2020/21 Coastal Steelhead Pre-season Planning

James Losee, Coastal and Puget Sound Regional Fish Program Manager

Washington Department of FISH and WILDLIFE

Zoom Directions and Etiquette

- All callers will be muted upon entry.
- 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 your calling from a computer you can find the hand icon at the bottom of your screen.
- When you are called on for a question or comment, we encourage you to speak up and provide comments live. 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 during the webinar, please drop us a note in the Q&A and we will help you through it.
- Expect and accept non-closure during question and feedback portion.
- Assume positive intentions from those speaking.

Washington Department of FISH and WILDLIFE

Agenda

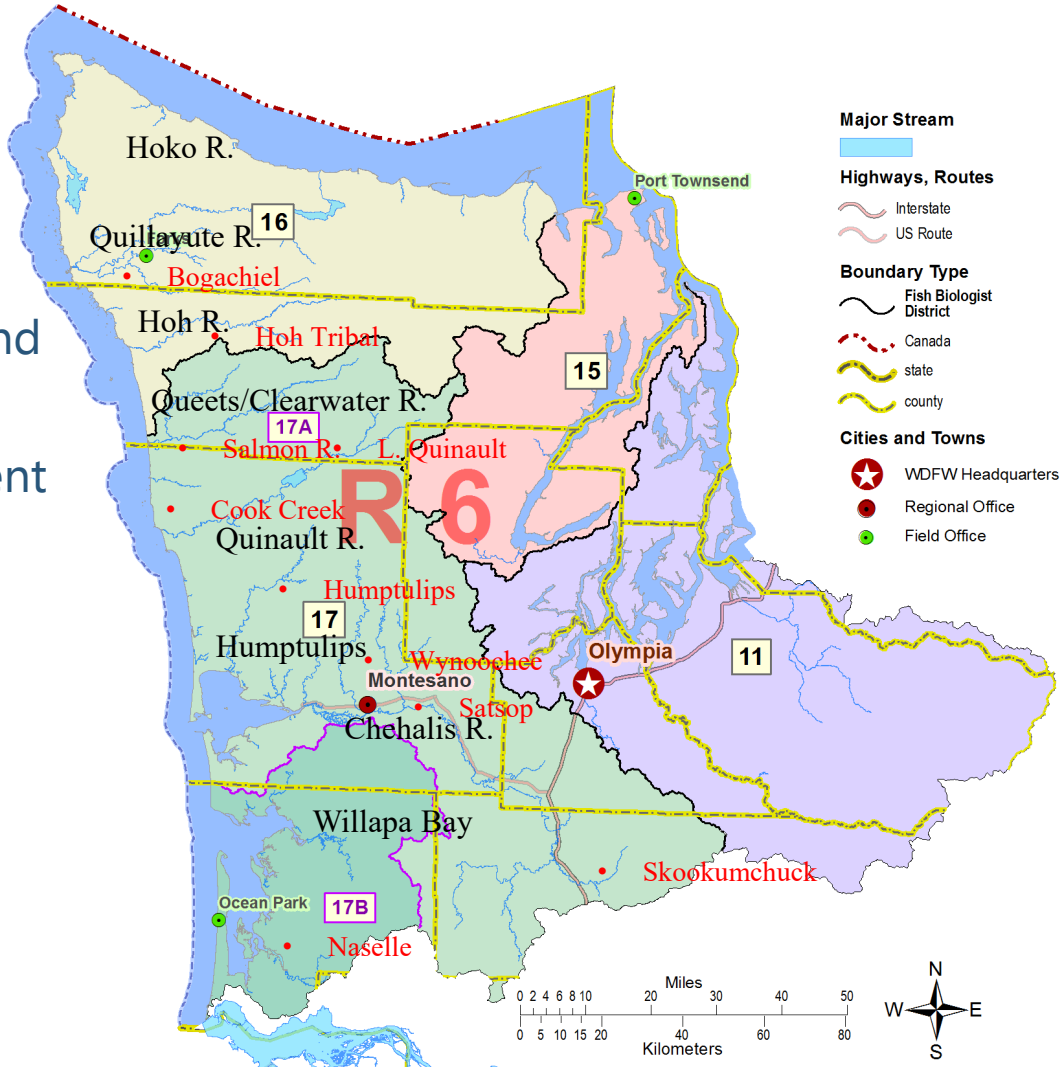
Steelhead Management Background

Steelhead Biology/Stock Assessment

Trends and Goals

2020/21 Forecasts

Potential Fisheries Options



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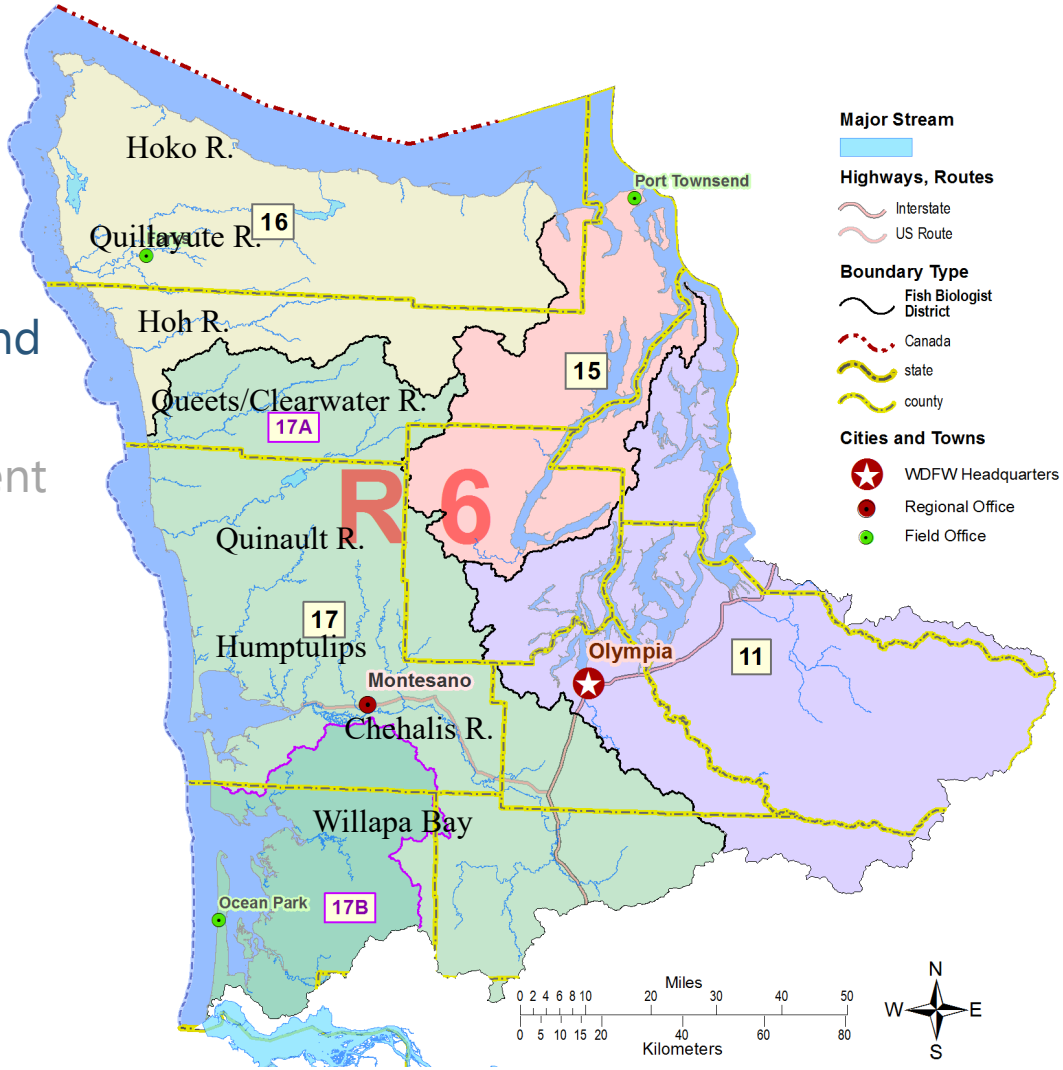


Steelhead Management-Constraints

- Limited in-season tools
- Effort shift uncertainty
- Recent history of overforecasting
- Tribal comanagement
- Escapement goals

Steelhead Management-Key Terms

Wild steelhead-Steelhead that were produced in the natural environment.

Hatchery steelhead-Steelhead that were produced in a hatchery.

Run- A group of anadromous fish on its return migration, identified by species, race and water of origin.

Escapement-Number of steelhead surviving to the spawning grounds or hatchery.

Redd-Spawning nest.

Runsize-Number of steelhead returning to the freshwater. Escapement + Harvest.

Survival-Number of steelhead produced by each parent spawner. Recruit per spawner.

Forecast-Predicted number of adult steelhead returning in future years.

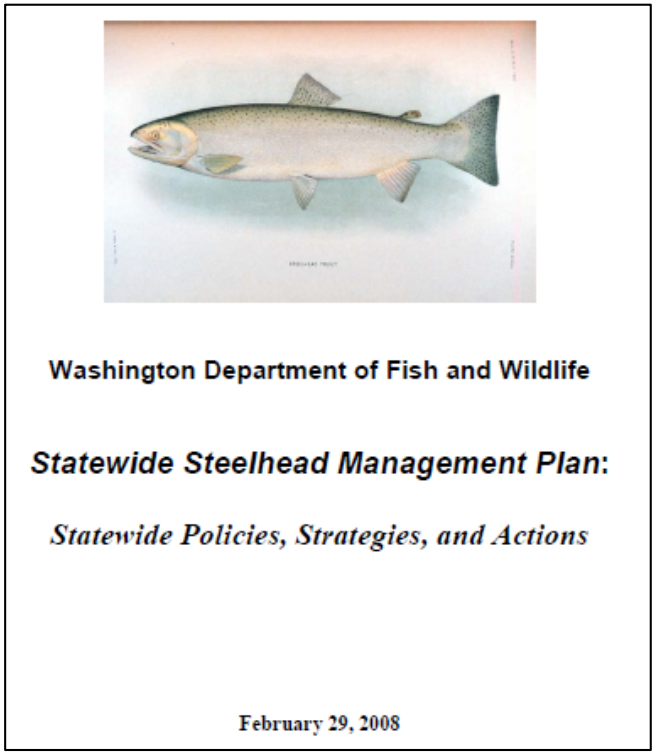
Integrated hatcheries-Genetically integrated with natural population.

Segregated hatcheries-Genetically segregated from natural population.

Steelhead Management Plan

Policy guidance from **Statewide Steelhead Management Plan**. Provide a framework of policies, strategies and actions that will lead to achievement of goals. Goals include restore and maintain:

- **Abundance**
- **Productivity**
- **Distribution**
- **Diversity**



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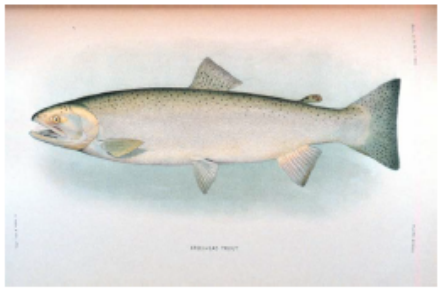

Washington Department of Fish and Wildlife

Statewide Steelhead Management Plan:

Statewide Policies, Strategies, and Actions

Specific Abundance Guidelines:

Runsize less than escapement goal: Minimize mortality to wildstock(s); in no case exceed a 10% impact from all fisheries.

Runsize Greater than escapement goal: Assure escapement goals are met.

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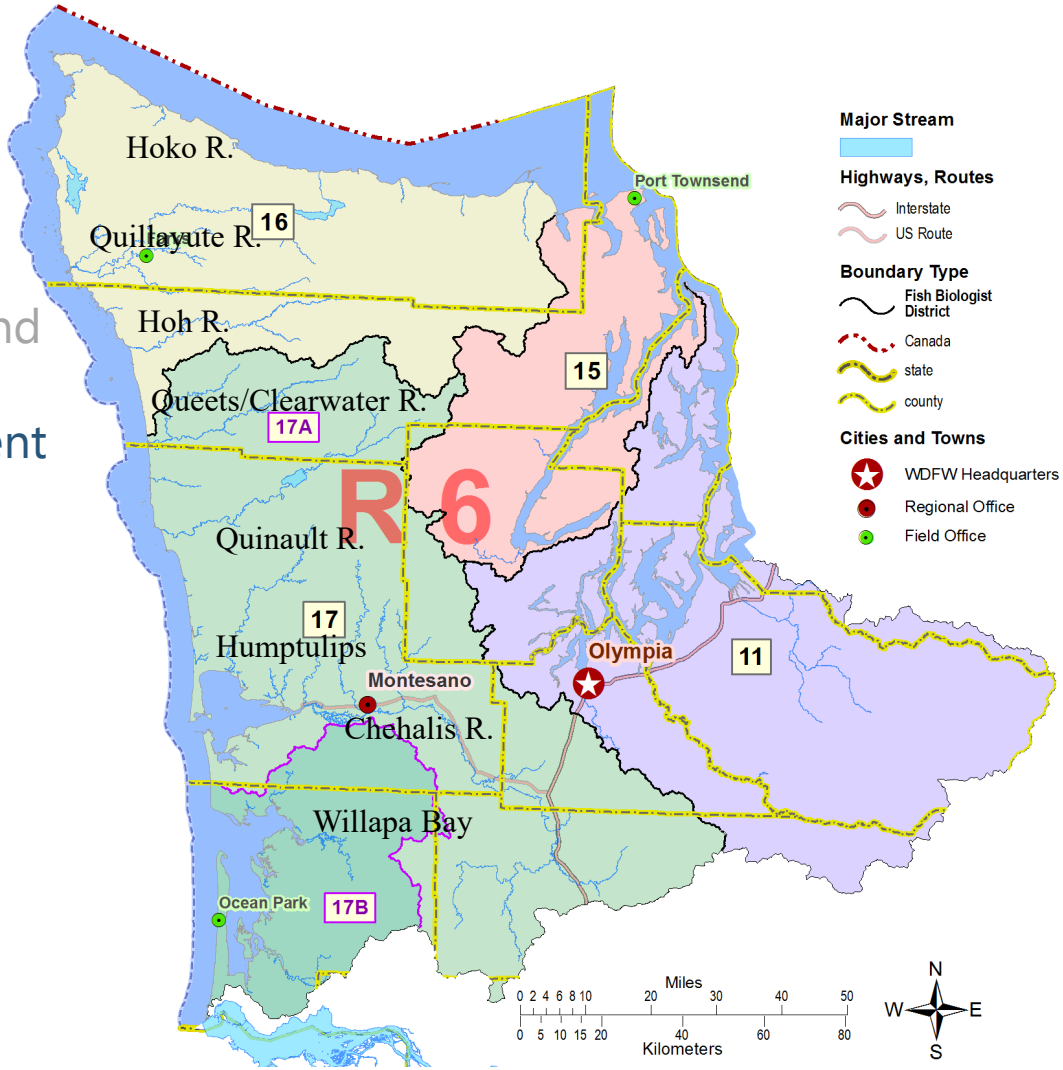
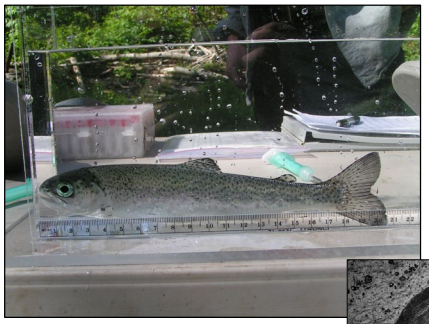


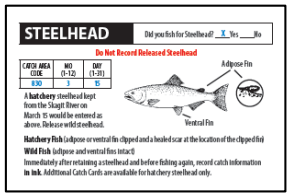
Biology/Stock Assessment

Hatcheries



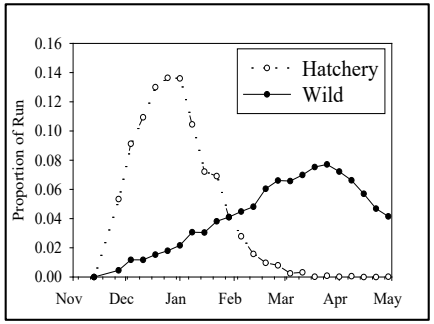
Hatchery Releases

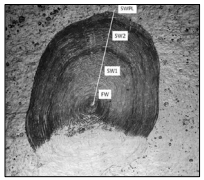
Spawning Grounds



Spawning Ground Surveys

Fishery Monitoring

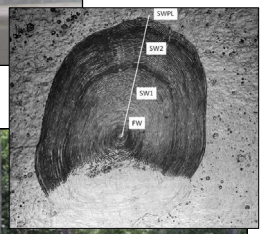




Fresh Water

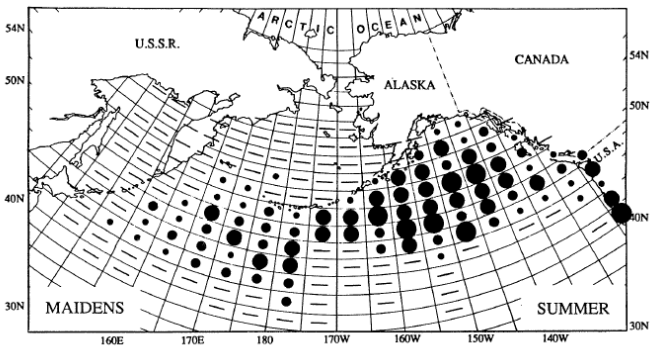
Marine

Ocean Phase



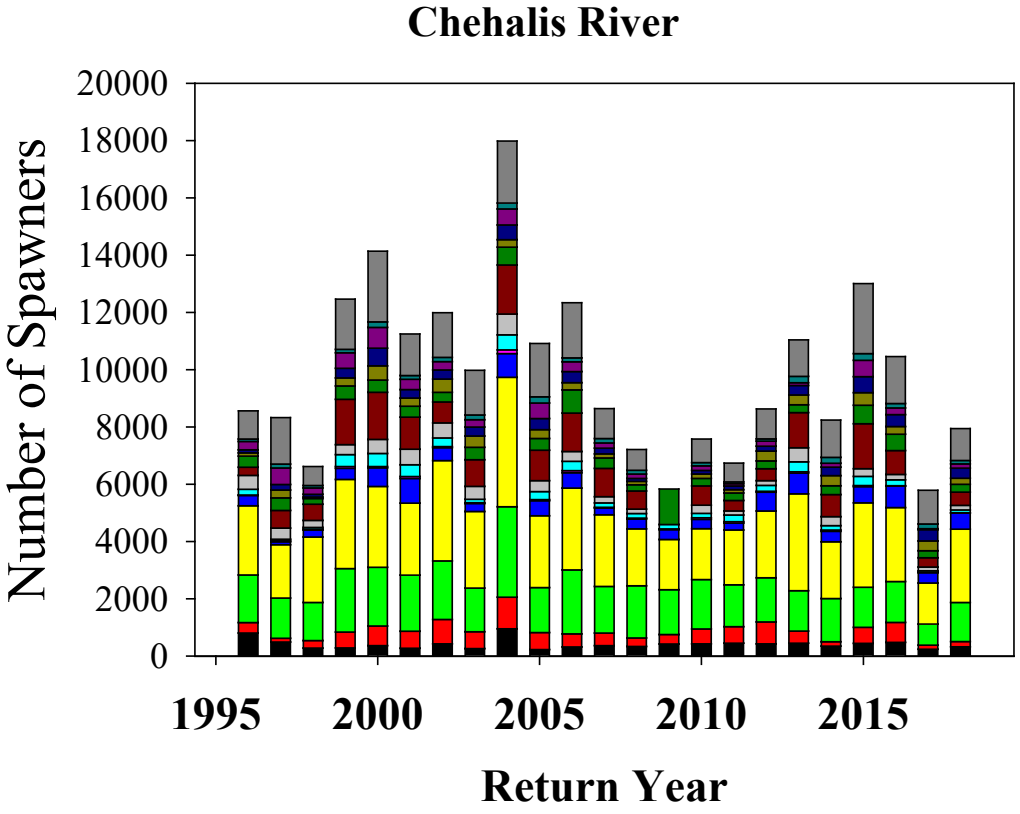
Smolt outmigration

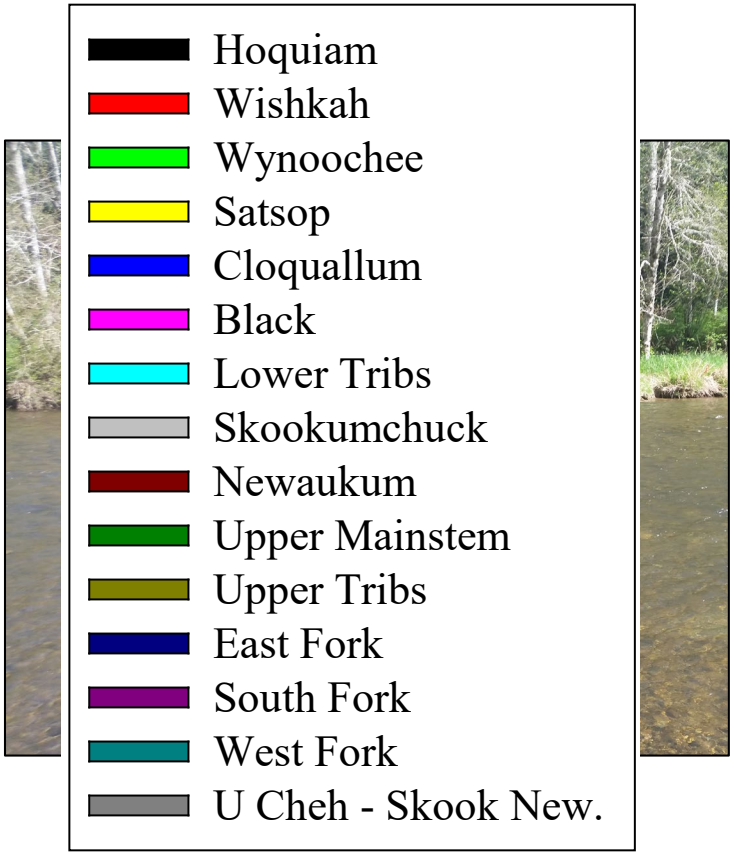
Collaborative Research



Light et al. 1989

Steelhead Biology-Escapement





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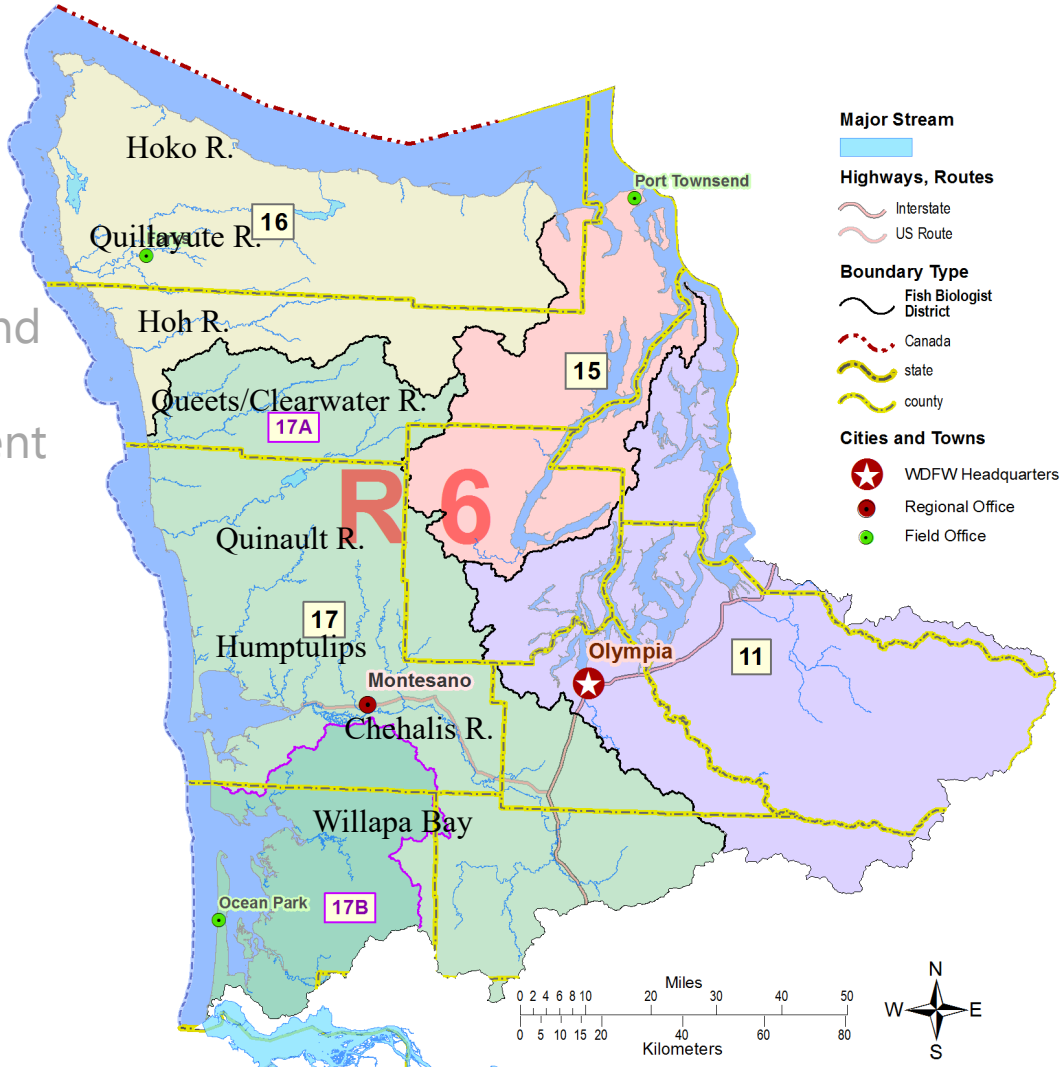
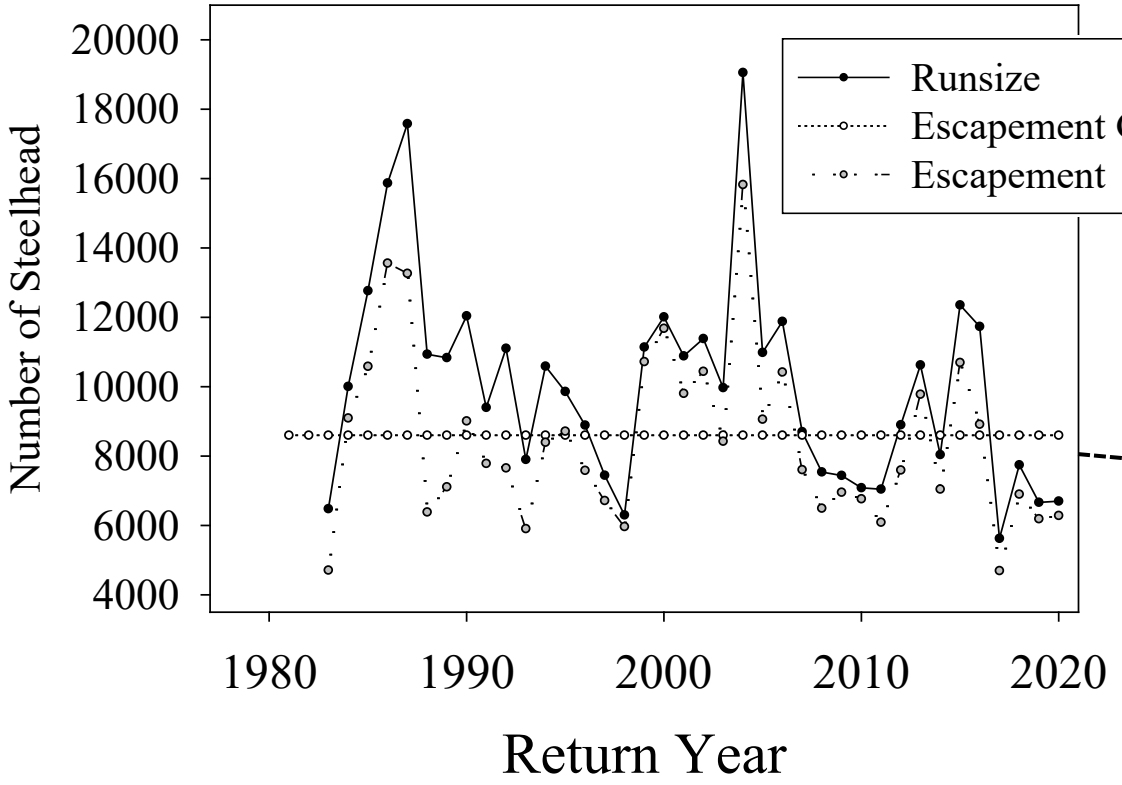
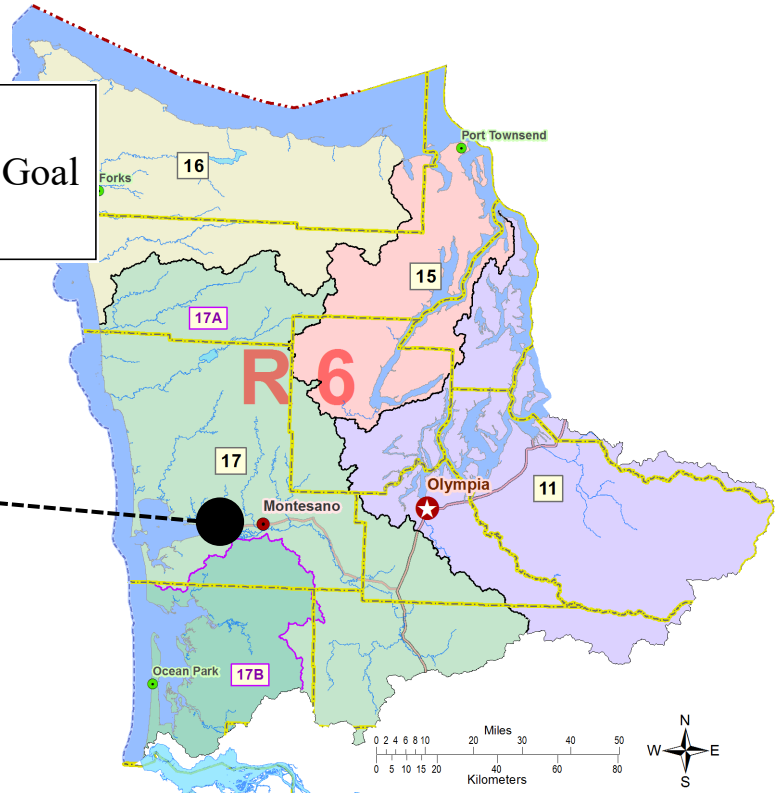
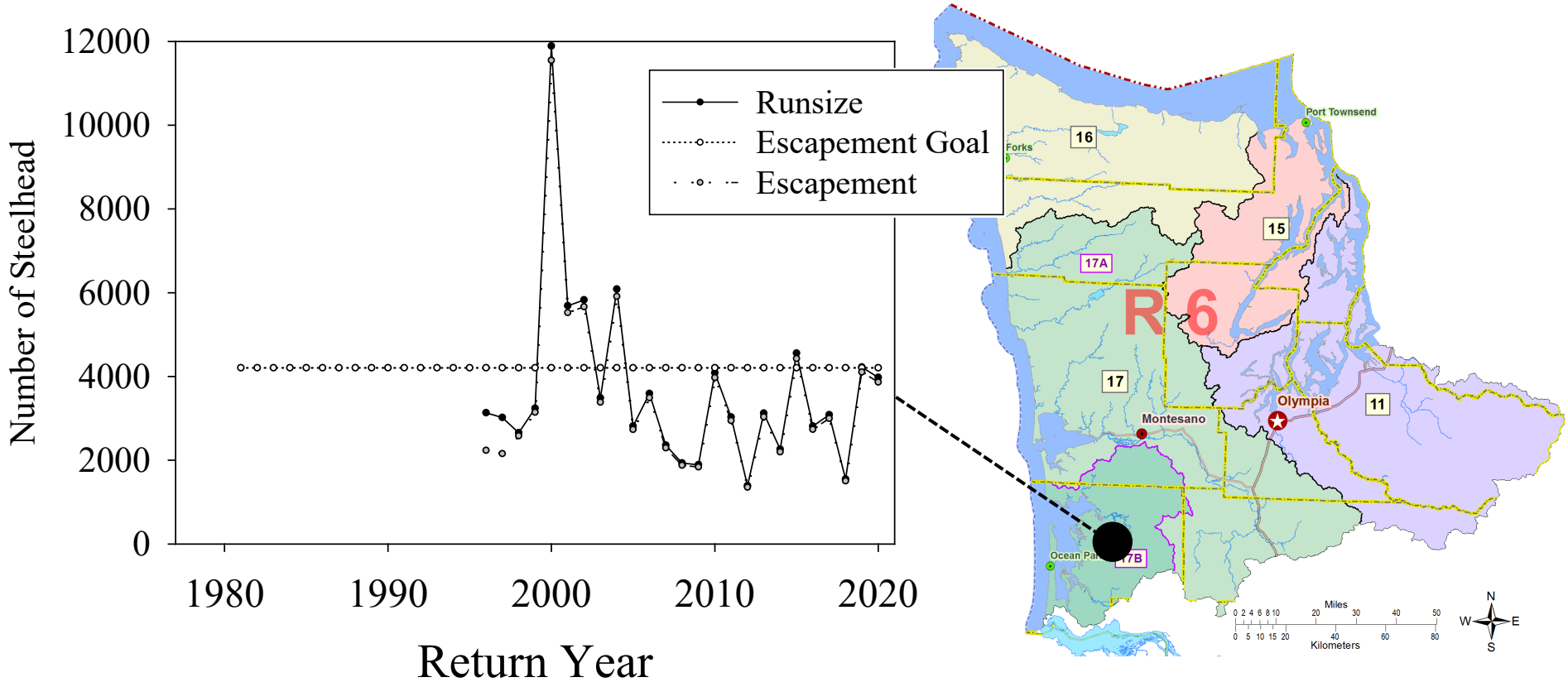


Steelhead Trends-
Chehalis R.

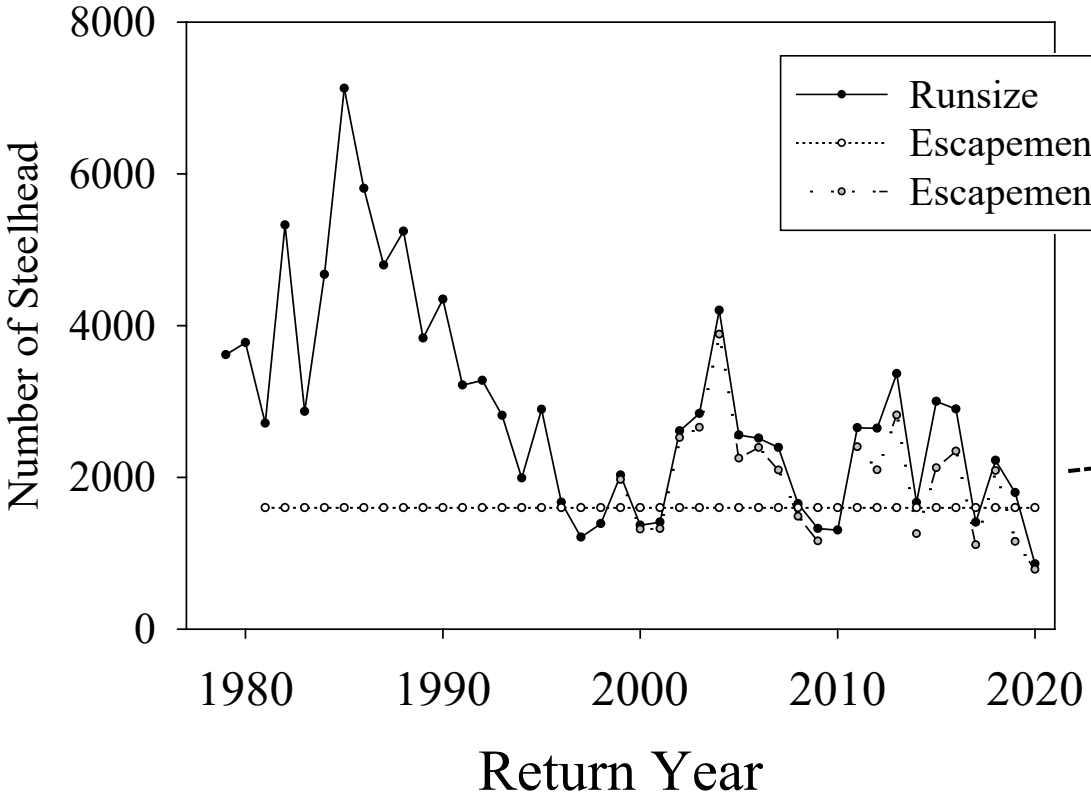


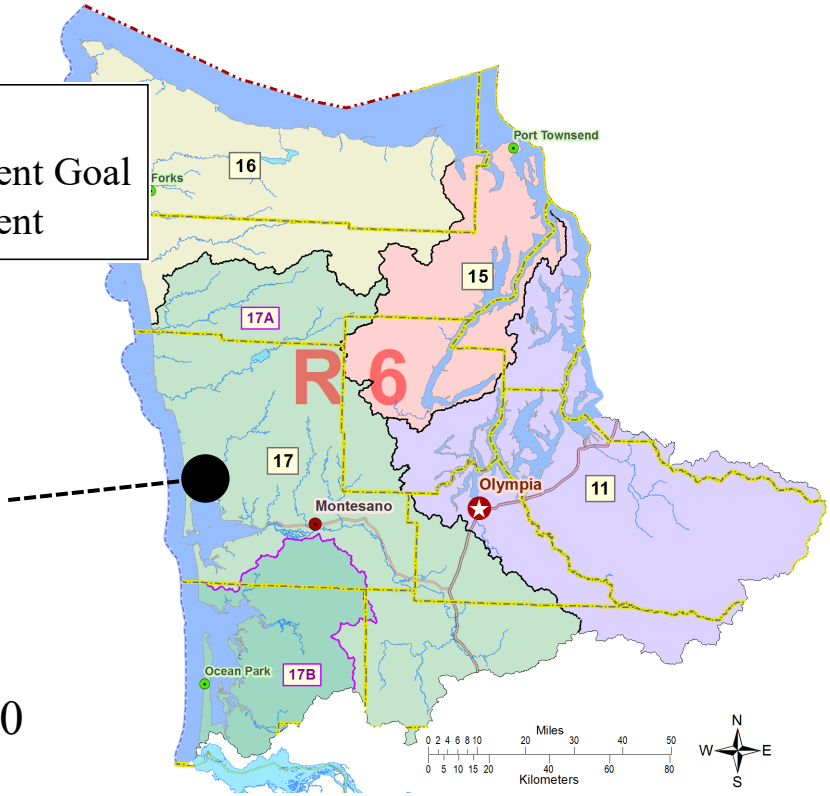


Steelhead Trends-
Willapa Bay

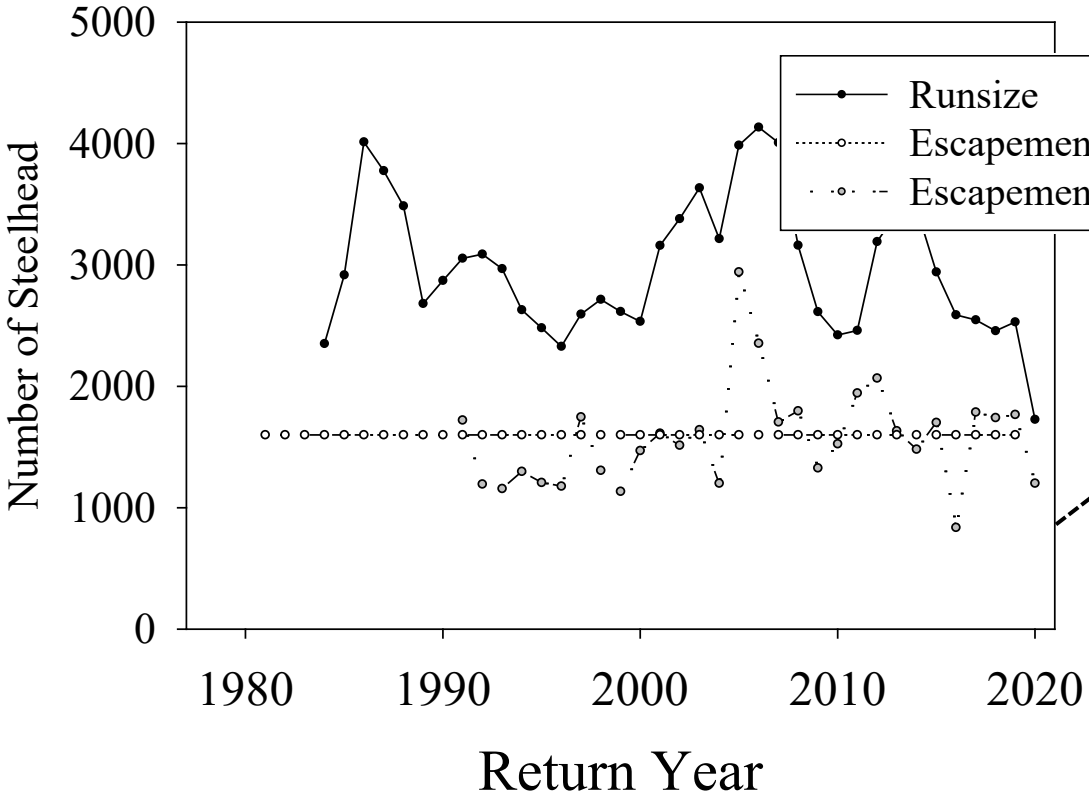


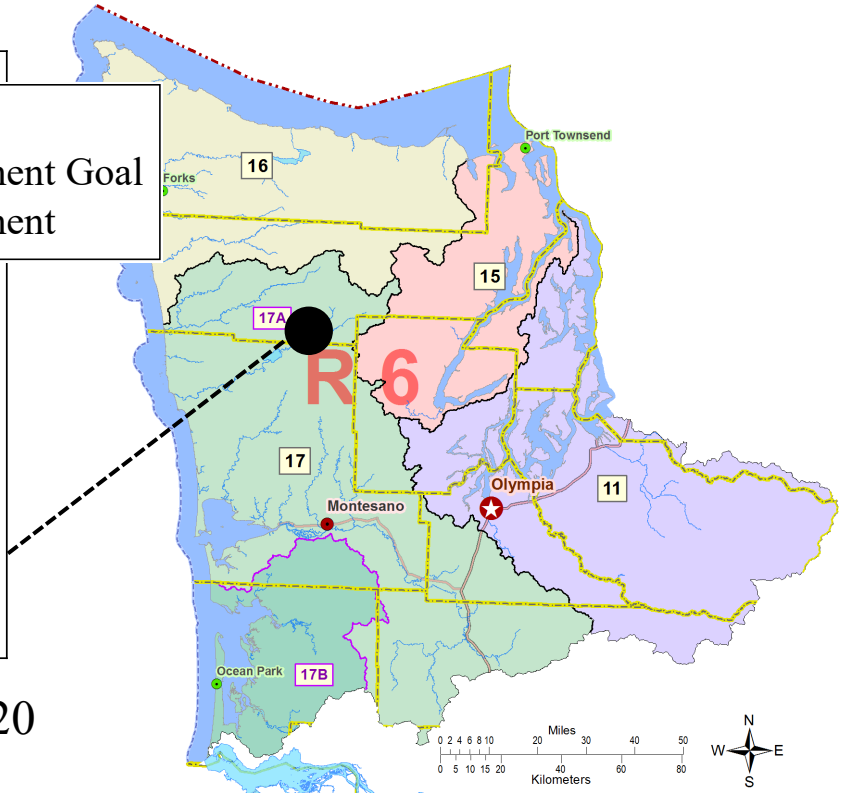
Steelhead Trends- **Humptulips R.**



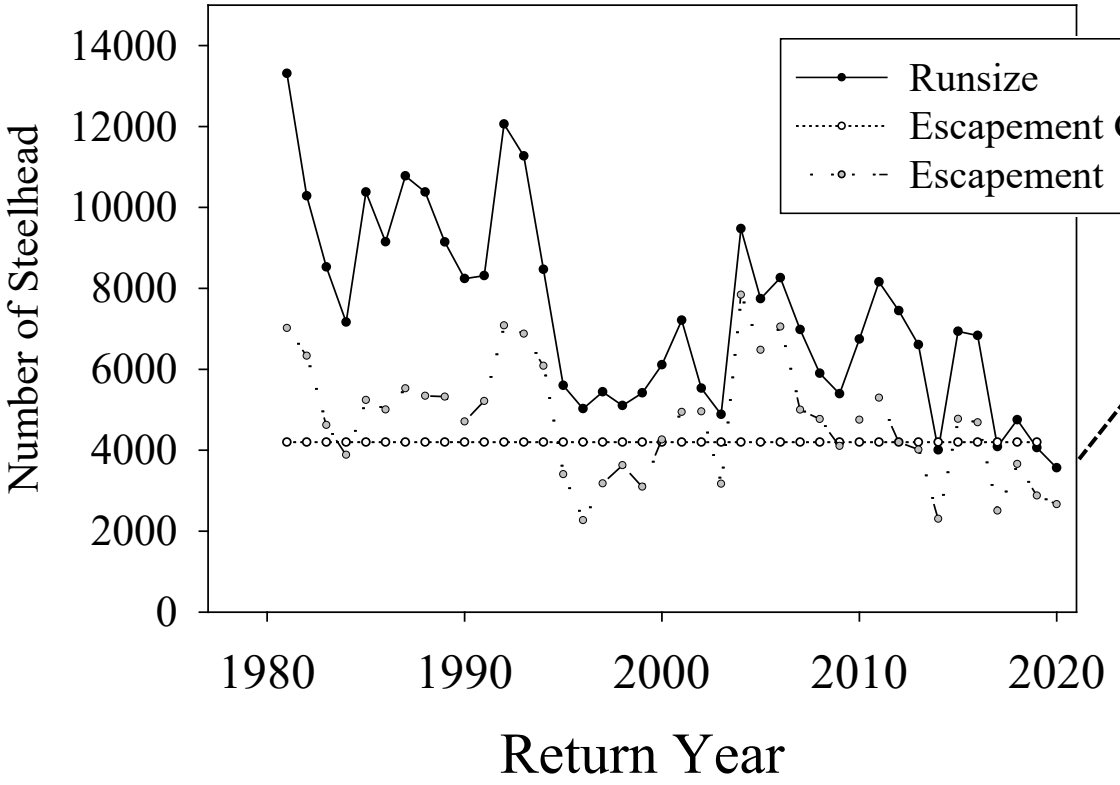


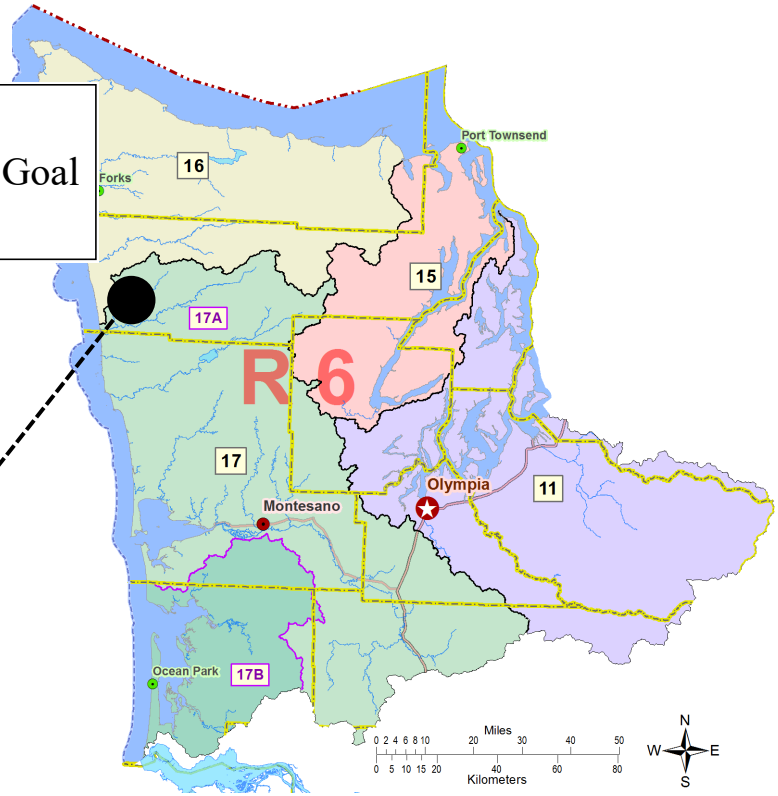
Steelhead Trends-
Upper Quinault R.



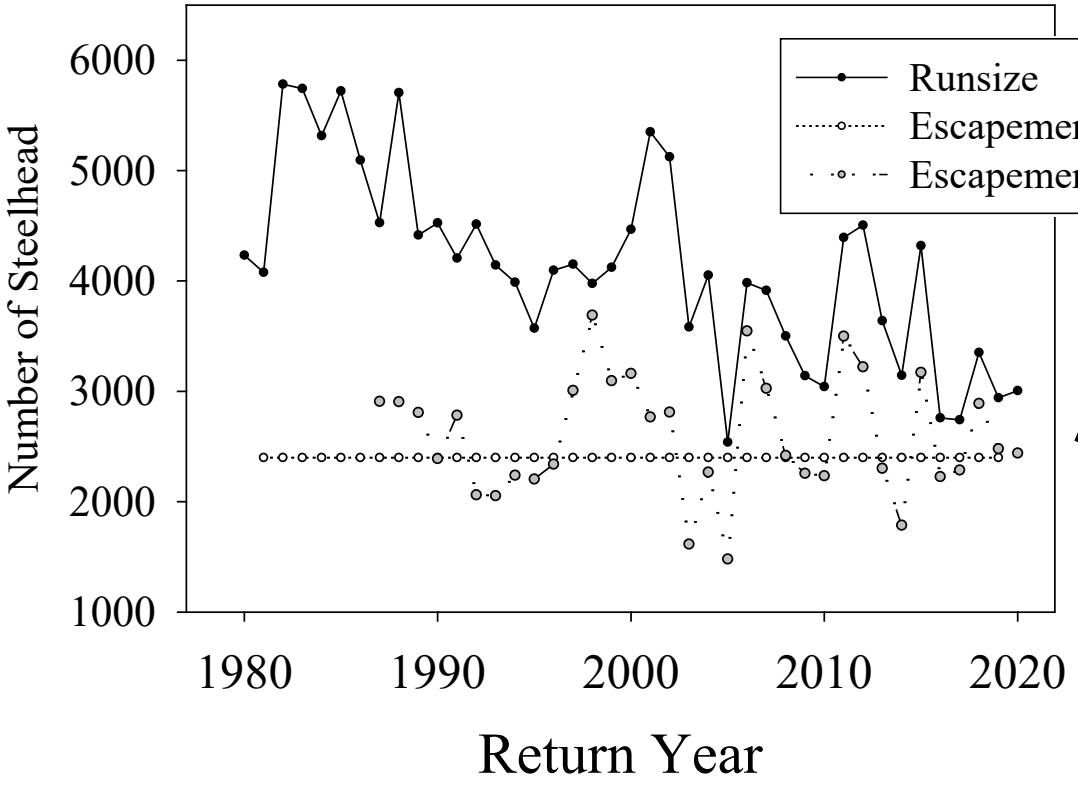


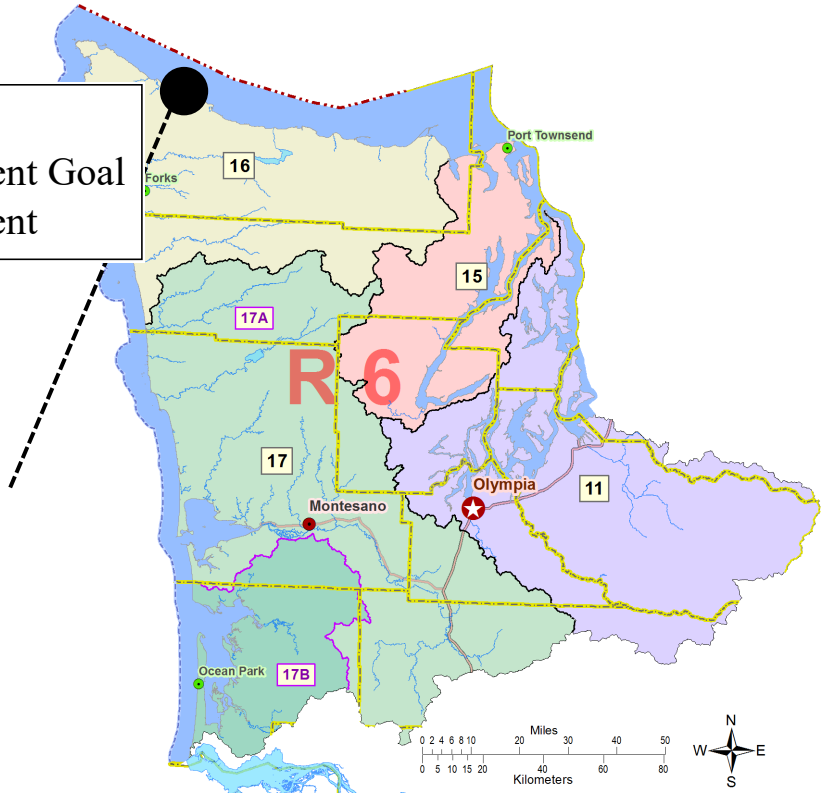
Steelhead Trends-
Queets/Clearwater R.



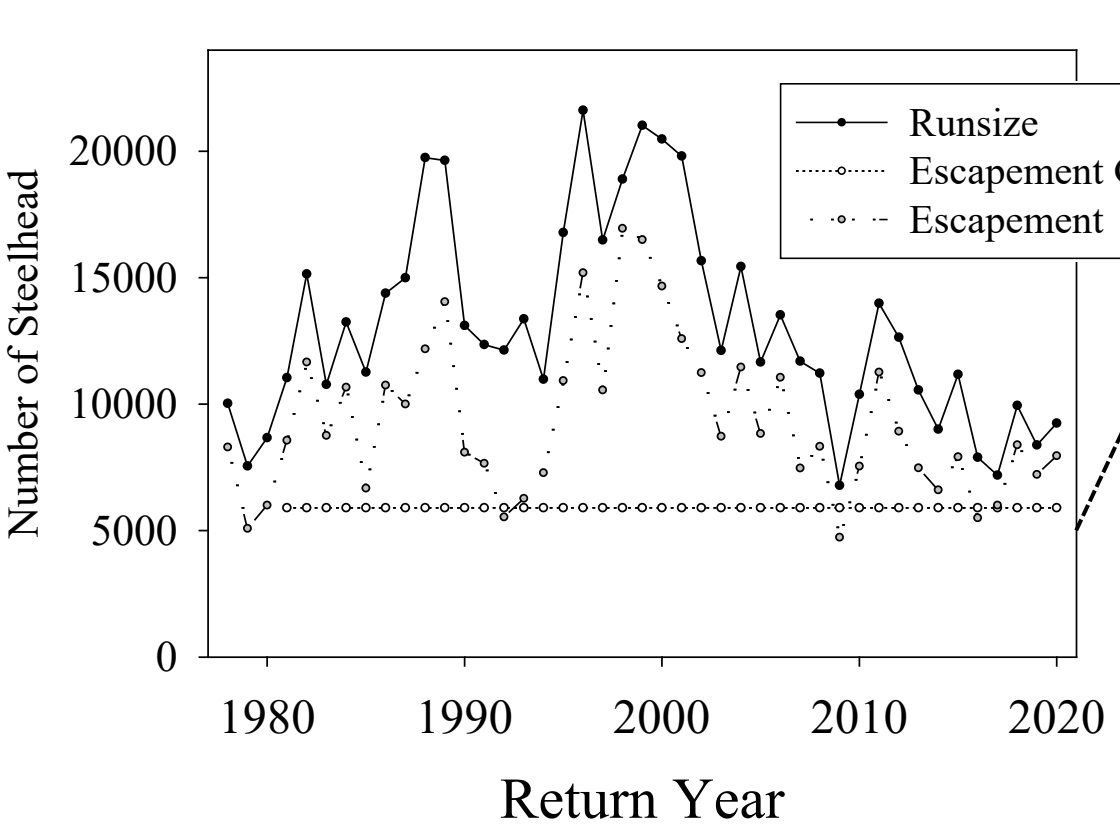


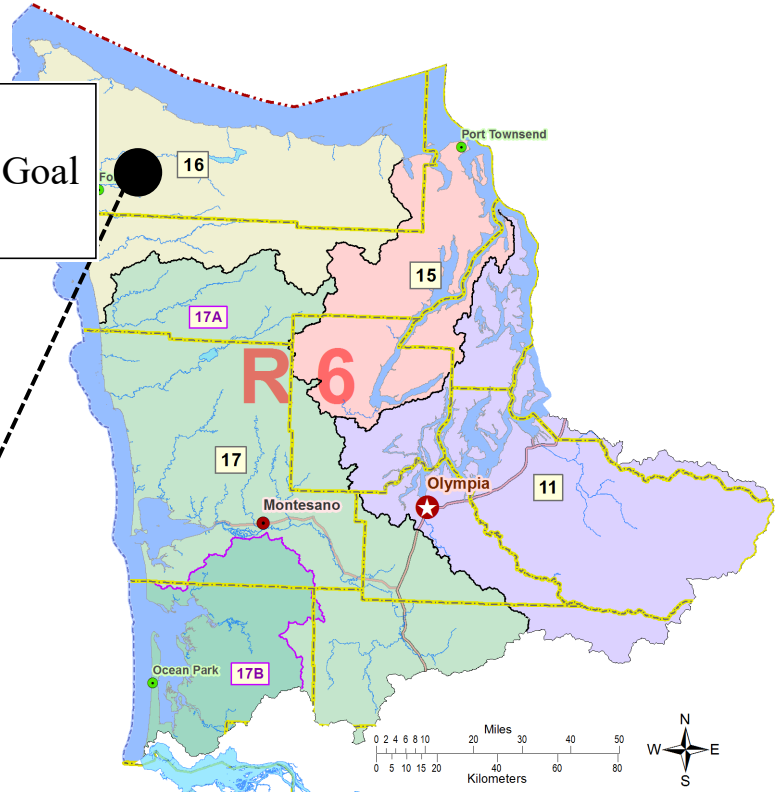
Steelhead Trends-
Hoh R.



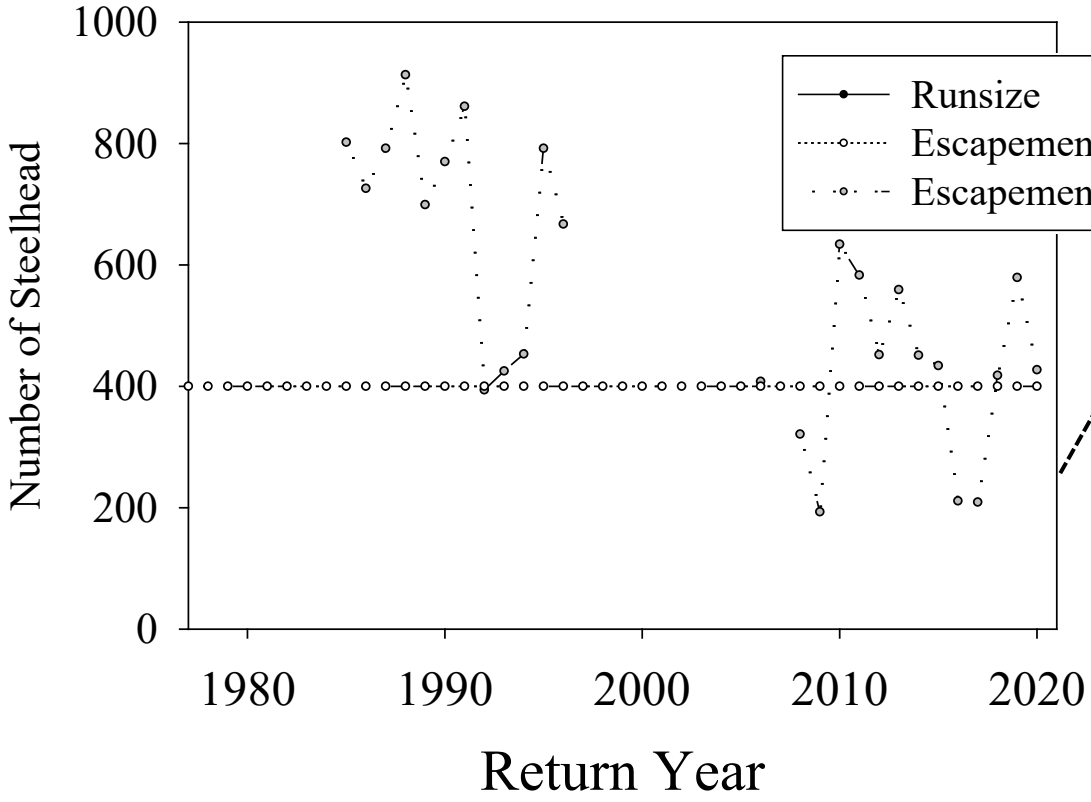


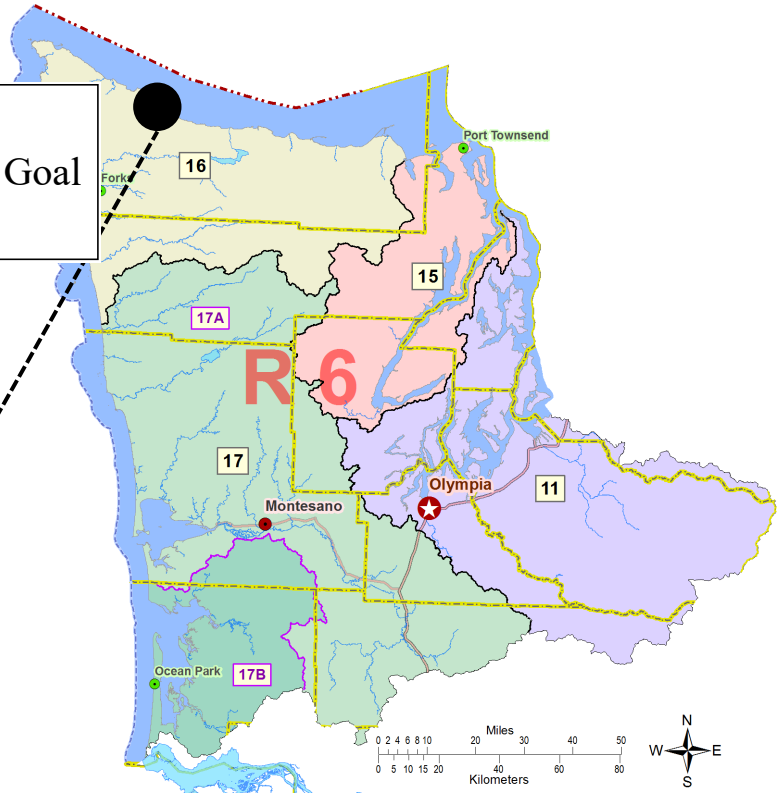
Steelhead Trends-
Quillayute R.





Steelhead Trends-
Hoko R.





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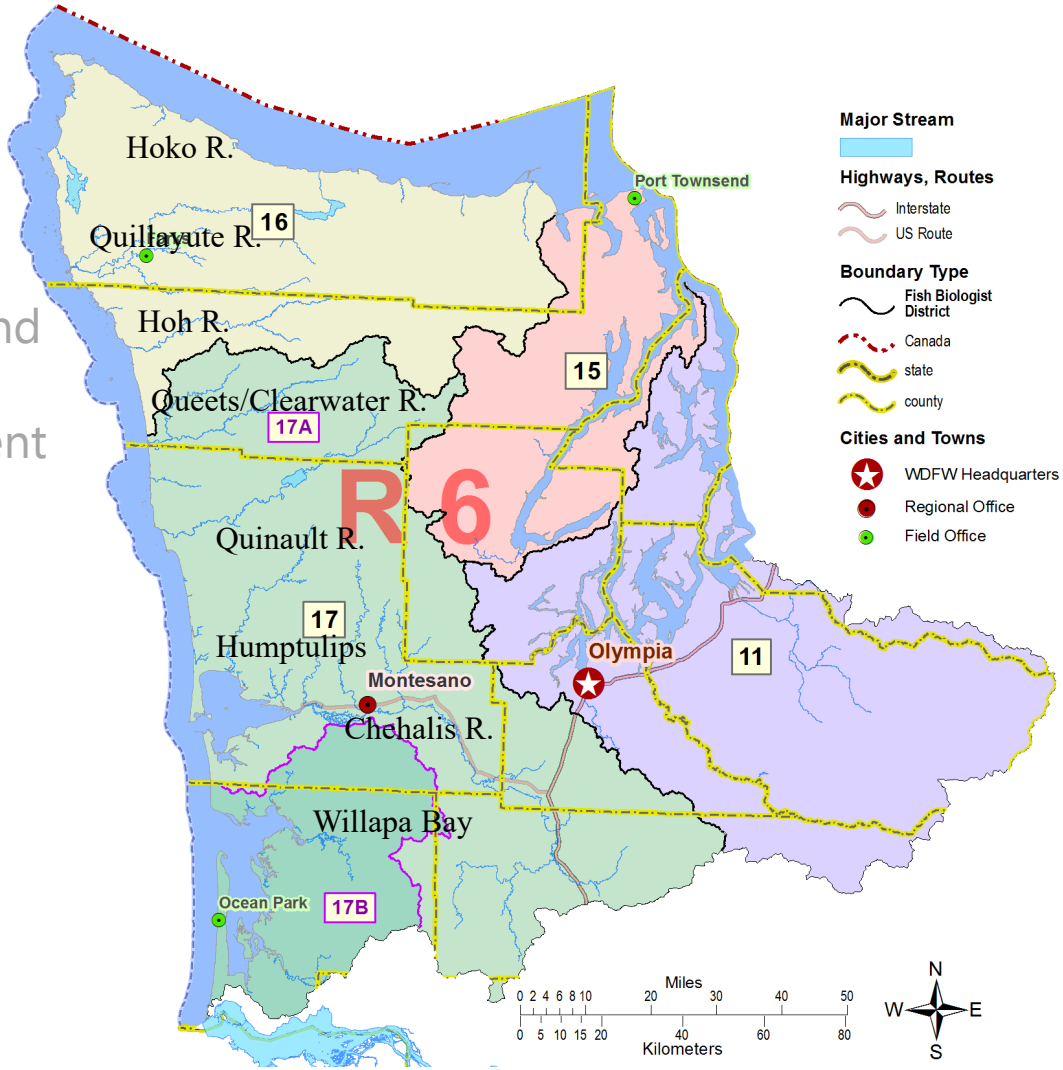
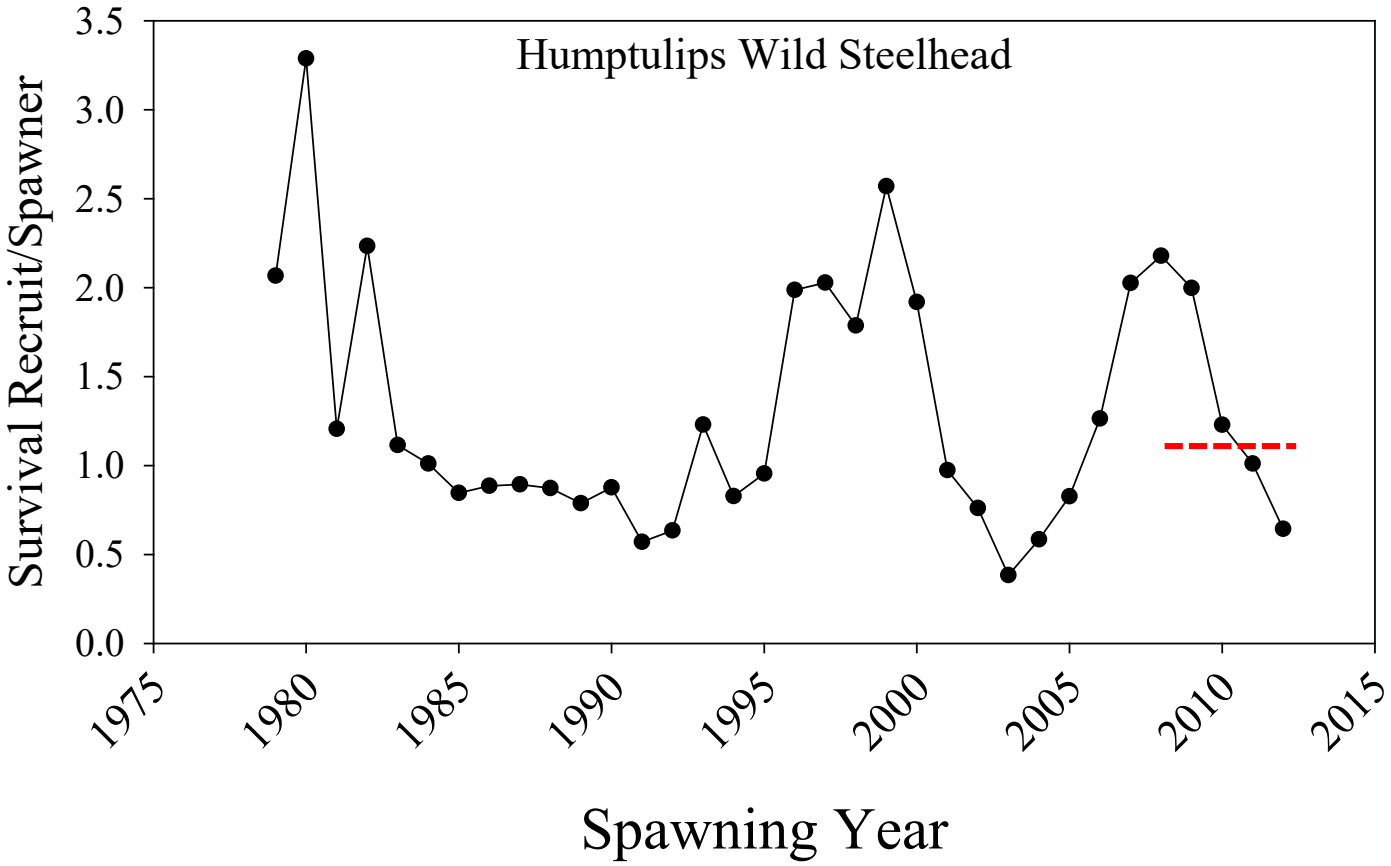
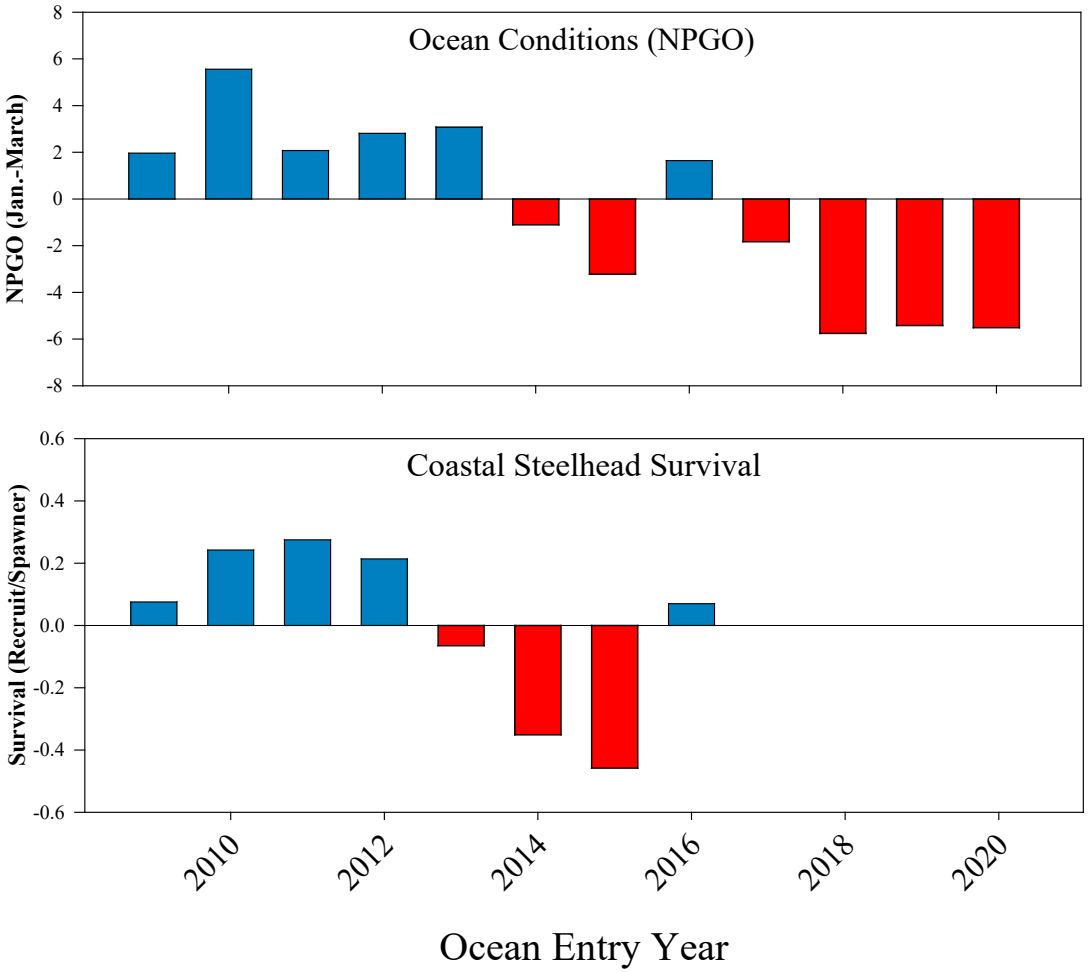
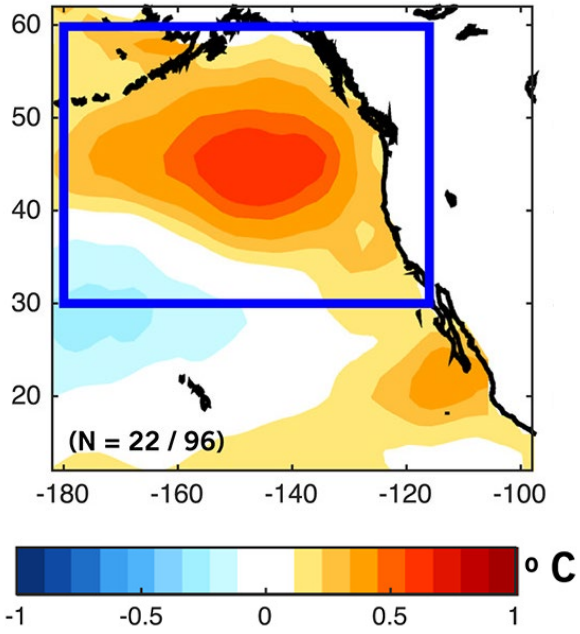


2021 Forecasts-Survival



2021 Forecasts-Ocean Conditions





Joh & Lorenzo 2017

2021 Preliminary Forecast*

System	Forecast	Goal	Wild Steelhead Above Escapement Goal
Willapa	3862	4206	-344
Chehalis	6600	8600	-2000
Humptulips	1066	1600	-534
Upper Quinault	1725	1600	125
Queets/Clearwater	3563	4200	-637
Hoh	2903	2400	503
Quillayute	9276	5900	3,376

*forecasts are subject to change given continuing discussions with tribal comanagers

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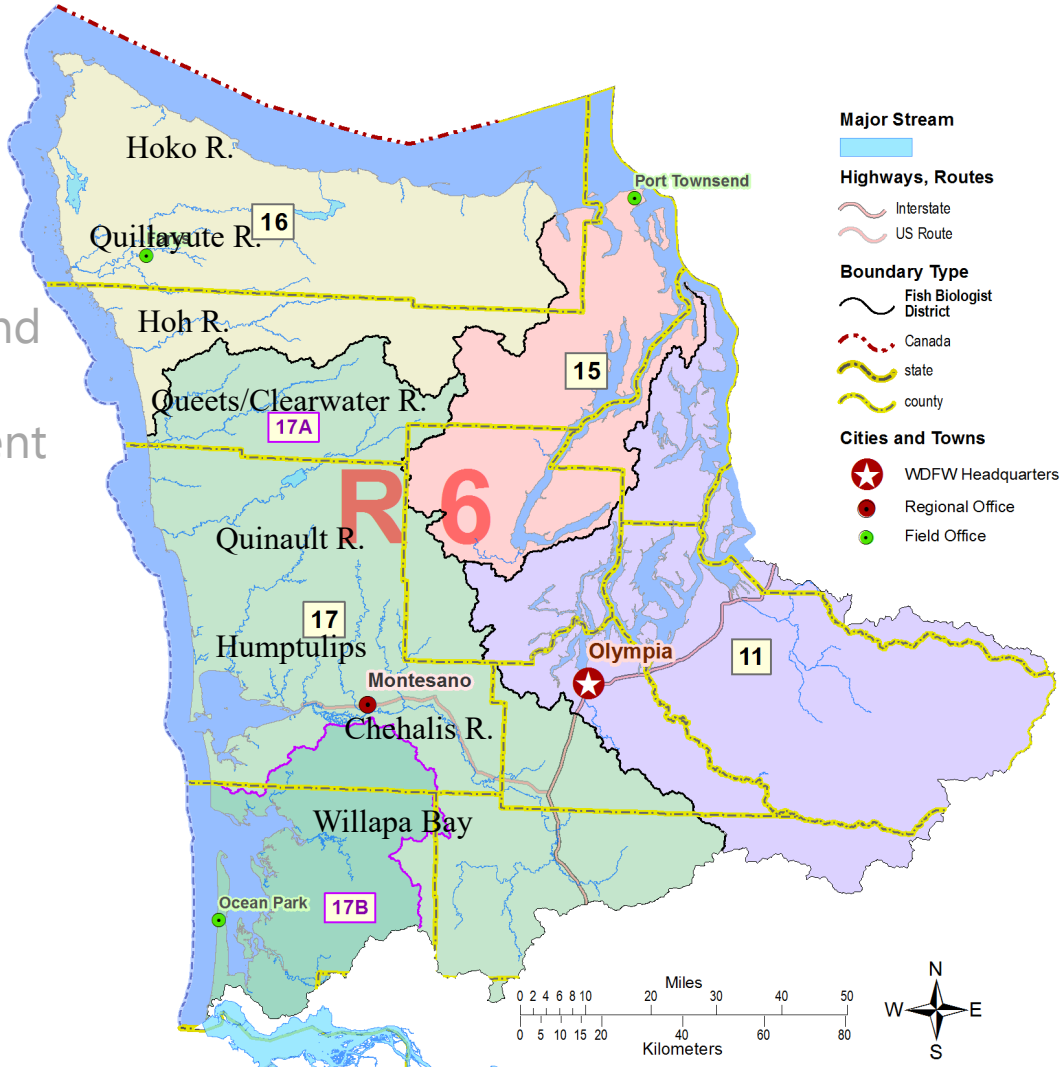
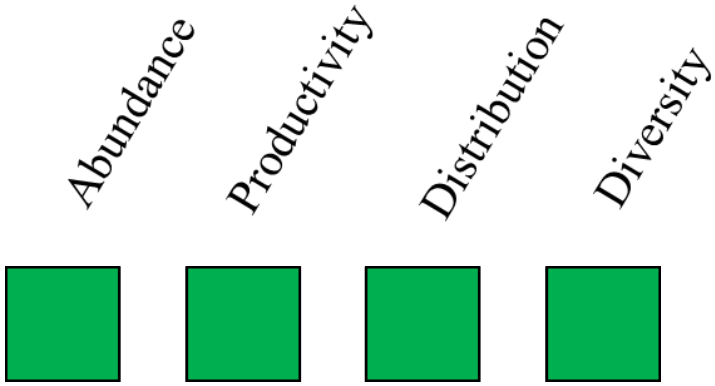


Status Quo

Description: ***Release all wild steelhead****. Hatchery steelhead* ***daily limit 2-3****,* ***Gear type****: Variety of regulations including barbless hooks, no bait, single hook and no fishing from a floating device in select waters.* ***Closure day:*** *range from last day in February to April 15th,* ***Rainbow Trout:*** *Catch and release or minimum size 14".*

- Declining abundance trends in majority of coastal rivers.
- Chehalis and Humptulips: Failure to meet escapement goal in at least 3 of last 4 years and exceedance of 10% ER in two of the last 3 years.
- Willapa Bay: Failure to meet escapement goal in last 5 years. ER <10%
- Queets: Failure to meet escapement goal and exceedance of 10% ER in last 3 years.
- Hoko: Failure to meet escapement goal in 2 of last 4 years. No estimate of ER.
- Forecasts below escapement goals in majority of coastal rivers.

Potential Options



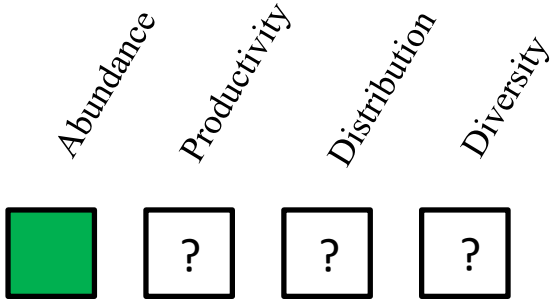
Option #1: Early Closure

Option #2: Quillayute River Only

Option #3: Gear and Harvest Restrictions

Option #4: Coastwide Closure

Option #1. Early Closure



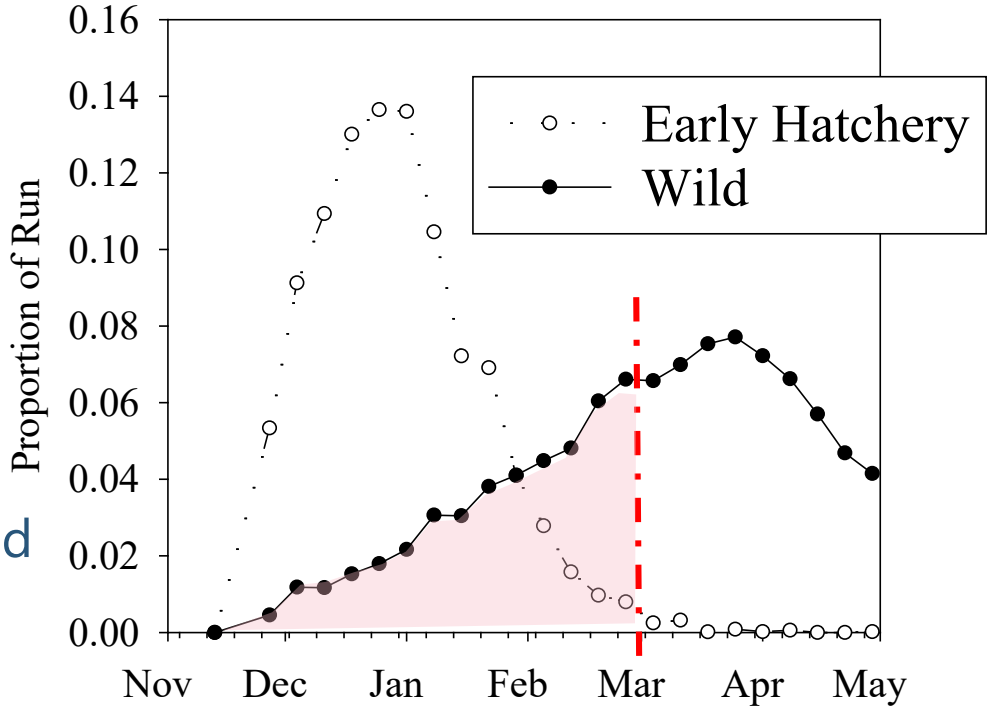
Description: Closed to all fishing March 1 to April 15.

Pros:

- Targets early-returning hatchery releases.
- Protects peak of wild run.

Cons:

- Limited harvest of late-timed hatchery steelhead.
- Displaces anglers targeting wild steelhead.
- Disproportionately effects early end of the wild run.



Option #2. Quillayute only

Abundance	Productivity	Distribution	Diversity
■	?	?	?

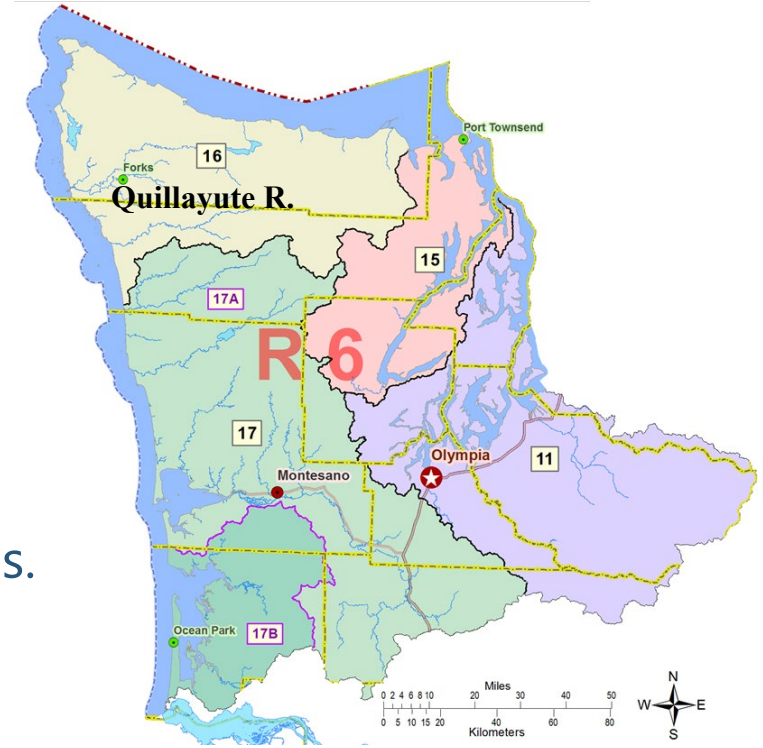
Description: Closed to fishing except the Quillayute R. and tributaries

Pros:

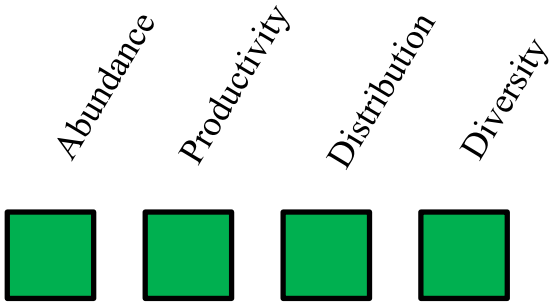
- Protects stocks at highest risk.

Cons:

- Decreased angler experience.
- Uncertainty around effort shifts.
- Concerns from tribal comanagers.
- Displaces some user groups and economies.



Option #3. Gear Restrictions



Description: Bait restriction, no fishing from a floating device in select waters, release rainbow trout.

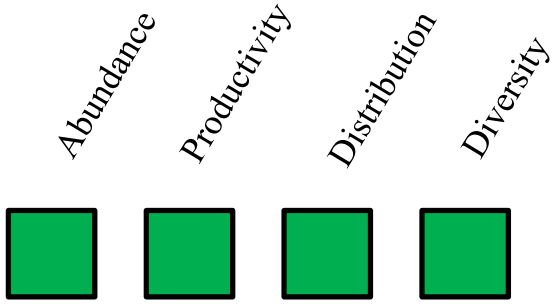
Pros:

- Maximizes time on the water.
- Consistently protects steelhead in all areas, times and at all life stages.
- Allows for harvest of early and late-timed hatchery steelhead.

Cons:

- Displaces some user groups.
- Enforcement challenge.

Option #4. Coastwide Closure



Description: Closed to fishing in coastal rivers December 1-April 15

Pros:

- Maximum protection for wild steelhead.

Cons:

- No access to hatchery origin returns.
- Closure on rivers where escapement goal is likely to be met (Quillayute R.).
- Impact to economy of coastal communities.
- Displaces important advocates, anglers.

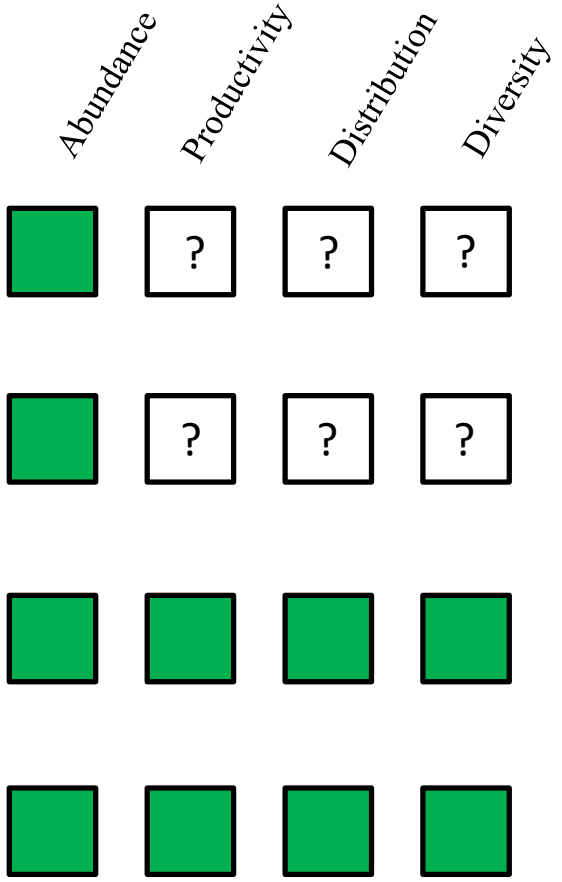
Without anglers, rivers lose passionate advocates

Feb. 21, 2020 at 12:01 pm | *Updated Feb. 21, 2020 at 3:09 pm*

The Seattle Times

By Jesse Bledsoe
Special to The Times

Potential Fisheries Options



Questions? Feedback?

We're especially interested in

- Questions on the data presented by WDFW staff
- Feedback on the management options we've outlined

ZOOM Reminders:

- 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 your calling from a computer you can find the hand icon at the bottom of your screen.
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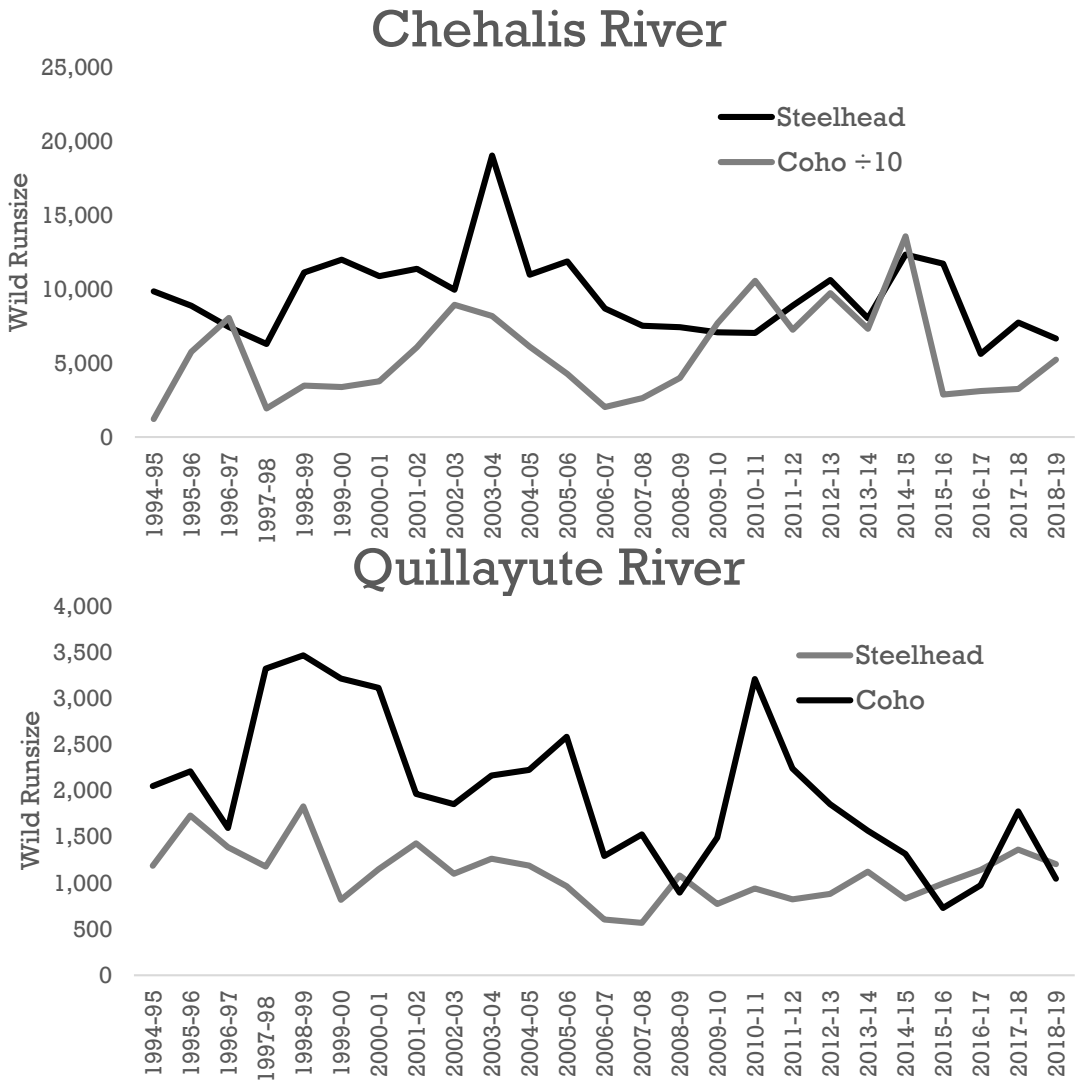
Coho Returns vs. Steelhead Returns



Department of Fish and Wildlife