

2020/21 Coastal Steelhead Briefing

WDFW Fish and Wildlife Fish Committee

December 11, 2020

Kelly Cunningham, Fish Program Director
James Losee, Region 6, Fish Program Manager



Agenda

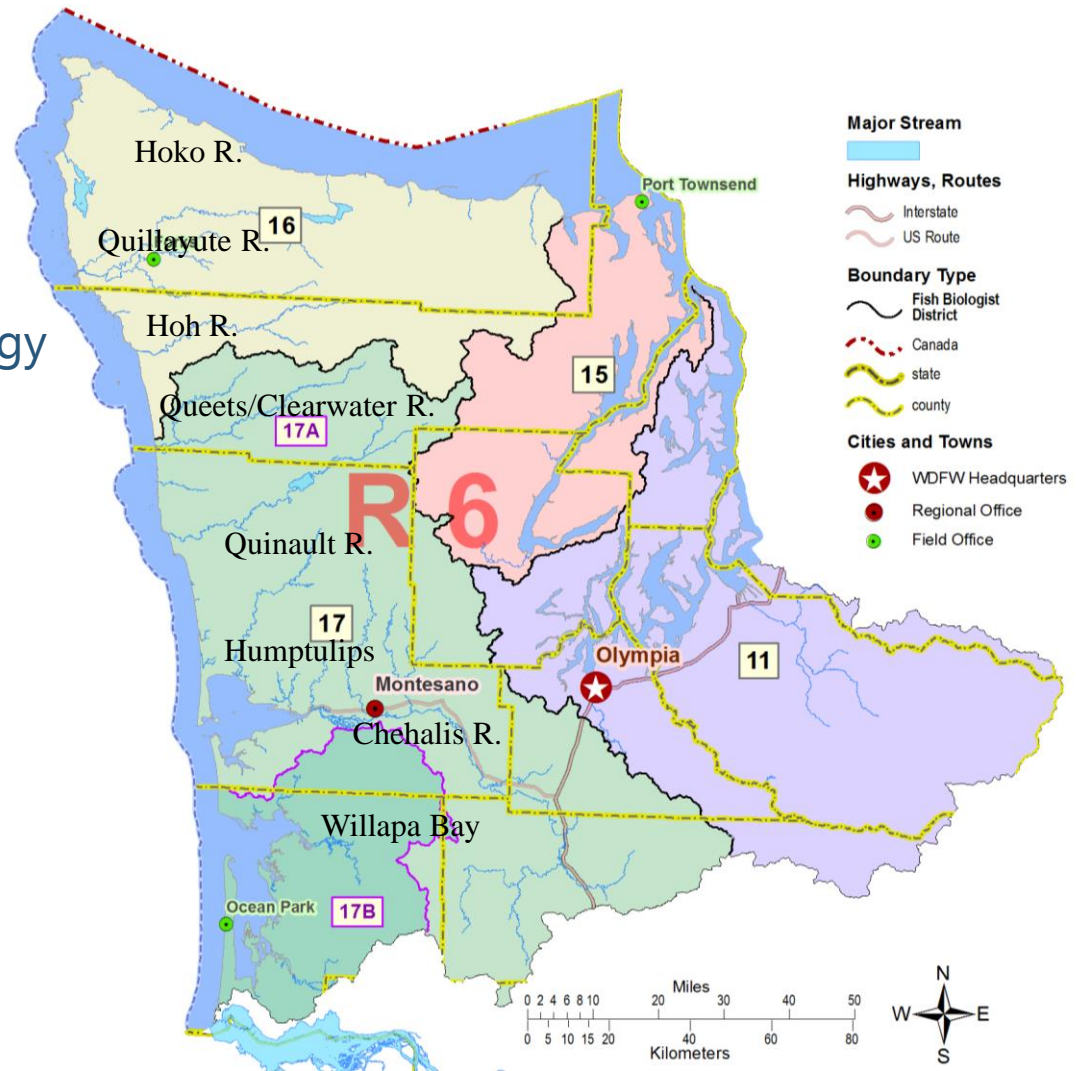
Steelhead Management and Biology

Recent History

Trends and Goals

2020/21 Forecasts

Management "Dials"



Agenda

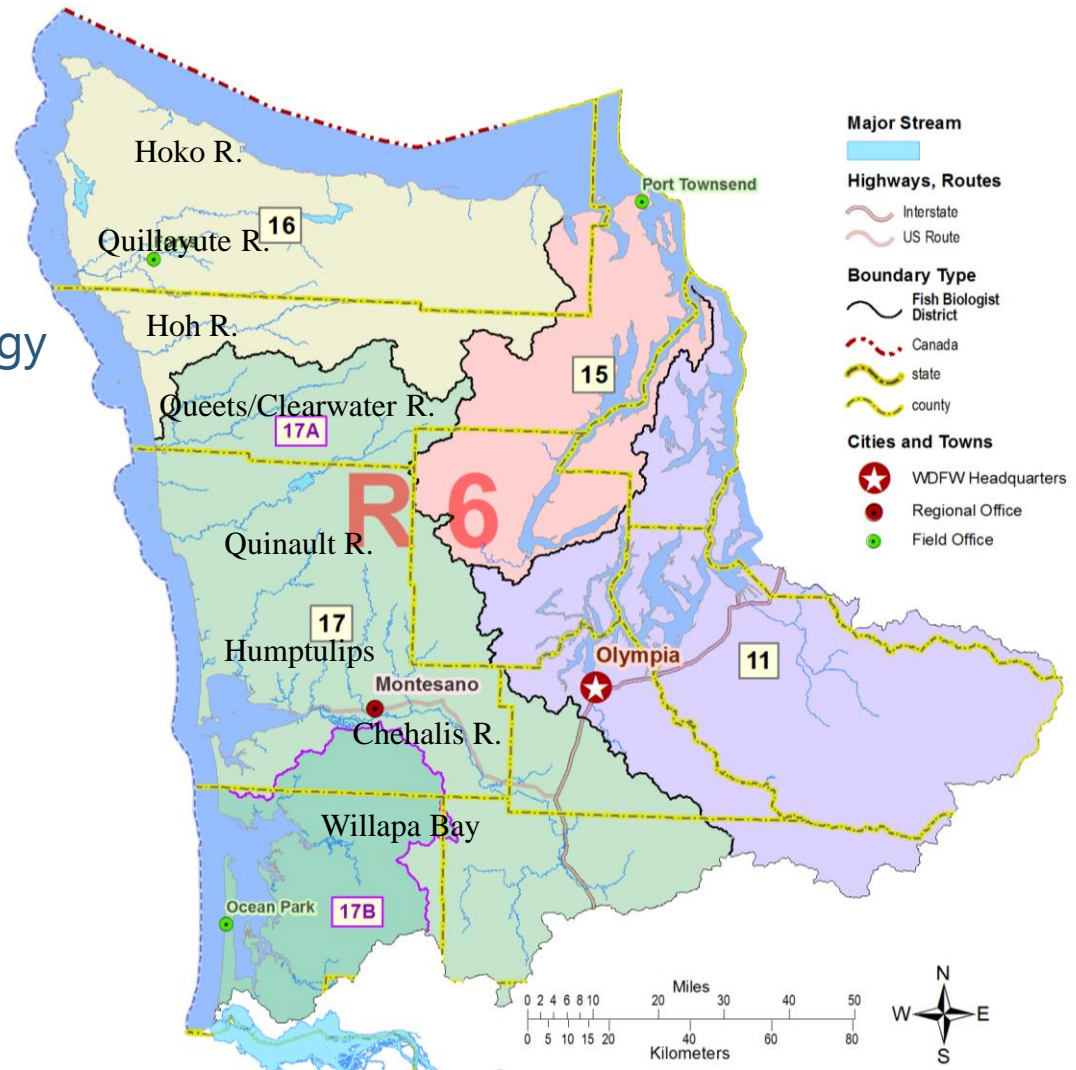
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Steelhead Management- Considerations/Constraints

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



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**



Washington Department of Fish and Wildlife

Statewide Steelhead Management Plan:
Statewide Policies, Strategies, and Actions

February 29, 2008



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:

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Washington Department of Fish and Wildlife

Statewide Steelhead Management Plan:

Statewide Policies, Strategies, and Actions

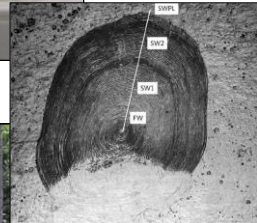
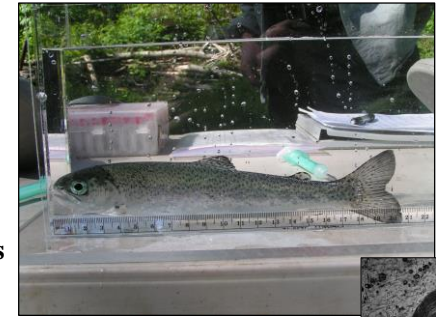
Specific Abundance Guidelines:

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

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



Biology/Stock Assessment



STEELHEAD Did you fish for Steelhead? No Yes No

Do Not Record Released Steelhead

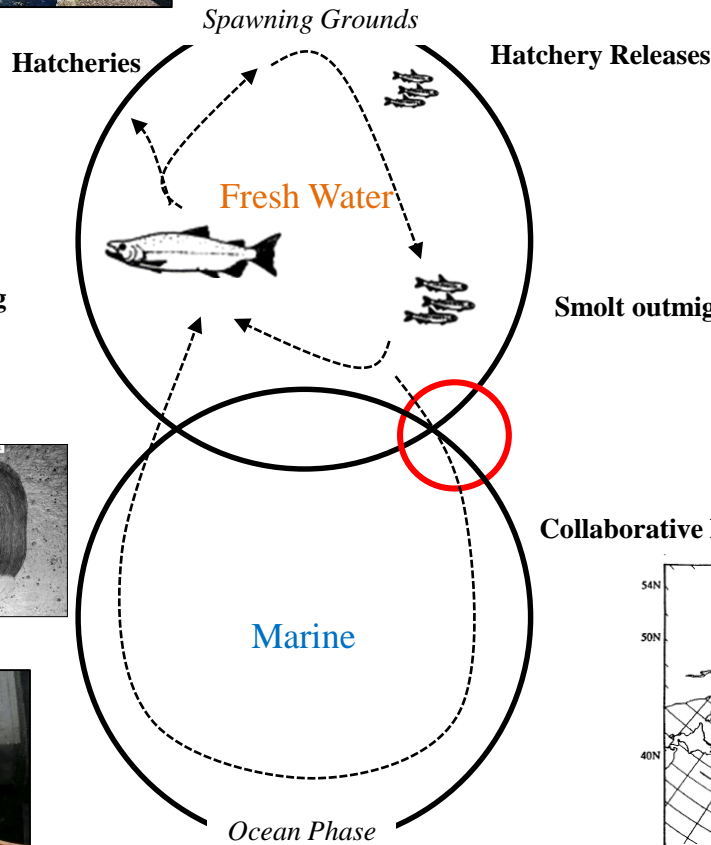
CATCH AREA	NO.	DATE
0100	1	1/21/11

A hatchery steelhead kept from the Slough River on March 12 would be entered as above. Release wild steelhead.

Hatchery fish in adipose fin clipped and a headscar at the location of the dependent Wild Fish adipose and ventral fin record. Immediately after retaining a steelhead and before fishing again, record catch information in link. Additional Catch Cards are available for hatchery steelhead only.

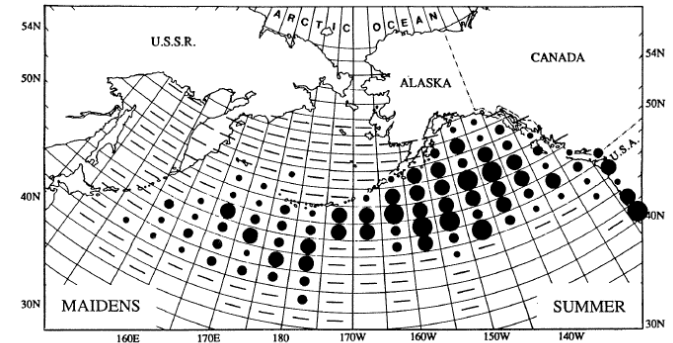
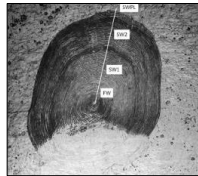
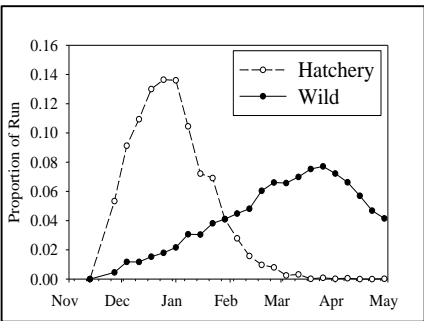
Spawning Ground Surveys

Fishery Monitoring



Smolt outmigration

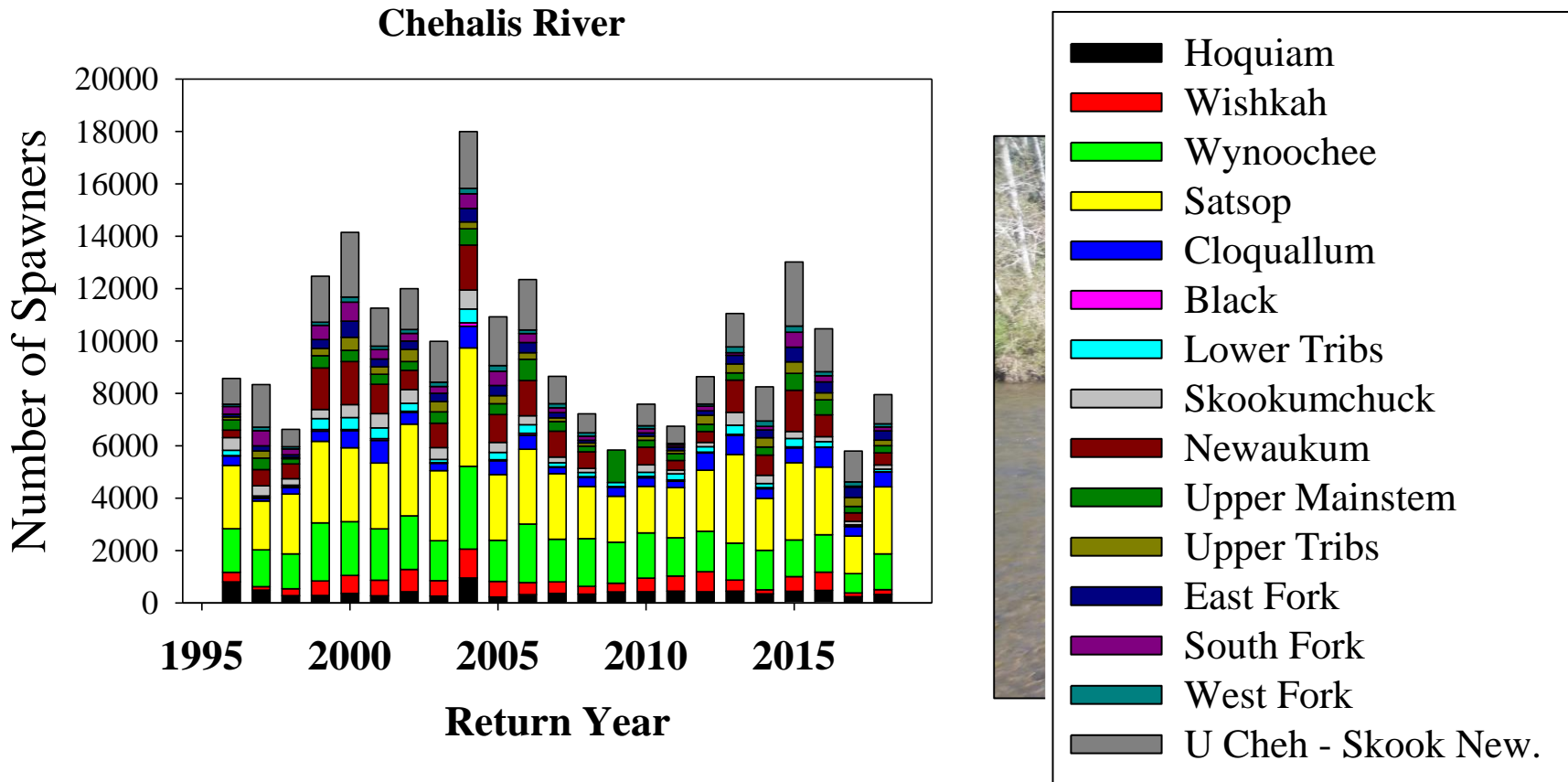
Collaborative Research



Light et al. 1989



Steelhead Biology-Escapement



Agenda

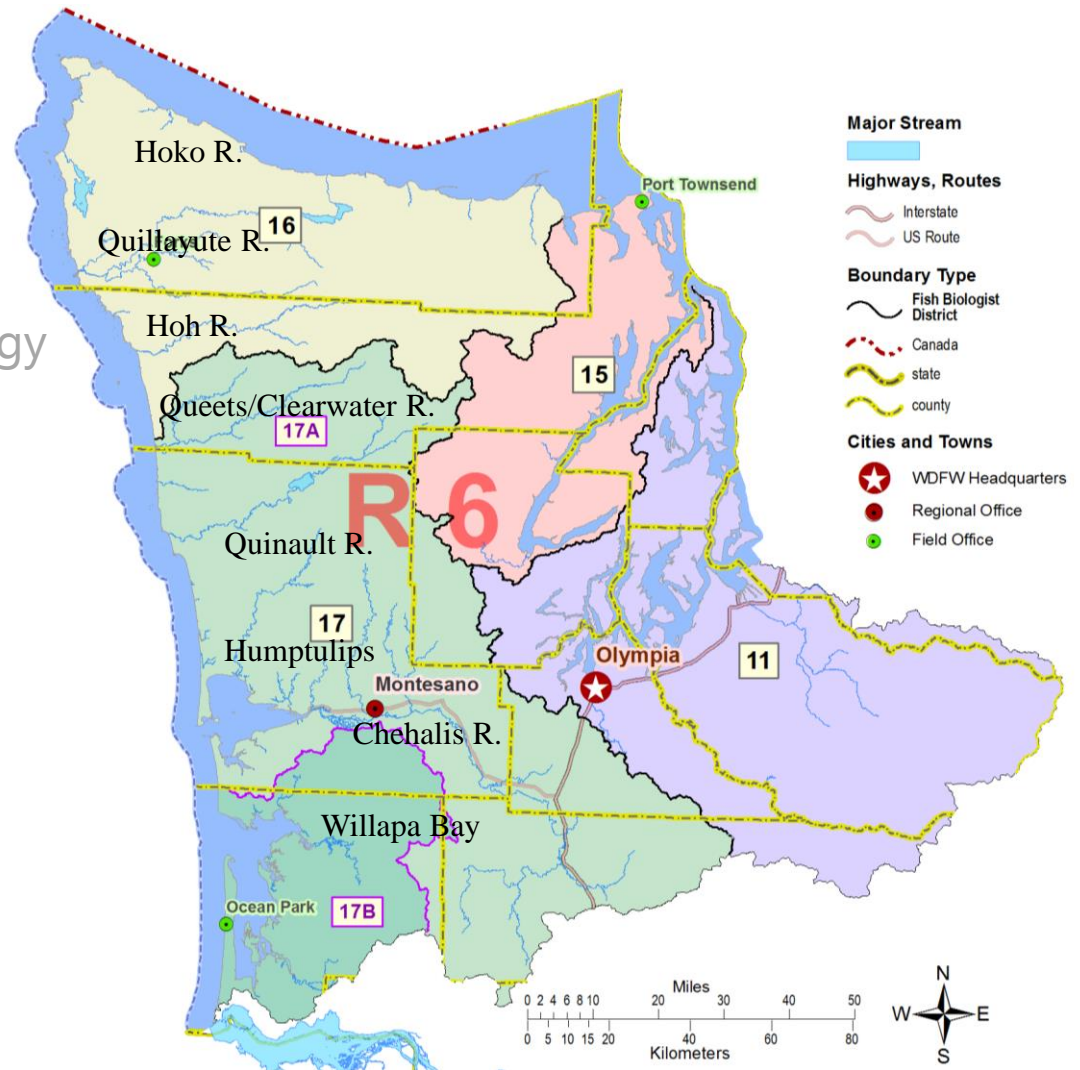
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Recent History

- **February 2020**-Closure of Chehalis and Willapa Bay
- **February and March 2020**-Meetings with Guide Advisory Group and others.
- **February-June 2020**-Steelhead Spawning Ground Surveys.
- **September 2020**-Technical discussion with comanagers.
- **November 2020**- Public Town Hall Meeting
- **December 1**-OPGA meeting
- **December 4**-Meeting with Washington Guides Association
- **December 8**-Rule Change



Agenda

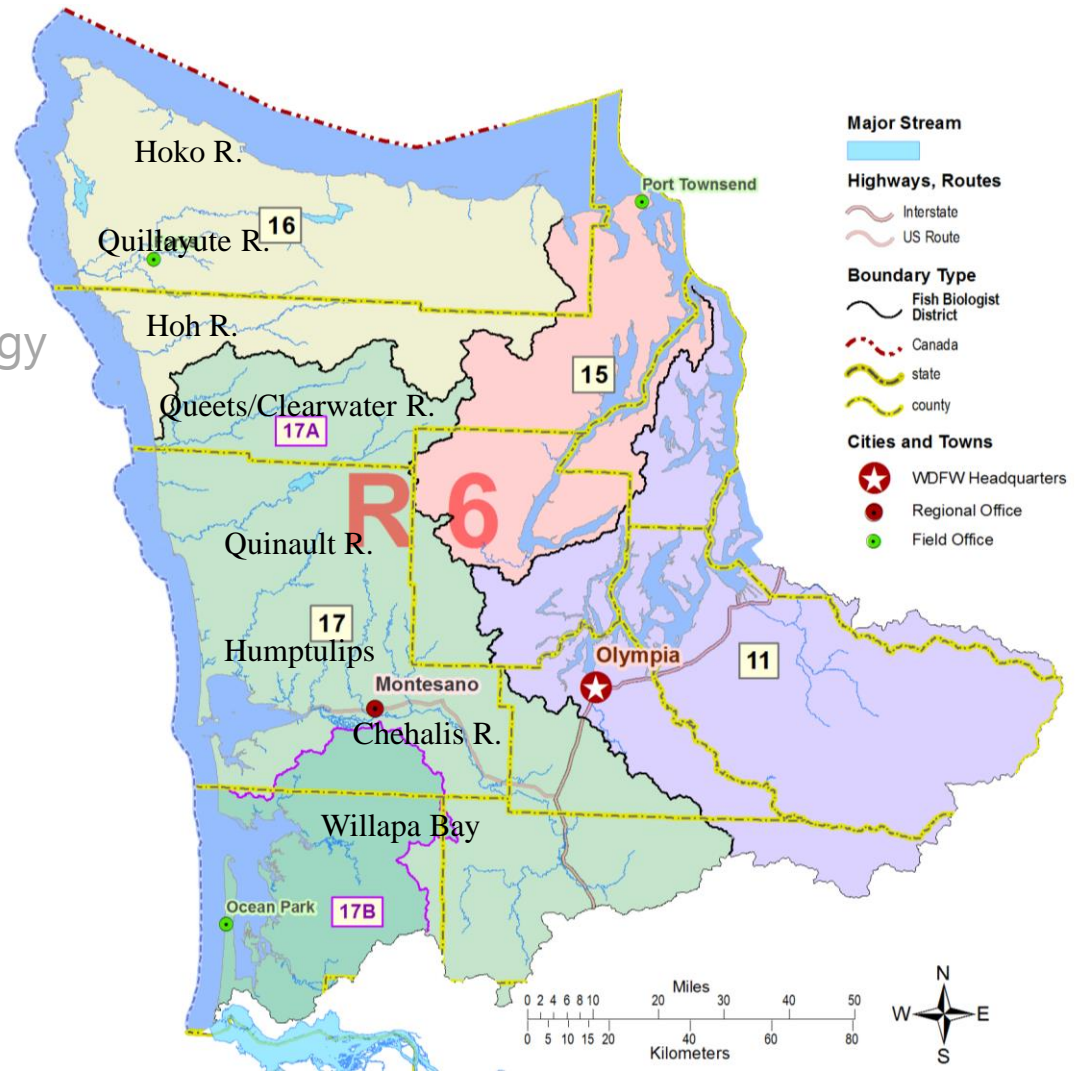
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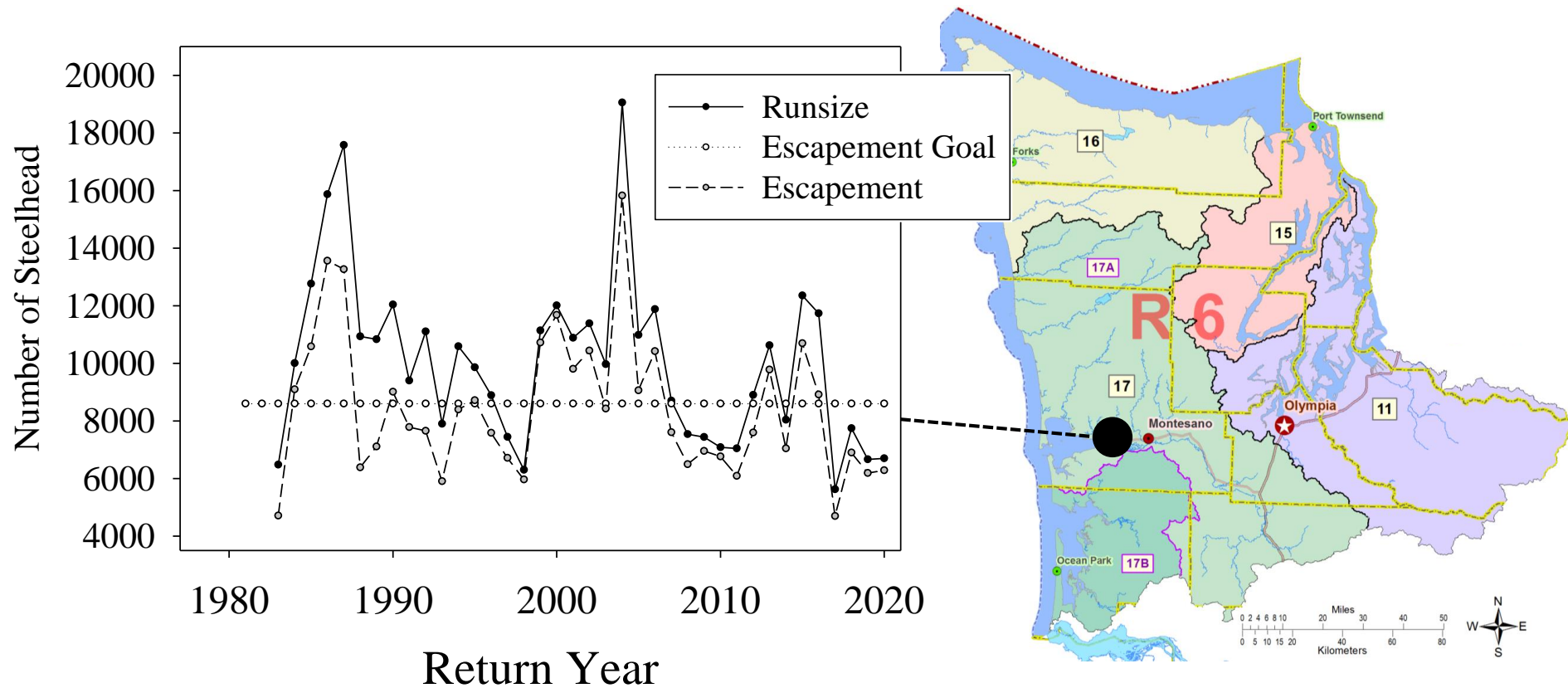
Trends and Goals

2020/21 Forecasts

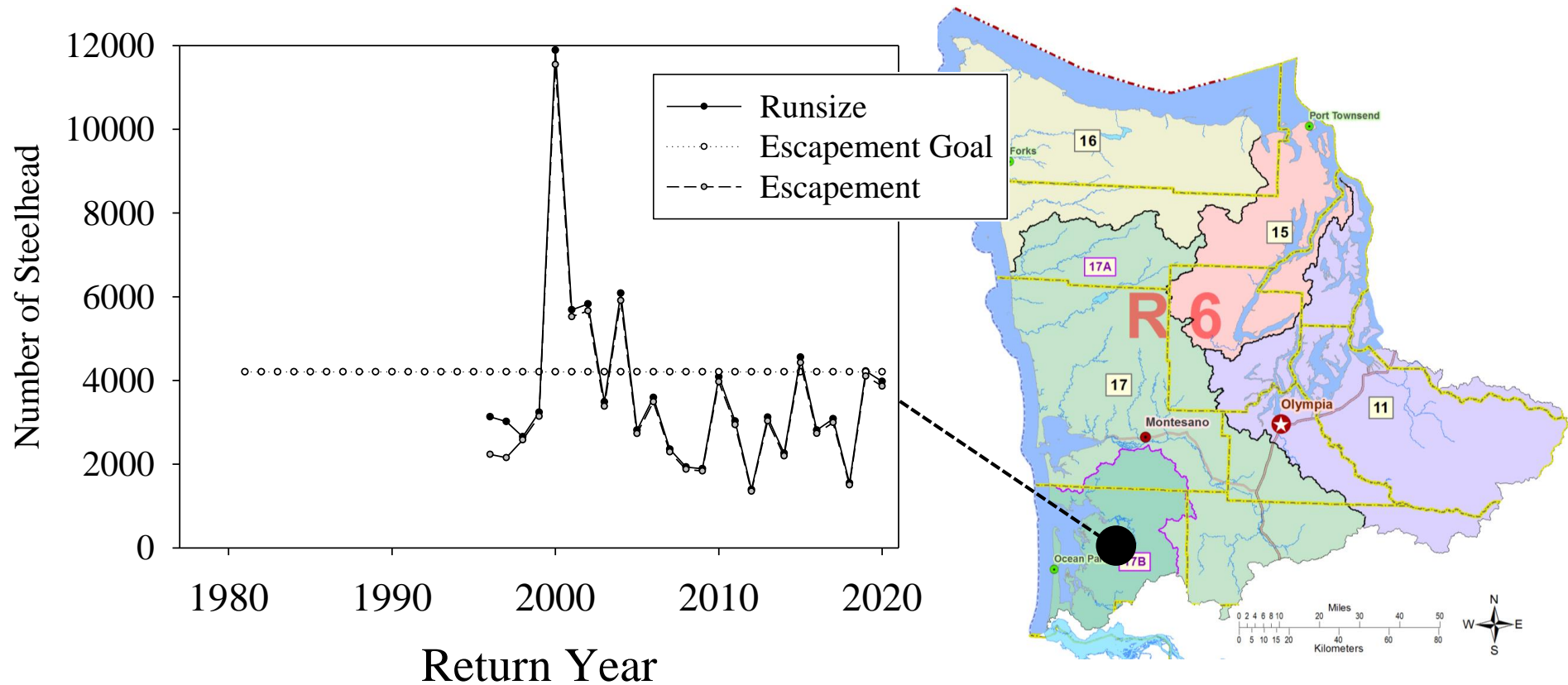
Management "Dials"



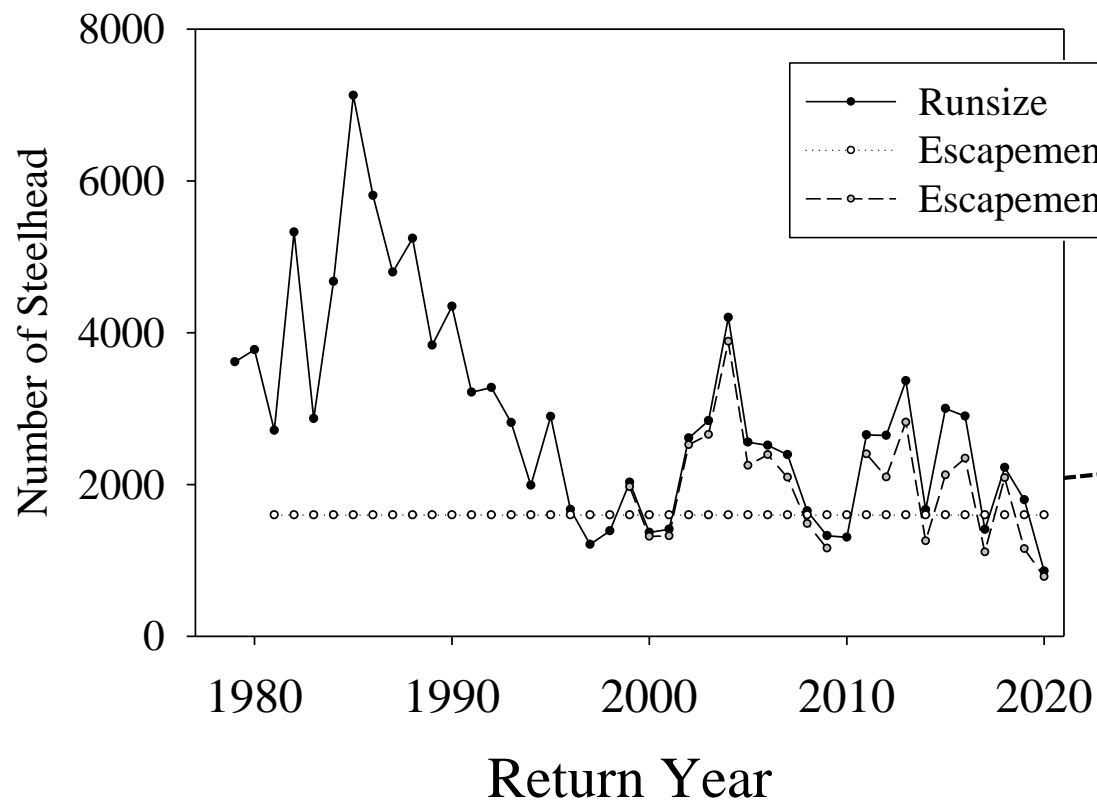
Steelhead Trends- Chehalis R.



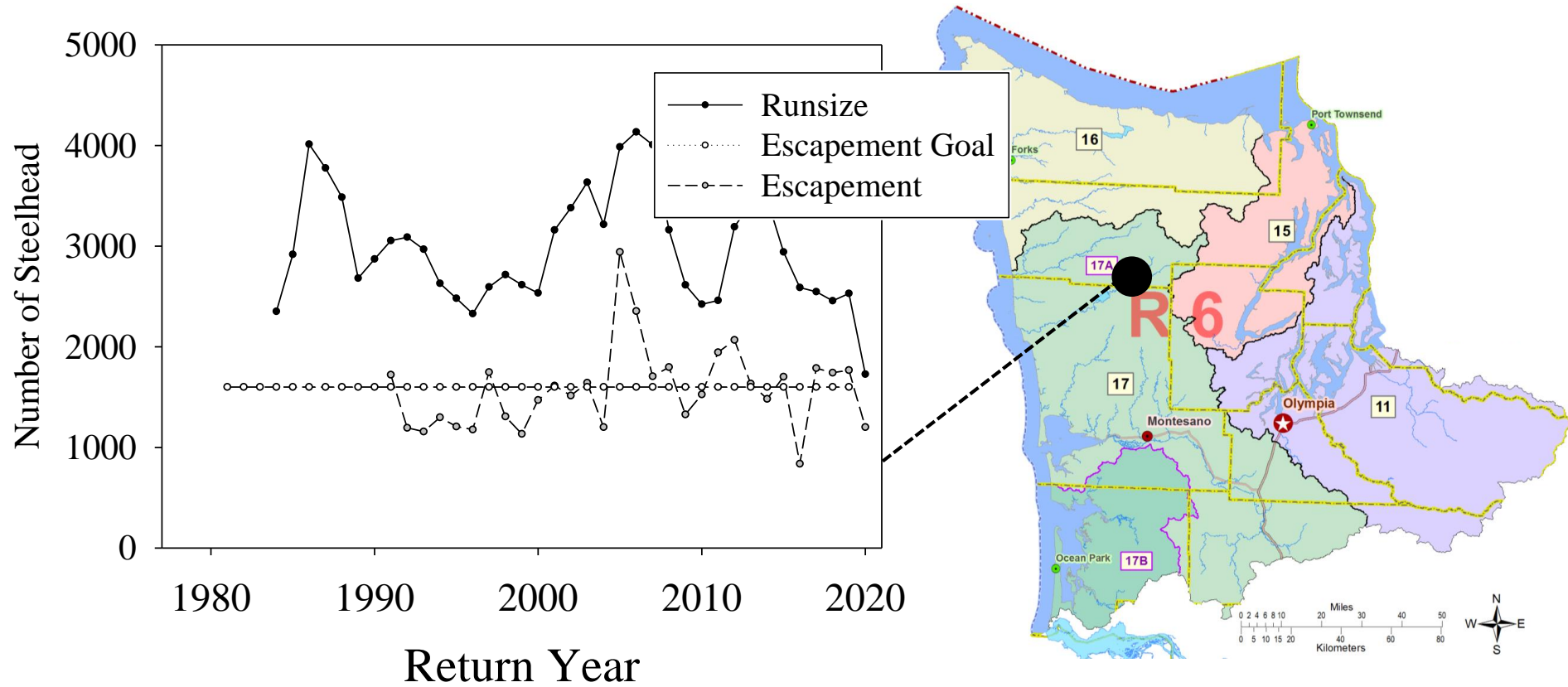
Steelhead Trends- Willapa Bay



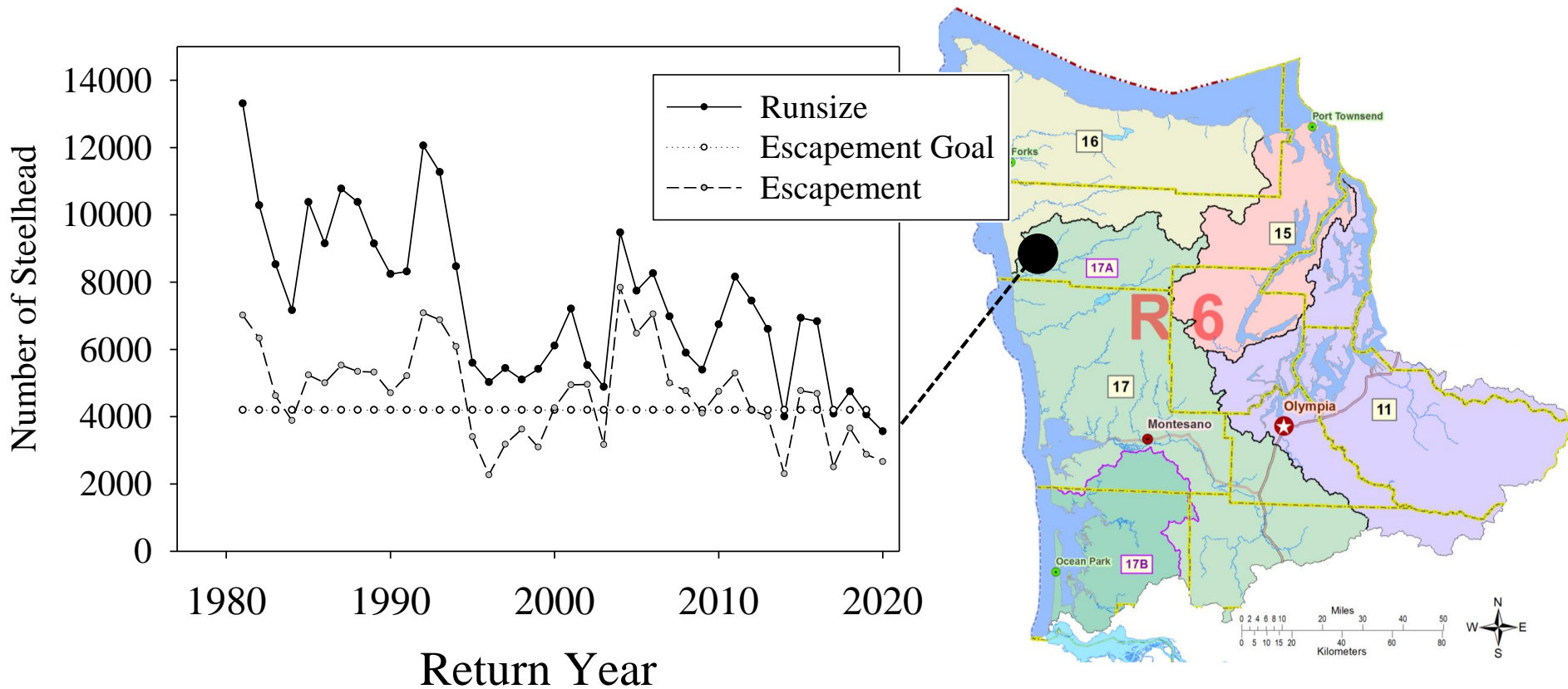
Steelhead Trends- Humptulips R.



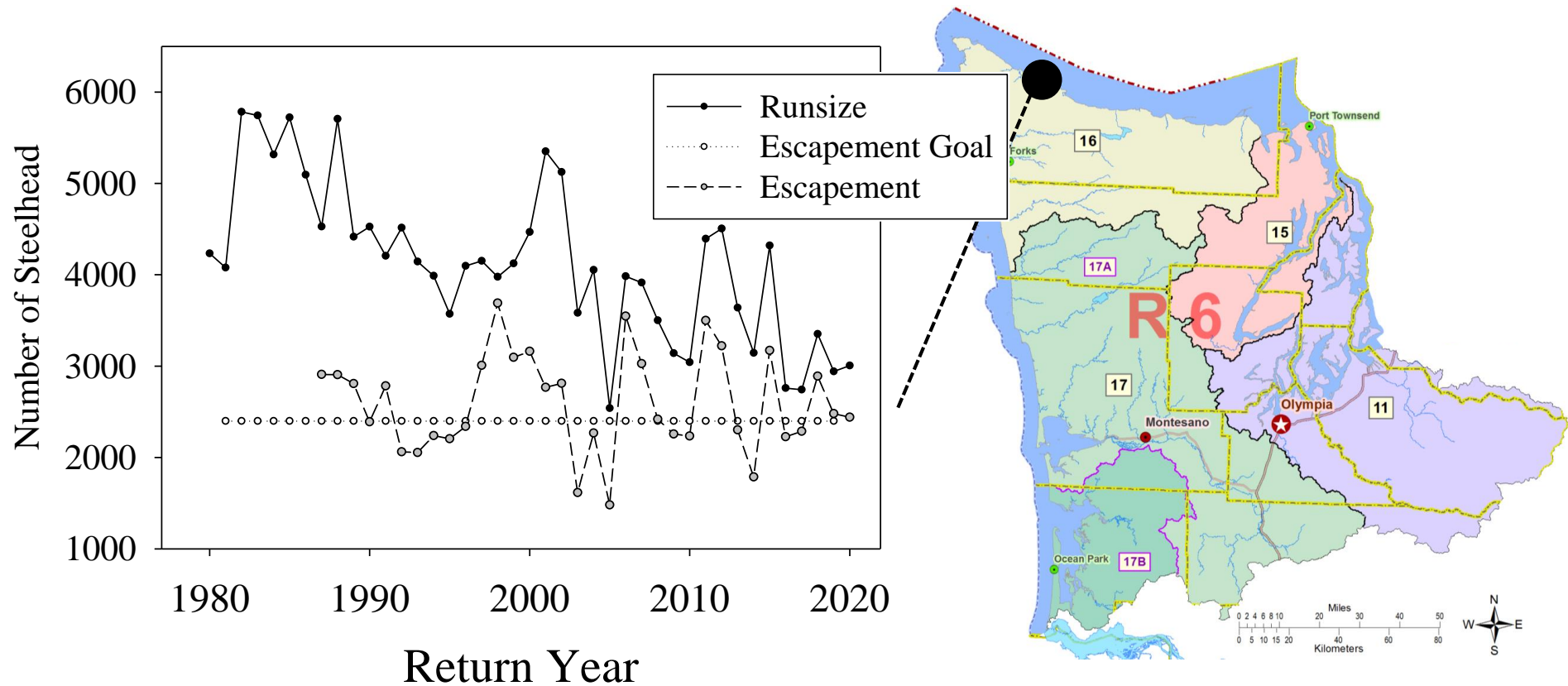
Steelhead Trends- Upper Quinault R.



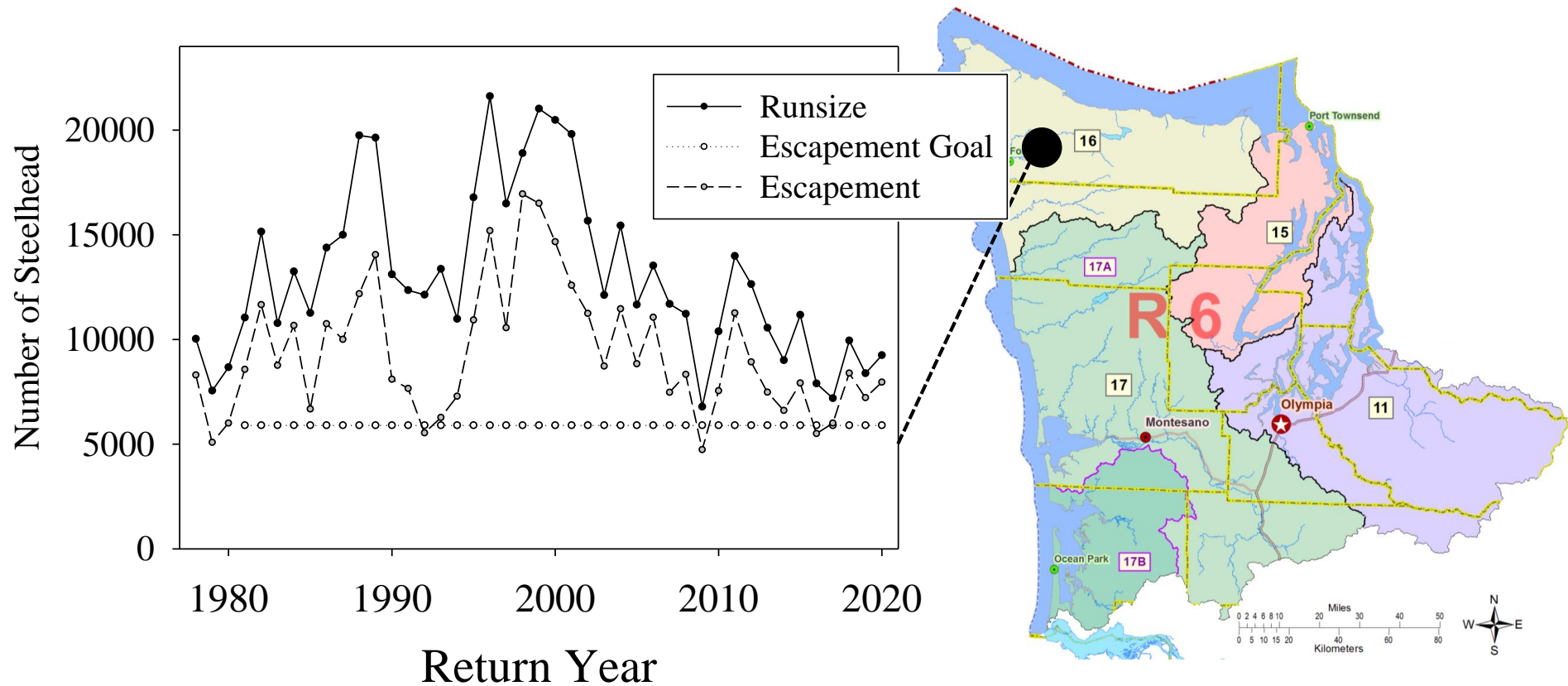
Steelhead Trends- Queets/Clearwater R.



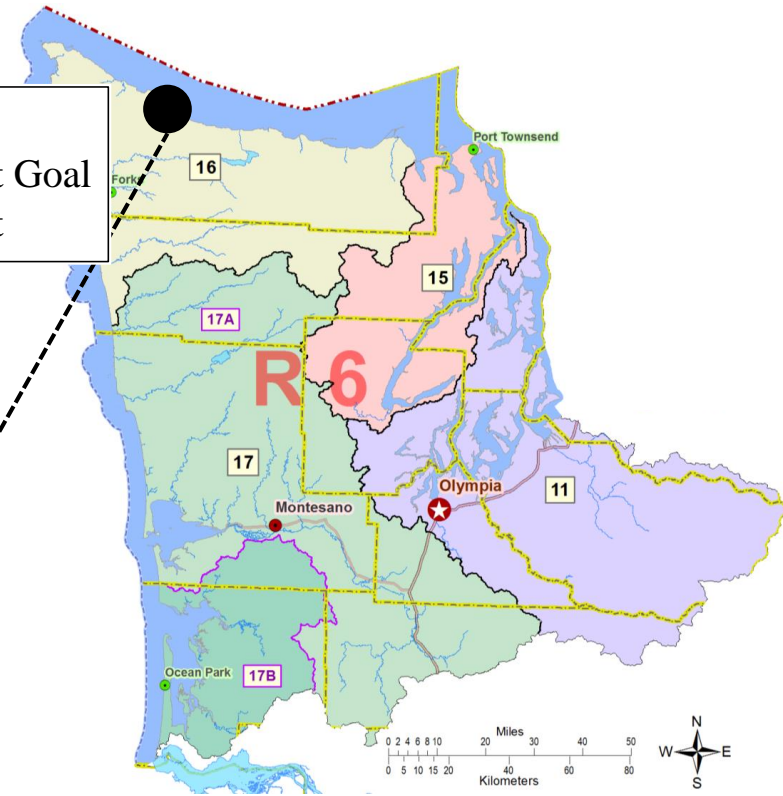
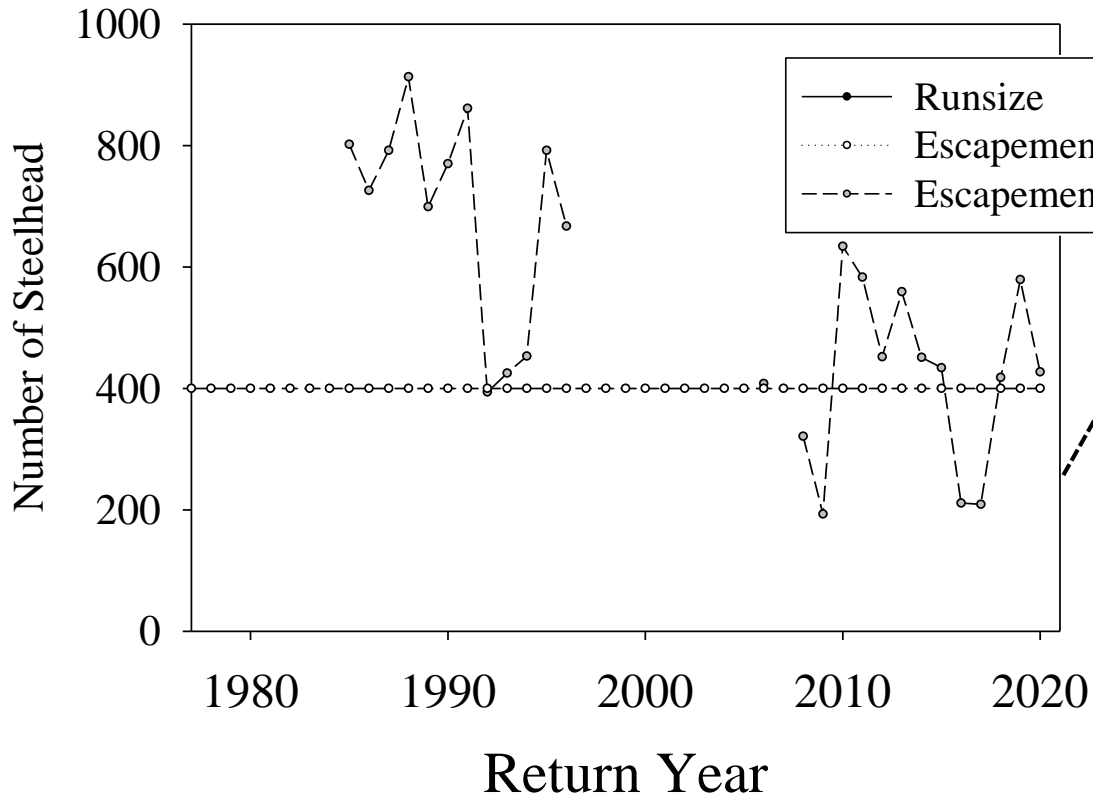
Steelhead Trends- Hoh R.



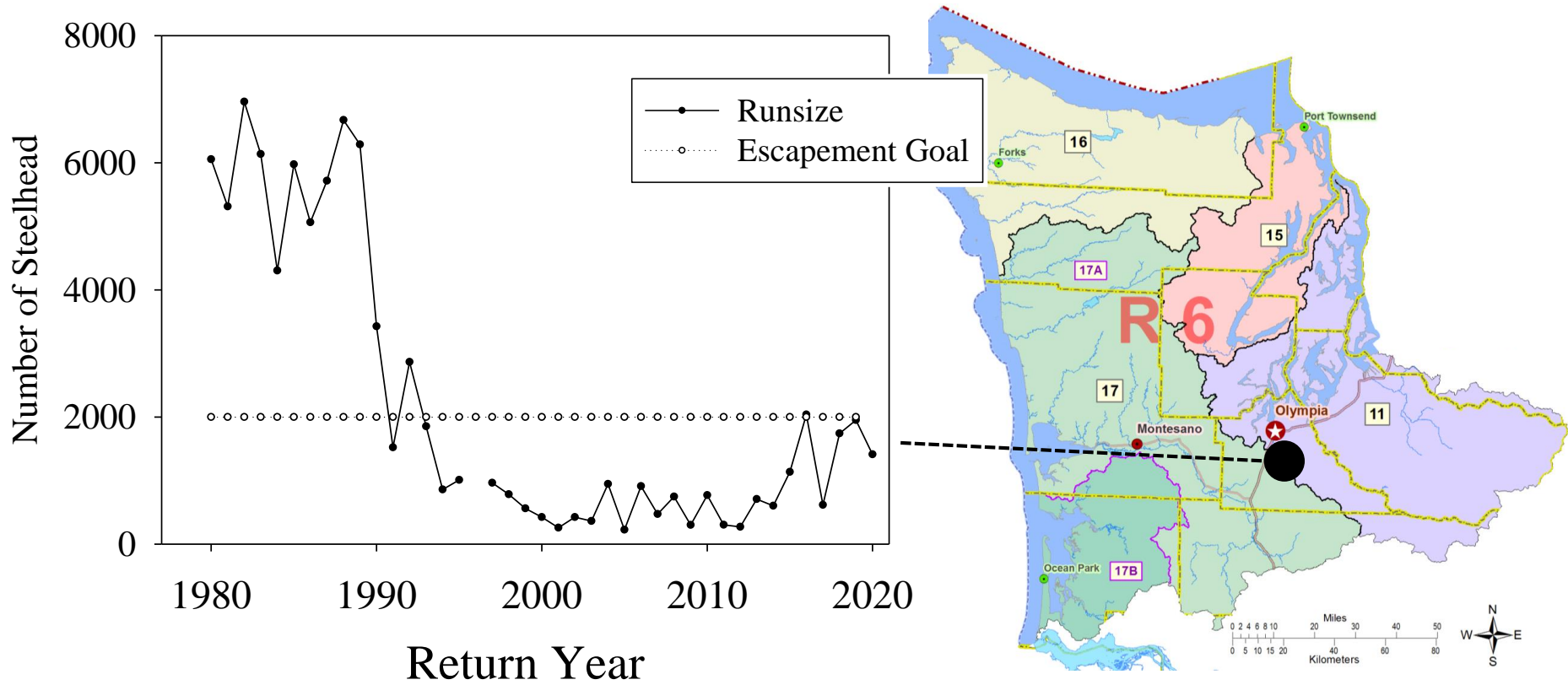
Steelhead Trends- Quillayute R.



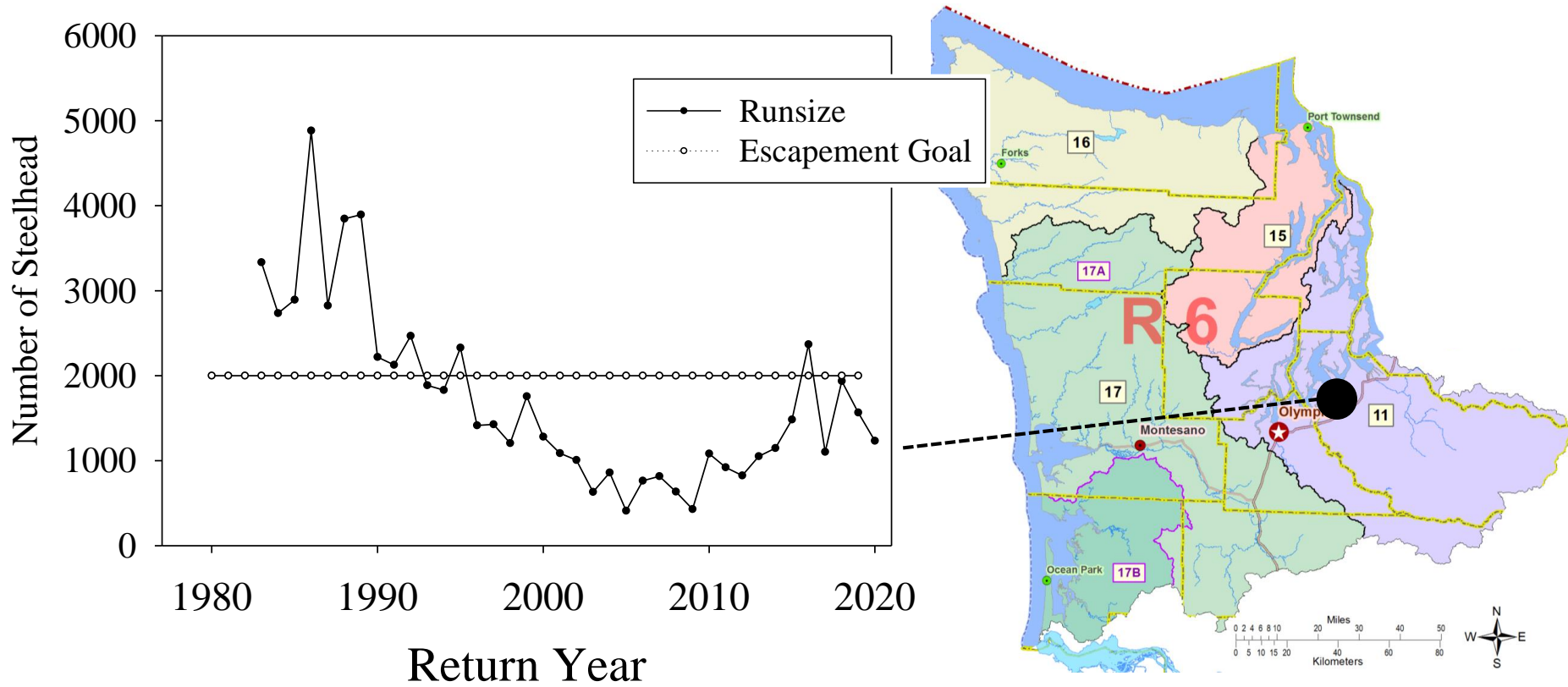
Steelhead Trends- Hoko R.



Steelhead Trends-Nisqually R.



Steelhead Trends-Puyallup R.



Steelhead Trends-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 30th, **Rainbow Trout:** Catch and release or minimum size 14”.*

- 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.
- 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.
- 2020/21 Forecasts are below escapement goals in majority of coastal rivers.
- Declining abundance trends in majority of coastal rivers.



Agenda

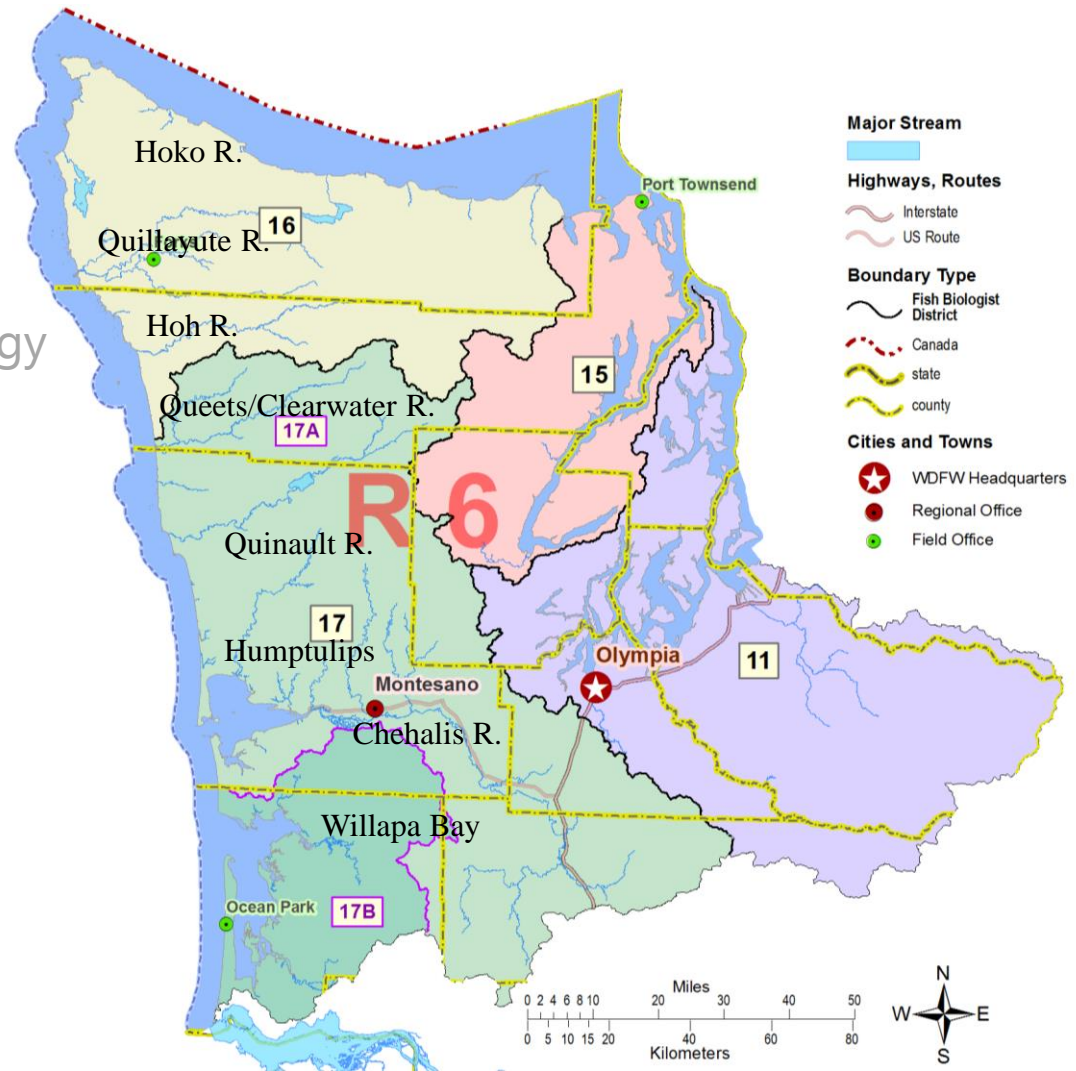
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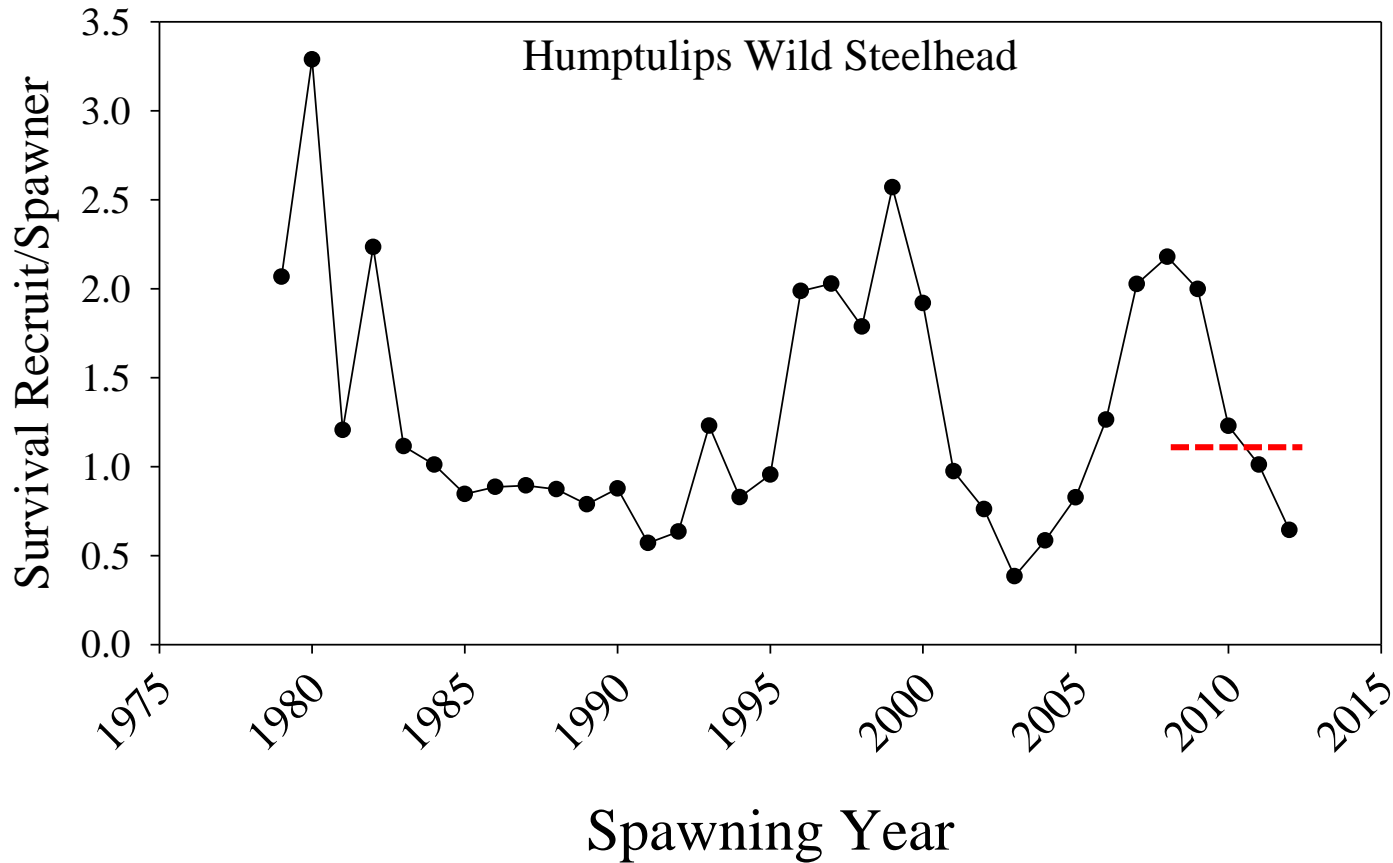
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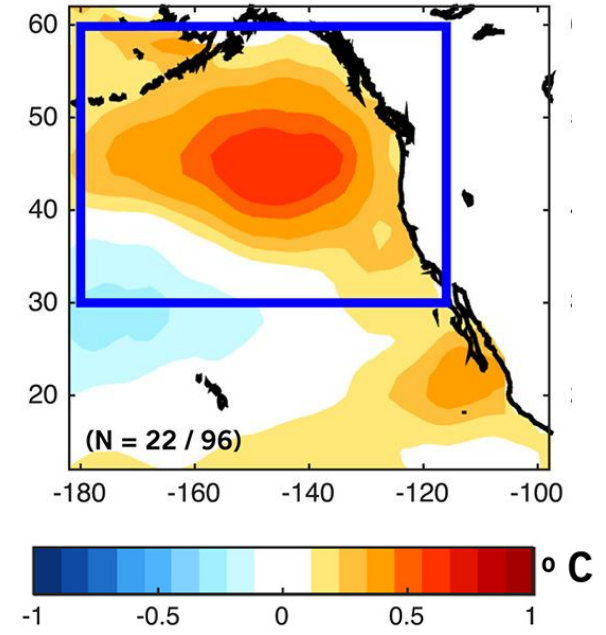
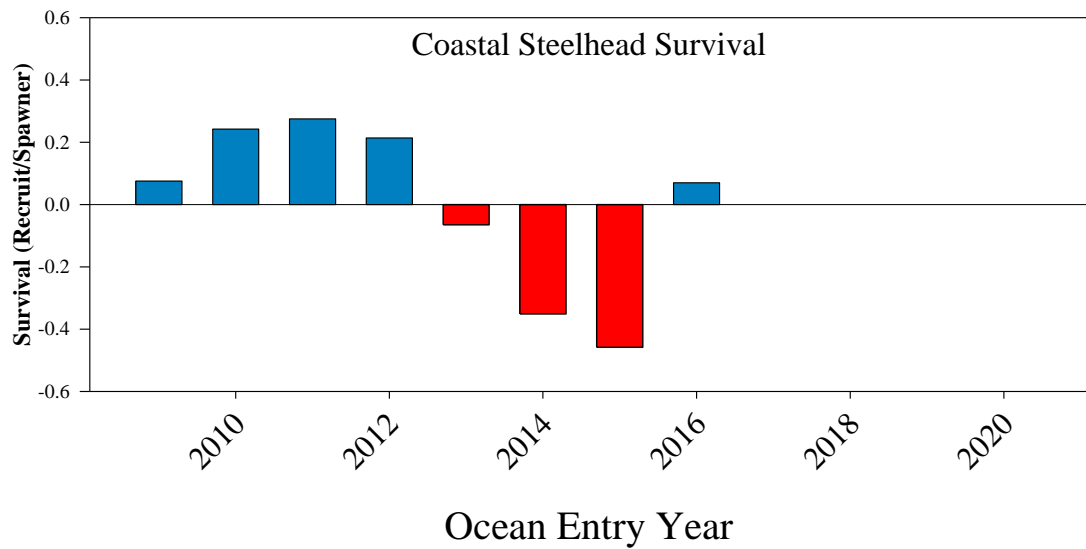
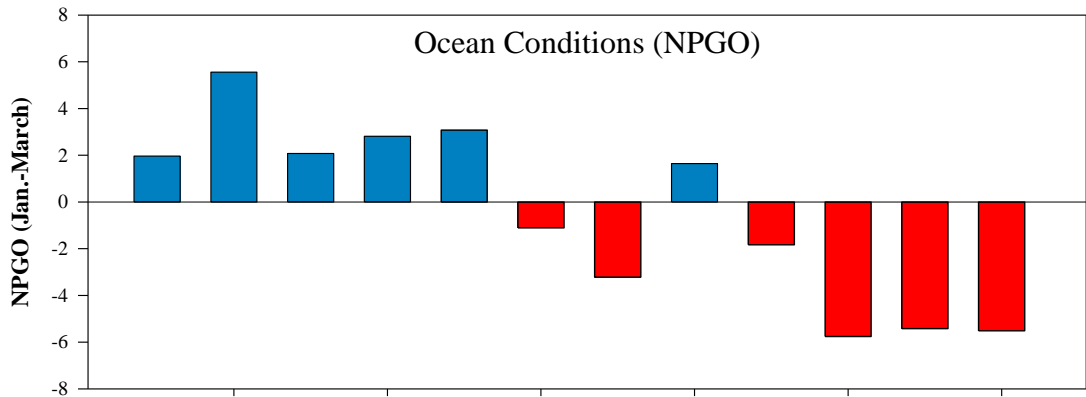
Management "Dials"



2021 Forecasts-Survival



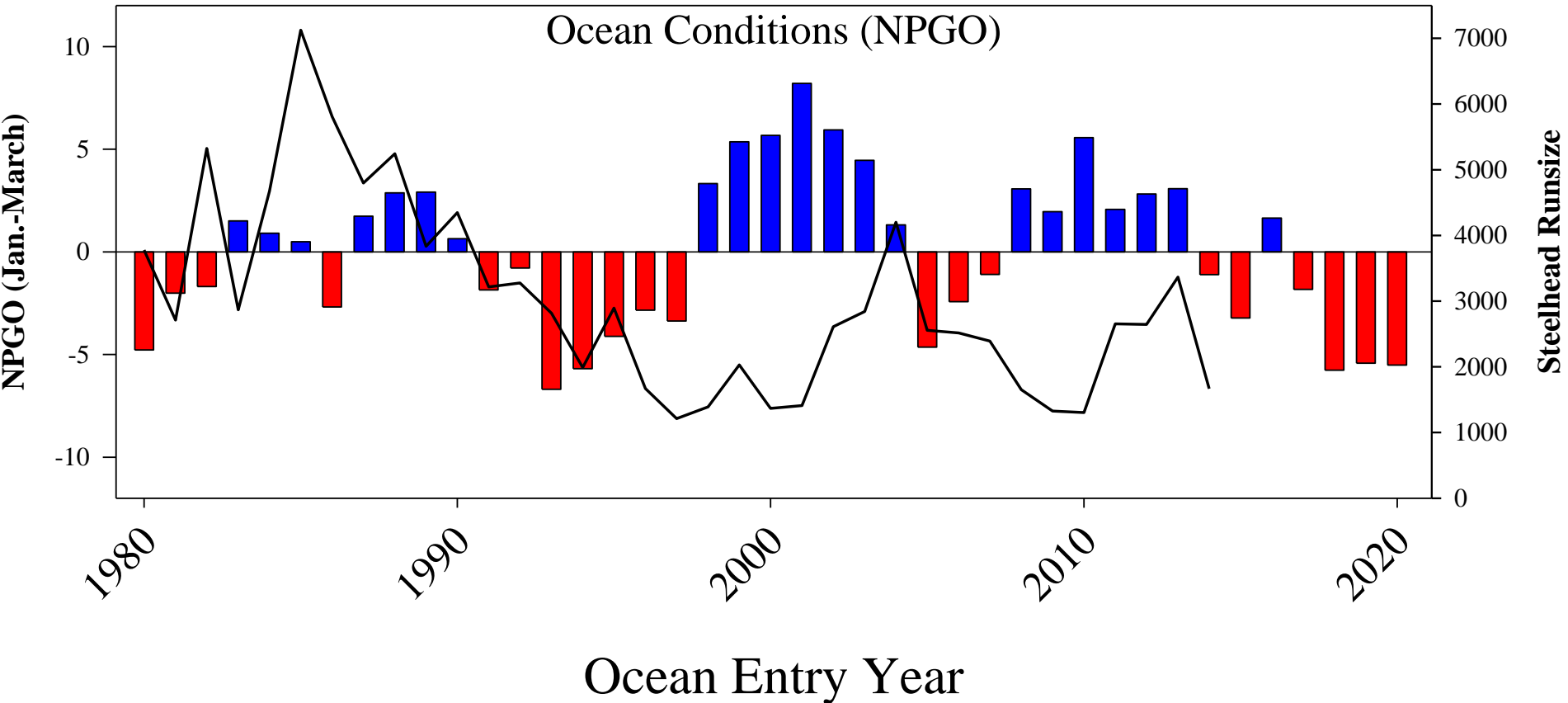
2021 Forecasts-Ocean Conditions



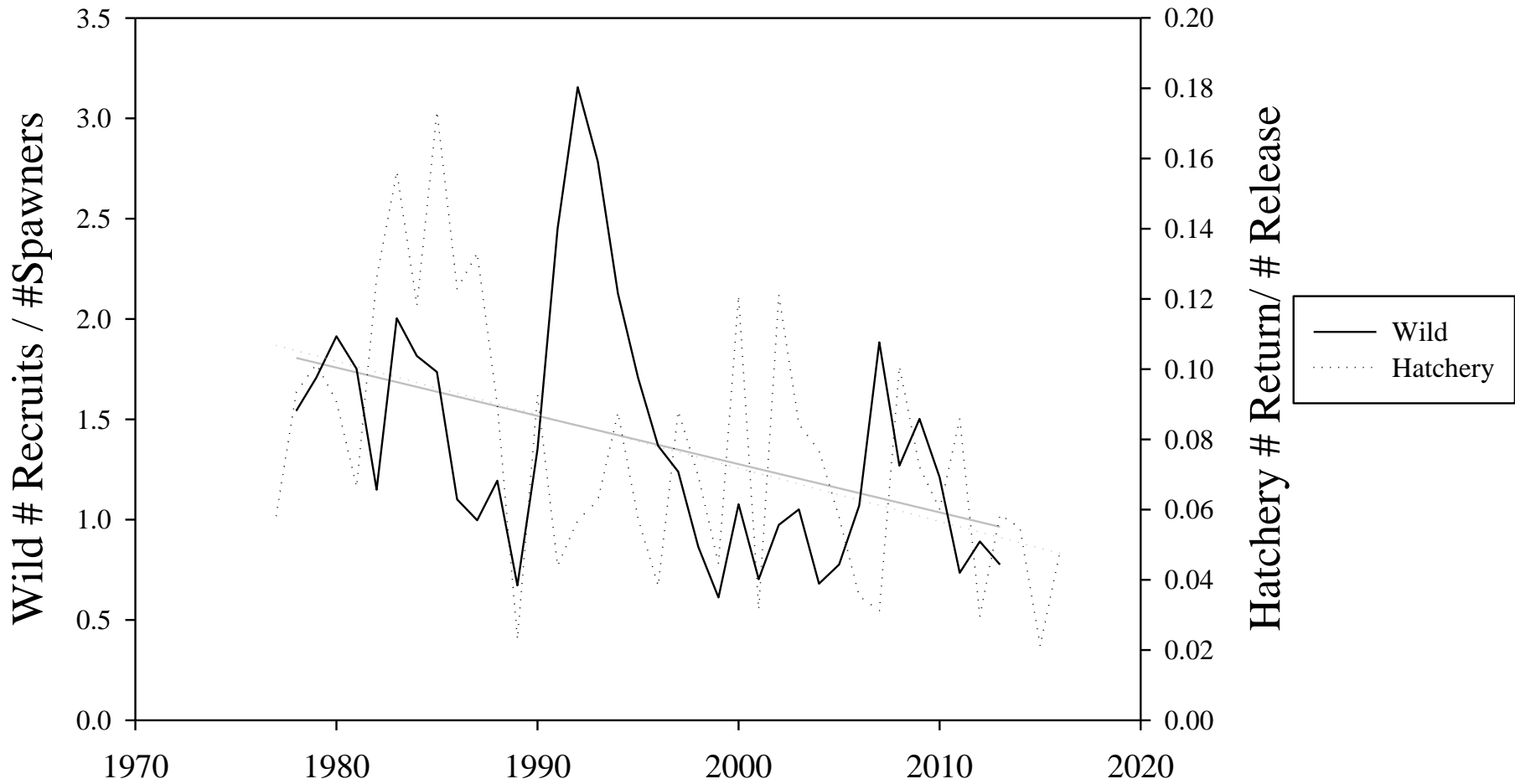
Joh & Lorenzo 2017



2021 Forecasts-Ocean Conditions



2021 Forecasts-Hatchery vs. Wild



Wild Brood Year and Hatchery Release Year



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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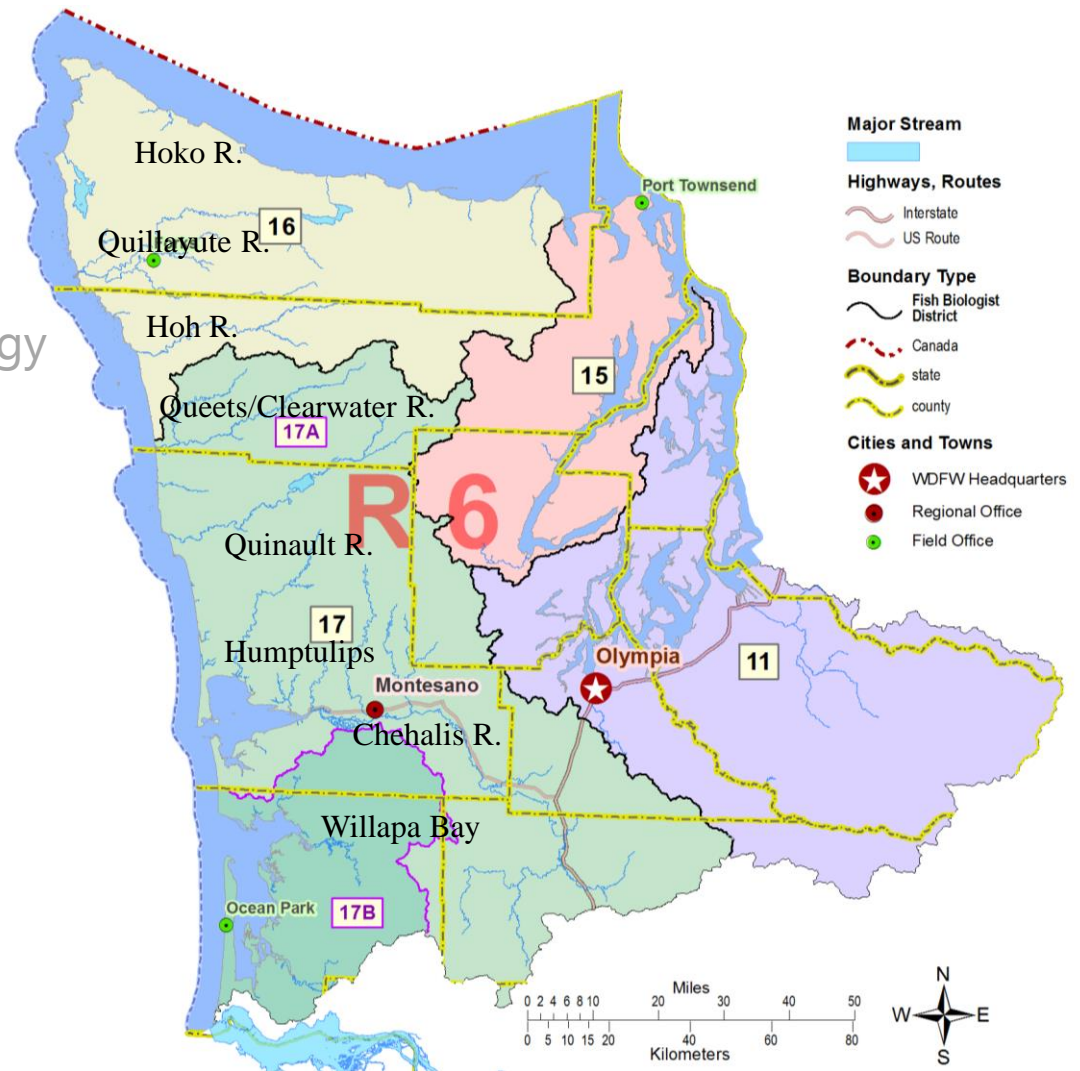
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Management "Dials"



Management “Dials”

- Escapement Goals
- Broodstock Collections
- Tribal Comanager Harvest
- Sport



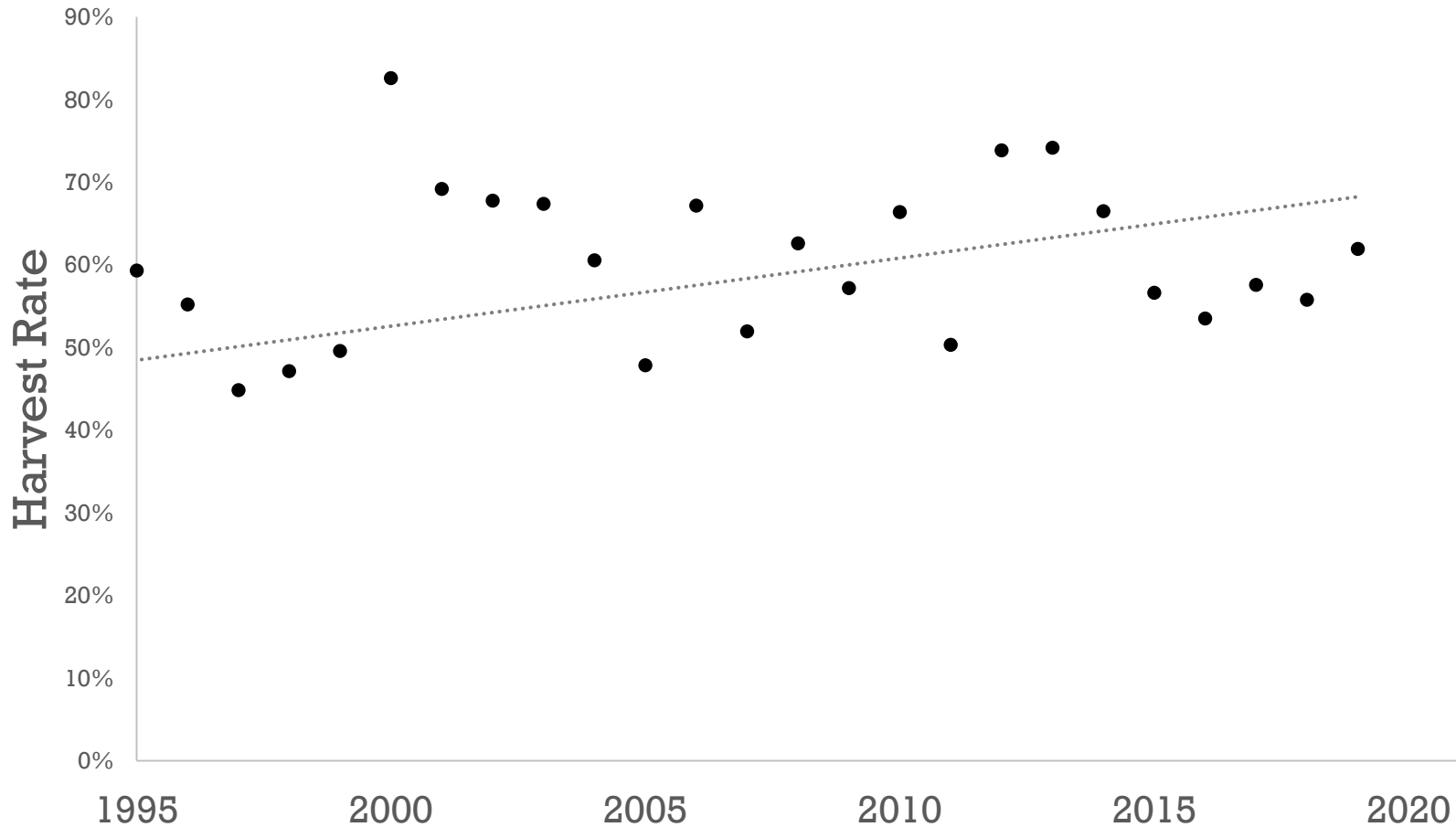
2021 Preliminary Forecast*

System	Forecast	Goal	Wild Steelhead Above Escapement Goal	Sport Impact Limit
Willapa	3862	4206	-344	386
Chehalis	6600	8600	-2000	179
Humptulips	1066	1600	-534	53
Upper Quinault	1725	1600	125	63
Queets/Clearwater	3563	4200	-637	178
Hoh	2903	2400	503	251
Quillayute	9276	5900	3,376	1688

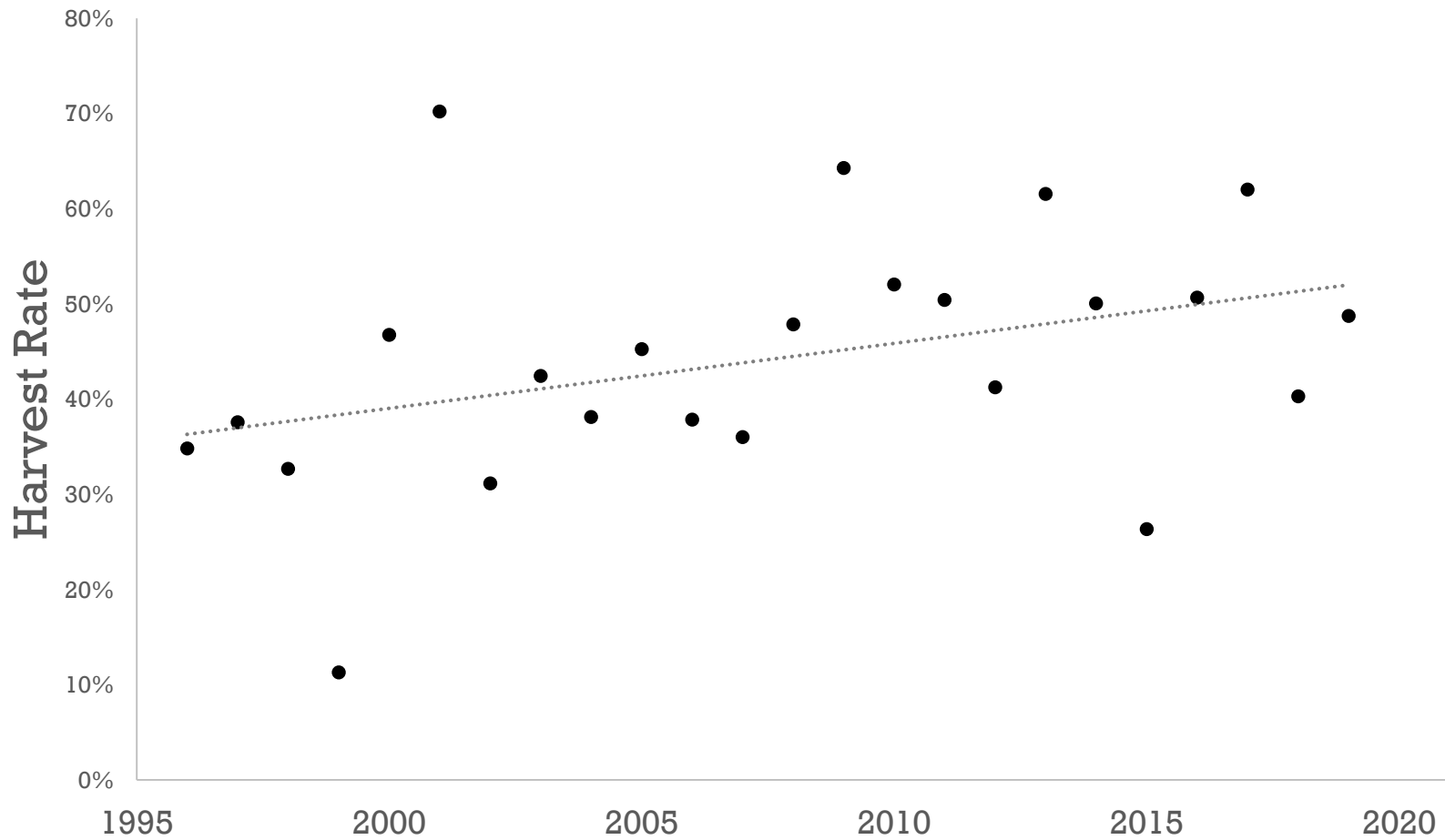
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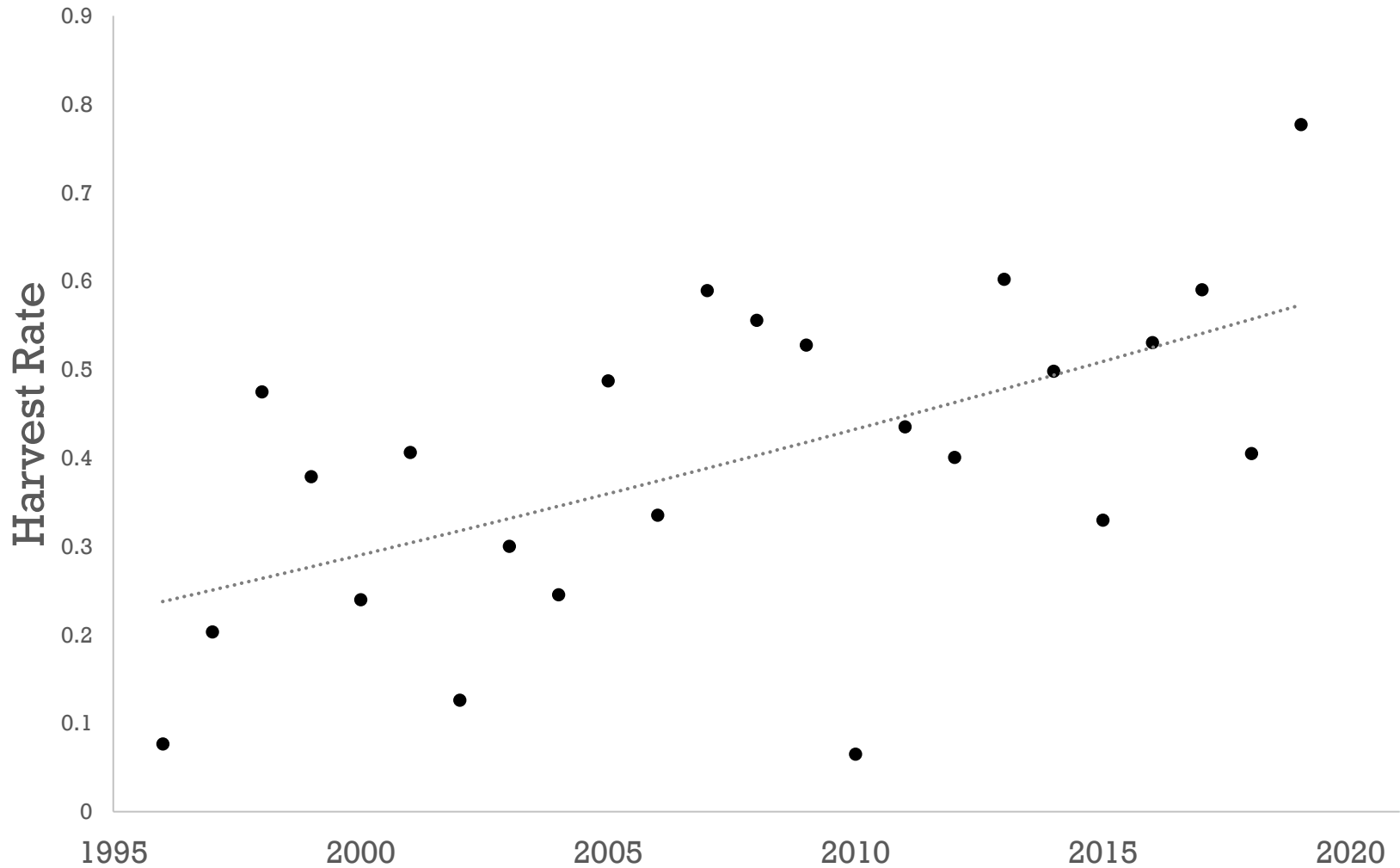
Sport Impact-Chehalis









Sport Impact-Humptulips



Sport Impact-Skookumchuck



Potential Fisheries Options

	<i>Abundance</i>	<i>Productivity</i>	<i>Distribution</i>	<i>Diversity</i>
1. Early Closure				
2. Quillayute River Only				
3. Gear and Harvest Restrictions				
4. Full Closure				

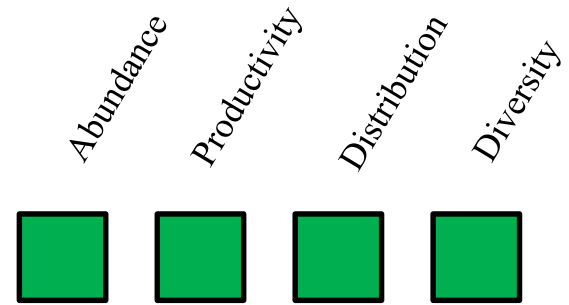


Potential Fisheries Options

	<i>Abundance</i>	<i>Productivity</i>	<i>Distribution</i>	<i>Diversity</i>
1. Early Closure	■	□ ?	□ ?	□ ?
2. Quillayute River Only	■	□ ?	□ ?	□ ?
3. Gear and Harvest Restrictions	■	■	■	■
4. Full Closure	■	■	■	■



2020/21 Rule Change



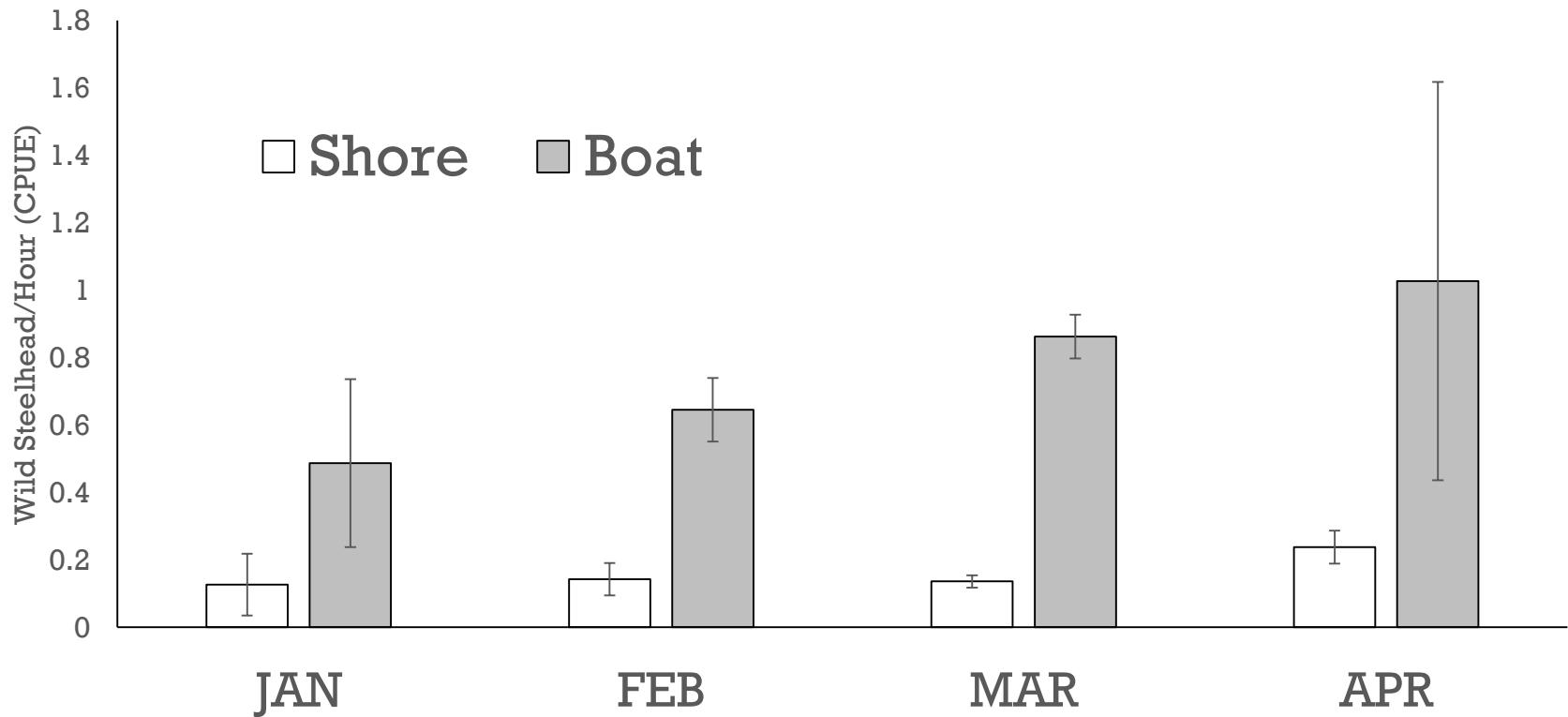
Description: Single point barbless hooks and Selective Gear rules (no bait), prohibit fishing from a floating device, April 1 closure date, release rainbow trout.

- Greatest likelihood of meeting management objectives outside of full closure.
- Support from public
- Maximum Opportunity
- Provides greatest “protection” for late-timed hatchery programs.
- Preferred by tribal comanagers over a full closure of state fishery.

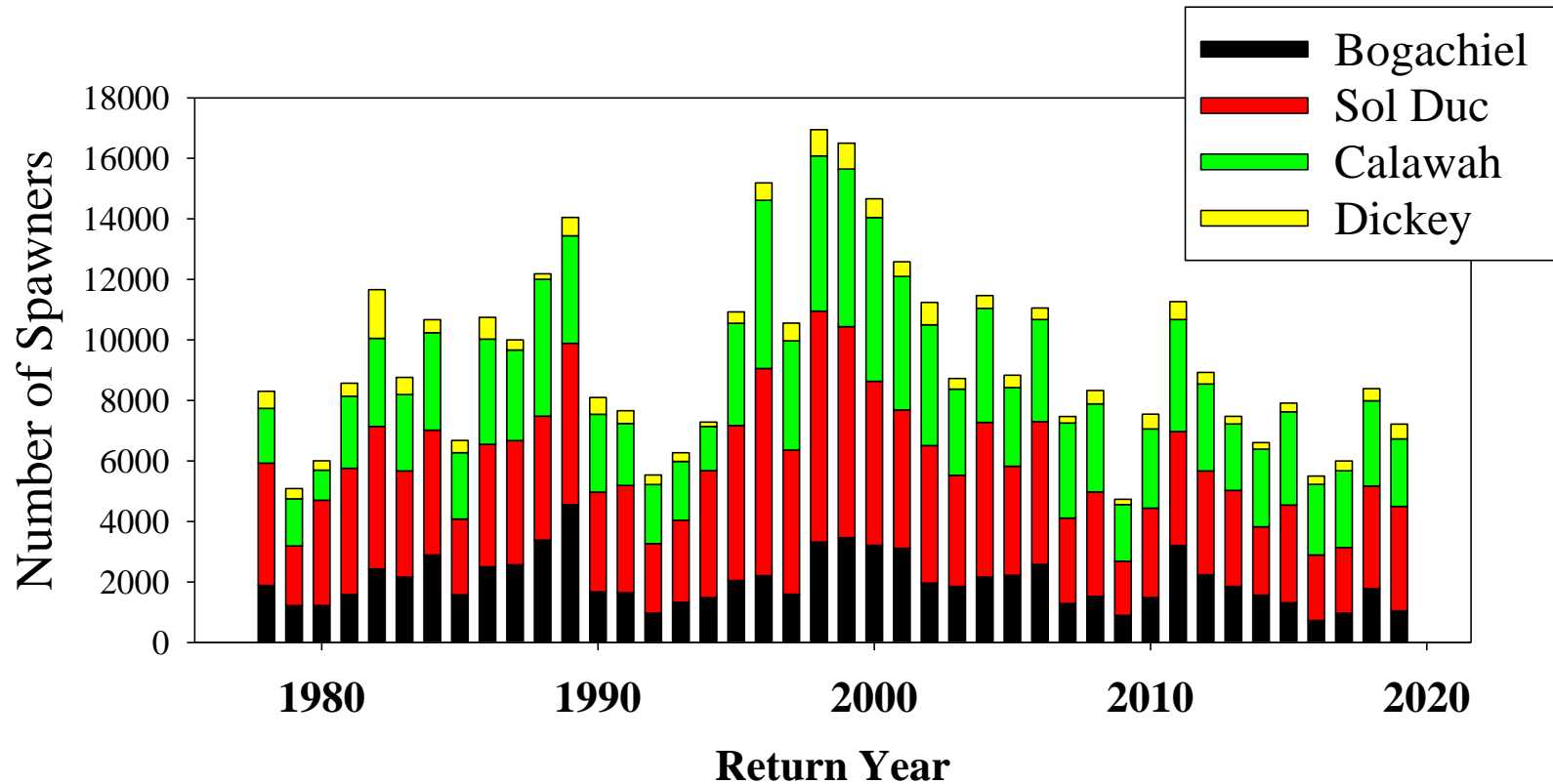


Fishing from a boat vs. shore

Hoh River, 2018 - 2020



Quillayute Escapement



Quillayute Escapement

Year	Bogachiel	Sol Duc	Calawah	Dickey	Total
2000	3,214	5,416	5,411	624	14,665
2001	3,112	4,575	4,413	483	12,583
2002	1,964	4,546	3,990	742	11,242
2003	1,854	3,673	2,850	347	8,724
2004	2,163	5,110	3,773	418	11,464
2005	2,224	3,602	2,602	405	8,833
2006	2,583	4,718	3,371	385	11,057
2007	1,293	2,819	3,144	214	7,470
2008	1,526	3,448	2,911	443	8,328
2009	895	1,791	1,875	172	4,733
2010	1,491	2,949	2,618	490	7,548
2011	3,208	3,763	3,705	587	11,263
2012	2,240	3,430	2,875	380	8,925
2013	1,853	3,173	2,199	251	7,476
2014	1,565	2,259	2,568	213	6,605
2015	1,315	3,229	3,081	289	7,914
2016	730	2,165	2,331	274	5,500
2017	975	2,164	2,538	324	6,001
2018	1,775	3,396	2,817	401	8,389
2019	1,046	3,449	2,233	489	7,217
Goal	1,127	2,910	1,740	123	5,900



Questions?

