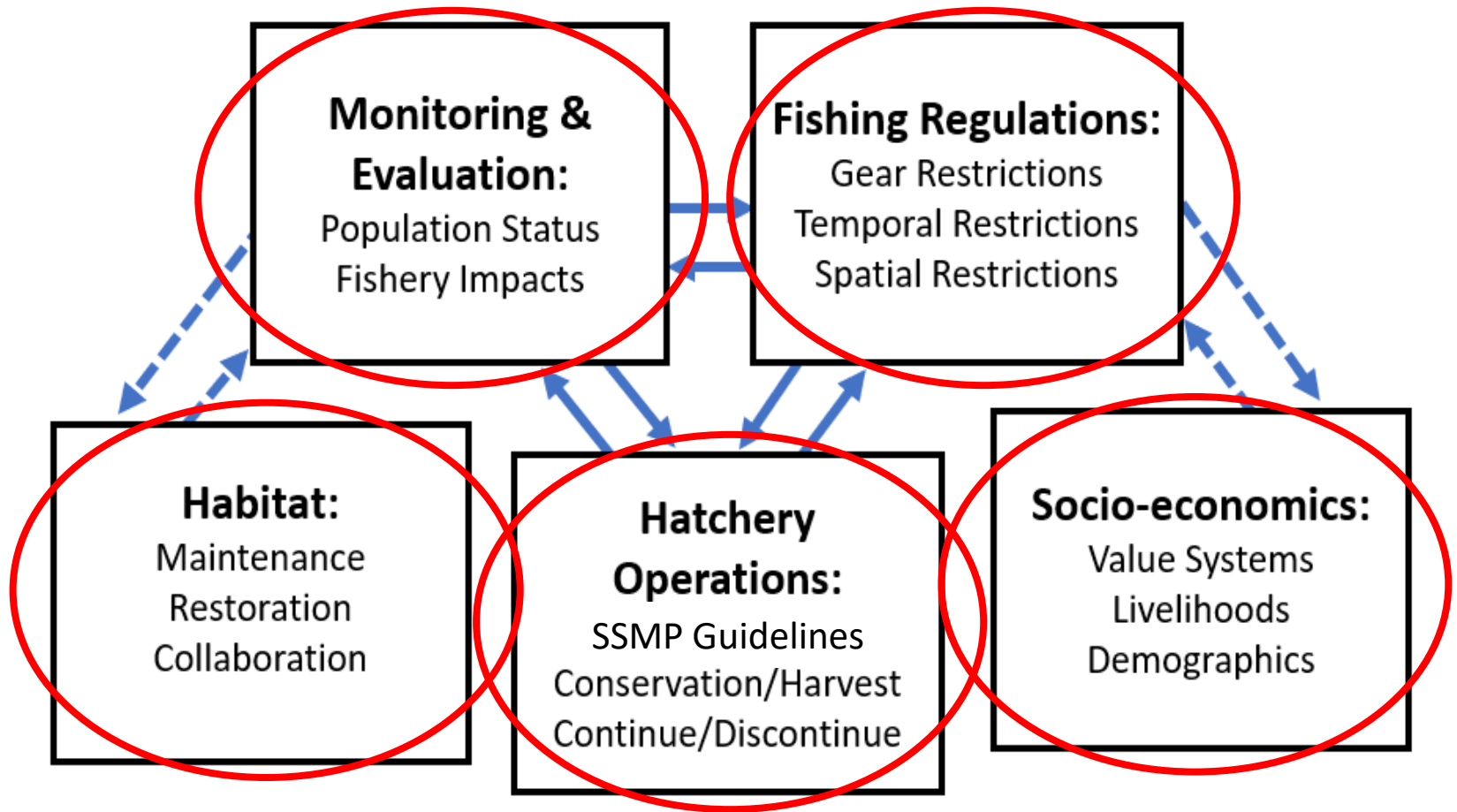






Habitat

Proviso Implementation Strategy



Steelhead Need Healthy Habitat!

GOOD SALMON HABITAT

HEALTHY VEGETATION

Streamside plants and overhanging branches block the sun and keep things cool.

They also:

- attract insects that salmon eat
- stabilize the banks against erosion and filter run-off from rain
- provide woody debris, roots, and fallen trees, to increase the complexity of the stream channel



GEOGRAPHIC COMPLEXITY

Floodplains and side channels off of the main stream provide:

- refuge from high, harmful flows
- high quality foraging and rearing areas



**ABUNDANT
CLEAN, COOL WATER**

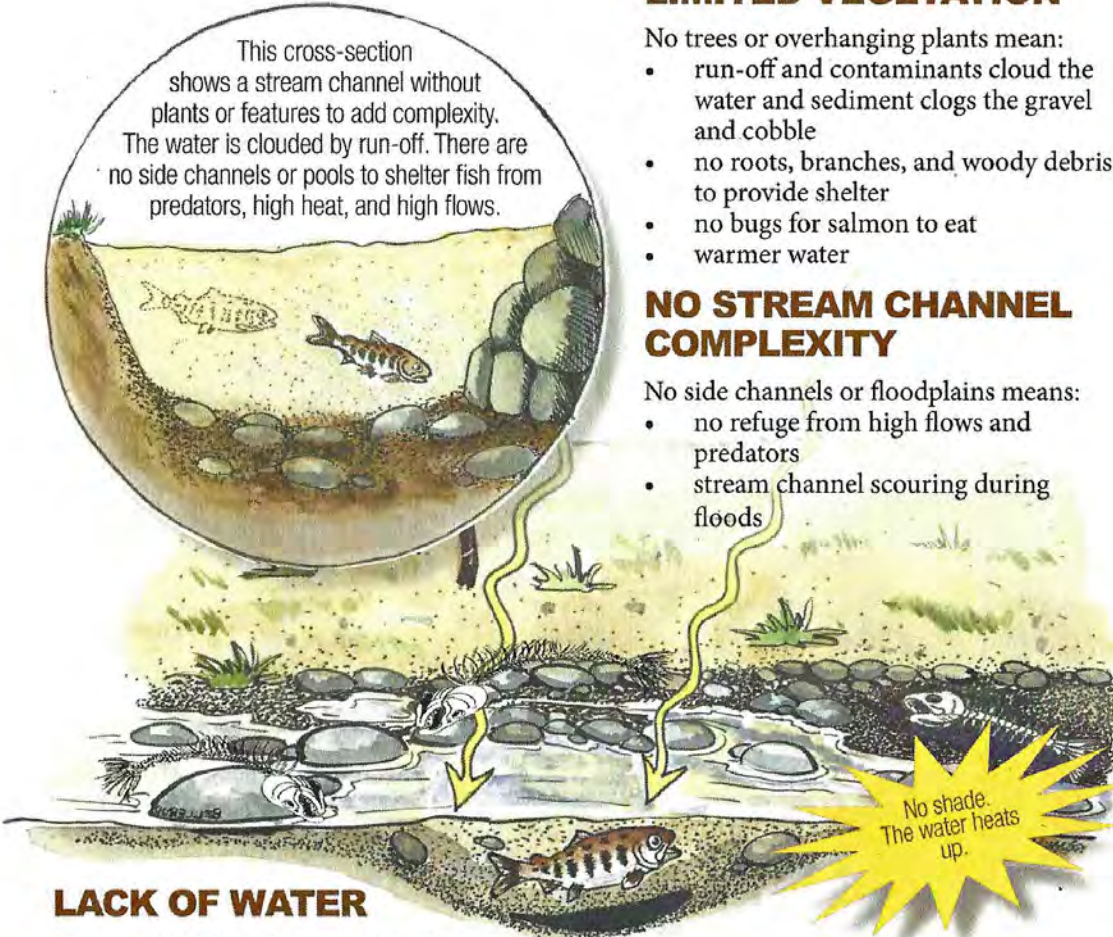


Birds-eye view
of a complex
habitat

STREAM CHANNEL COMPLEXITY

Good salmon streams have wood, rocks, pools, and riffles as well as clean gravel for spawning.





This cross-section shows a stream channel without plants or features to add complexity. The water is clouded by run-off. There are no side channels or pools to shelter fish from predators, high heat, and high flows.

LIMITED VEGETATION

- No trees or overhanging plants mean:
- run-off and contaminants cloud the water and sediment clogs the gravel and cobble
 - no roots, branches, and woody debris to provide shelter
 - no bugs for salmon to eat
 - warmer water

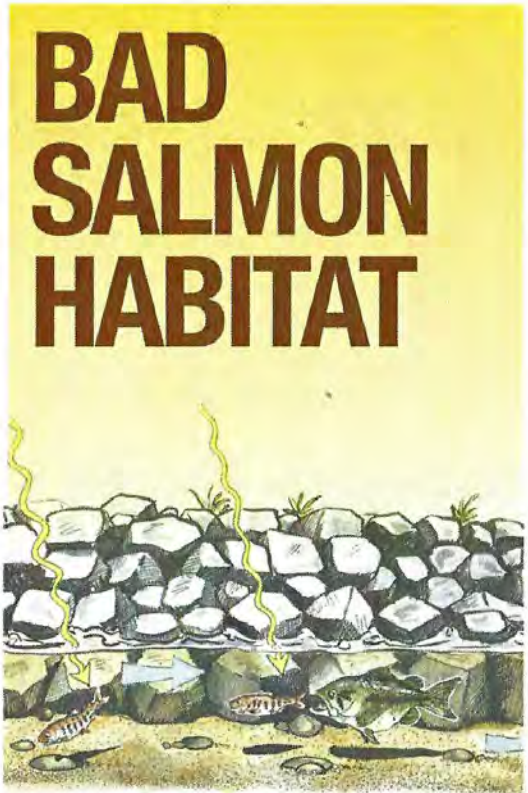
NO STREAM CHANNEL COMPLEXITY

- No side channels or floodplains means:
- no refuge from high flows and predators
 - stream channel scouring during floods

No shade. The water heats up.

LACK OF WATER

- strands fish and stops migration
- contributes to higher water temperatures

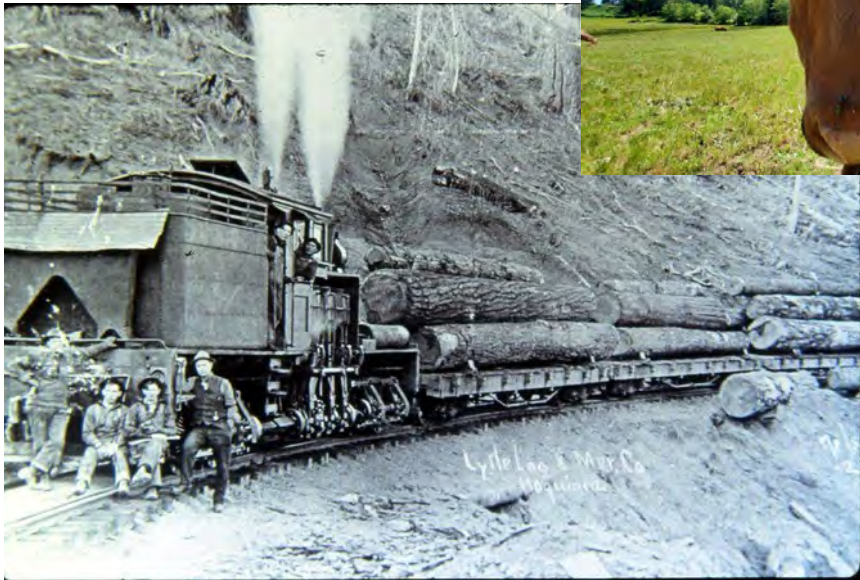


INVASIVE SPECIES

- invasive aquatic species eat juvenile fish and compete for food, breeding and rearing habitat
- invasive plants change stream flow and affect migration

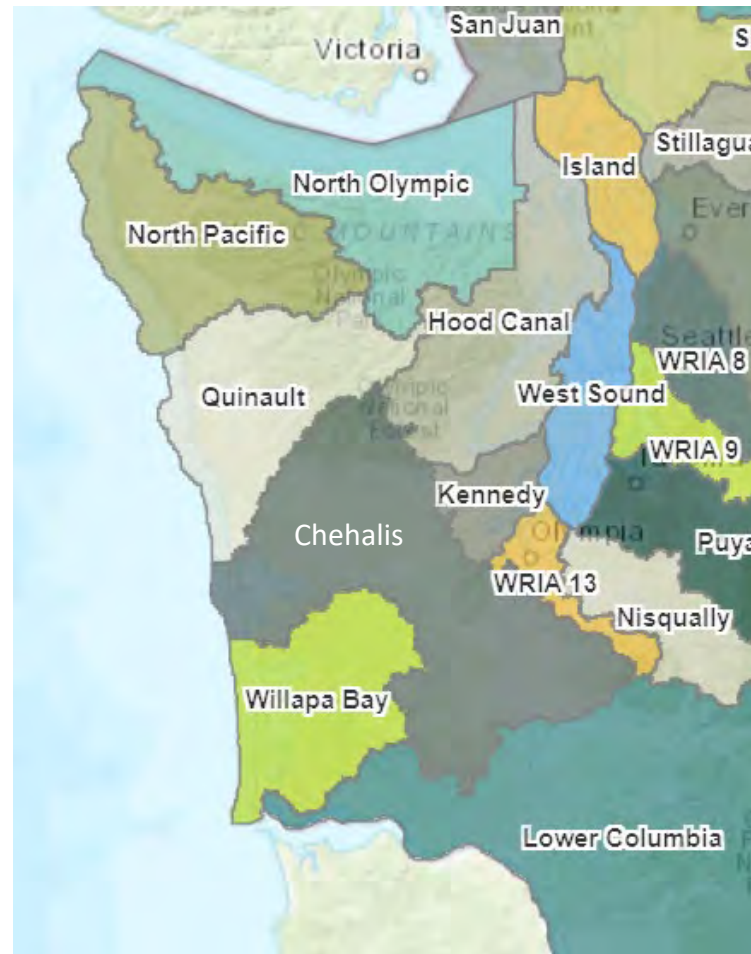
<http://elkcreekwatershed.org/restoration.html>





Statewide Salmon Recovery Strategy

- Addressed in Revised Code of WA (RCW) 77.85
- Written 1999, update 2006 & 2021
- <https://app.leg.wa.gov/rcw/default.aspx?cite=77.85>
- Habitat projects carried out according to **watershed-based & locally implemented projects** → under the direction of **Lead Entities**



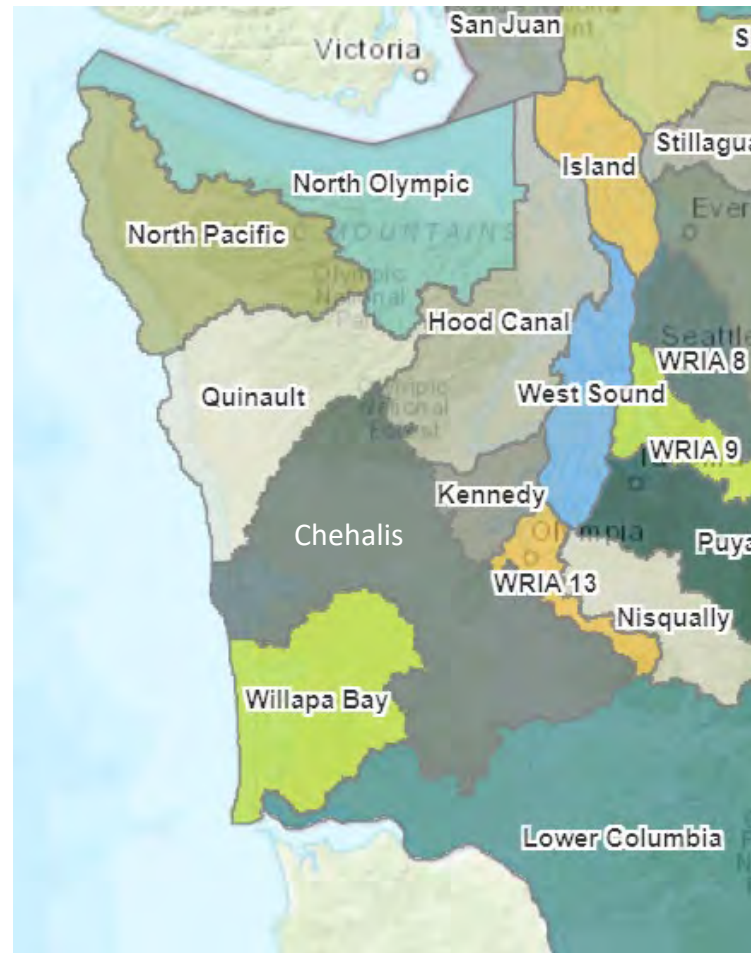
Salmon Recovery Lead Entities

<https://rco.wa.gov/salmon-recovery/managing-organizations/lead-entities/>



Habitat Lead Entities

- North Pacific Coast Lead Entity (Water Resource Inventory Area (WRIA 20))
- Quinault Indian Nation Lead Entity (WRIA 21)
- Chehalis Basin Lead Entity (WRIAs 22&23)
- Willapa Bay Lead Entity (~WRIA 24)



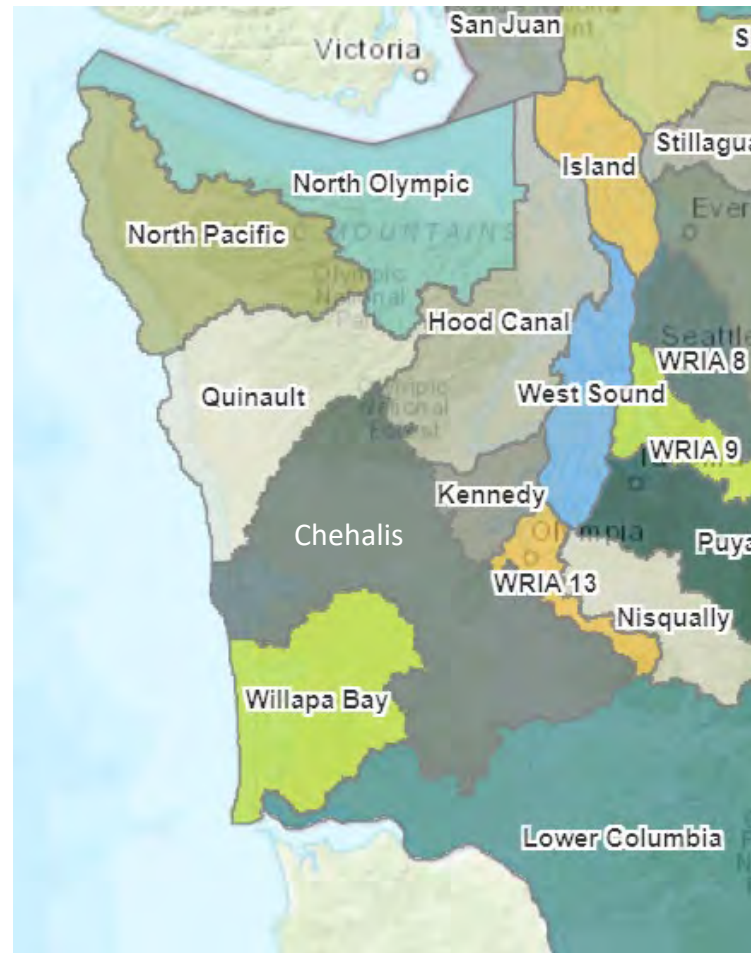
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Habitat Lead Entities

- “Lead entities **coordinate projects that spur local and rural economic development by creating and maintaining family wage jobs.**” WA Recreation and Conservation Office
- Washington State’s path to salmon recovery creates jobs for local communities. A \$1 million investment in watershed restoration directly results in 15 to 24 new or sustained jobs and has been shown to create \$2.2 million to \$2.5 million in total economic activity.
- Eighty percent of grant money is spent in the county where the project is located, helping families and businesses. Restoration projects funded through the Salmon Recovery Funding Board and Recreation and Conservation Office have resulted in thousands of jobs.



Salmon Recovery Lead Entities

<https://rco.wa.gov/salmon-recovery/managing-organizations/lead-entities/>



What is WDFW's role?

WDFW currently supports the overall strategy in Region 6 through the following actions:

1. Administering funding to support the functions of Lead Entities
2. Facilitating the Hydraulic Permit Approval (HPA) permitting process
3. Addressing fish passage through a statewide protocol for fish passage assessment and by hosting the Fish Barrier Removal Board
4. Providing oversight of large-scale habitat restoration projects and the Aquatic Species Restoration Plan in the Chehalis basin



Habitat in the CSPIP

- Sharing of steelhead status with Lead Entities
- Habitat \leftrightarrow Fish Divisions
- Research relating habitat quality and quantity to management (Critical Research Section)



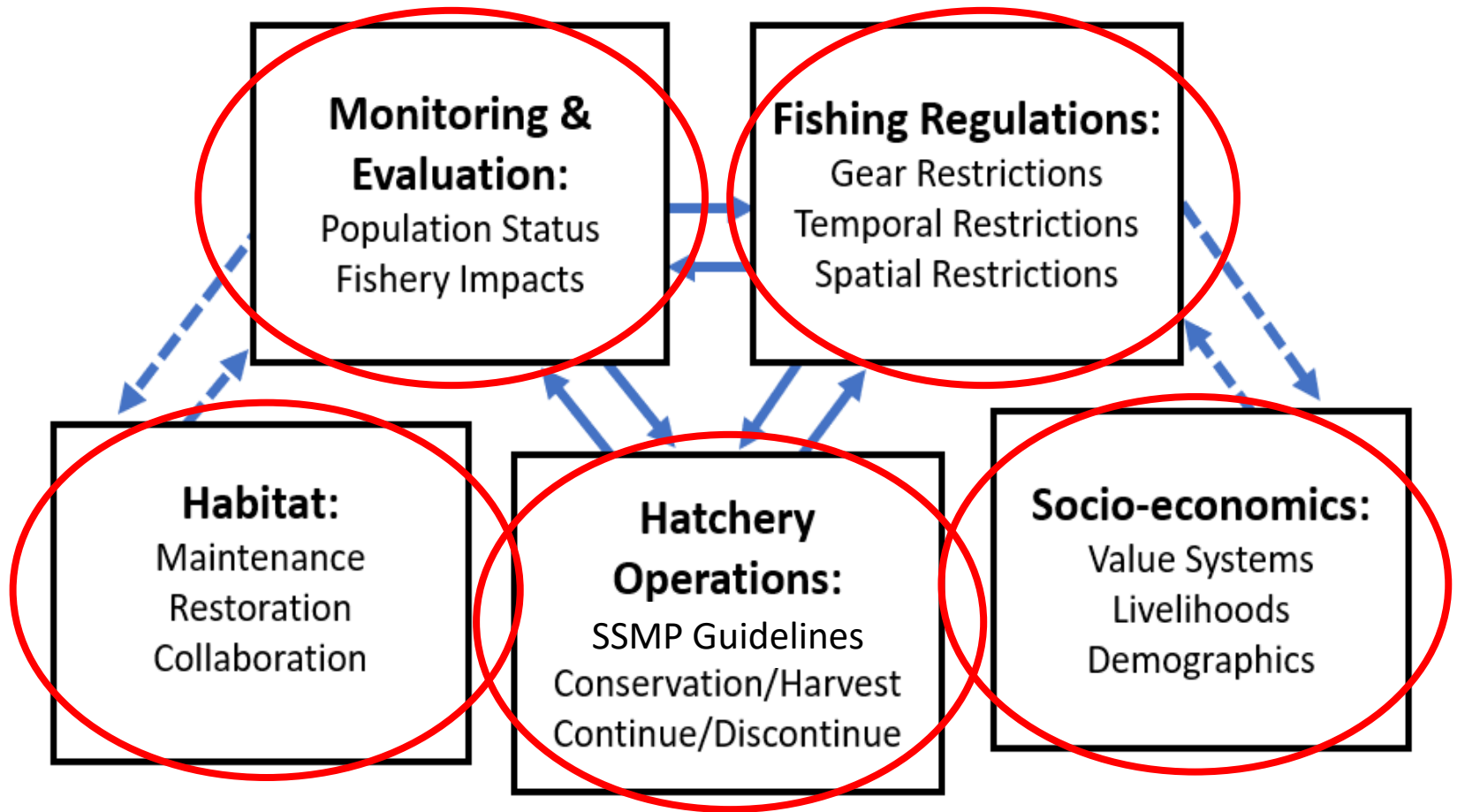


*How should habitat fit in with the CSPIP in
your eyes?*



5 Minute Break

Proviso Implementation Strategy





Human Dimensions

Human Dimensions

- Recognize significance to local communities
- Strategies to better understand human dimensions
 - Surveys
 - Creel questions
 - Guide logbooks
 - Catch record cards
- Collaborative process



Human Dimensions: Topics of Interest

1. Shifts in effort
2. Angler regulation preferences
3. Fishery demographics
4. Local economic impacts of shifts in fishery regulations
5. Non-consumptive resource valuation
6. Indirect effects of healthy steelhead populations
6. Other human dimensions questions





What are the social and economic impacts of changes to steelhead fisheries?

How should WDFW account for these impacts in fisheries management?

Wrap-up & Next Steps

- **Post-Meeting Materials:**

CSPIP Draft to date, sent out on September 23

- **Homework:**

Read CSPIP draft & comment

- **Next Meeting:**

November



Zoom reminders for public comments

- You can type a question through the Q&A function or ask a question by “raising your hand.” If you’re calling in you can raise a hand by dialing *9 on your phone, or if you’re calling from a computer, you can find the hand icon at the bottom of your screen.
- To speak you will need to unmute yourself by using the mute button on your computer or mobile device or enter *6 if you’re calling from a land line.
- If you have a technical issue, please drop us a note in the Q&A and we will help you through it.
- You can also submit general feedback on coastal steelhead management at wdfw.wa.gov/coastal-steelhead

