

Ad-hoc Coastal Steelhead Advisory Group: April 28 Meeting

James Losee
Toby Harbison
Amy Edwards
Eryn Couch
WDFW

Greer Meyer
Olivia Smith
Triangle Associates



Introduction

- Scope
 - “\$300K for the Department to develop steelhead plans for Grays Harbor, Willapa Bay, and coastal Olympic Peninsula. The plans must protect fisheries, provide fishing opportunities, and include stakeholder input and outreach. The Department must submit the final plans to the legislature by December 2022.
 - Tribal Co-Management
- Ground Rules
 - *Refer to the Advisory Group Handbook*





Process Check-In



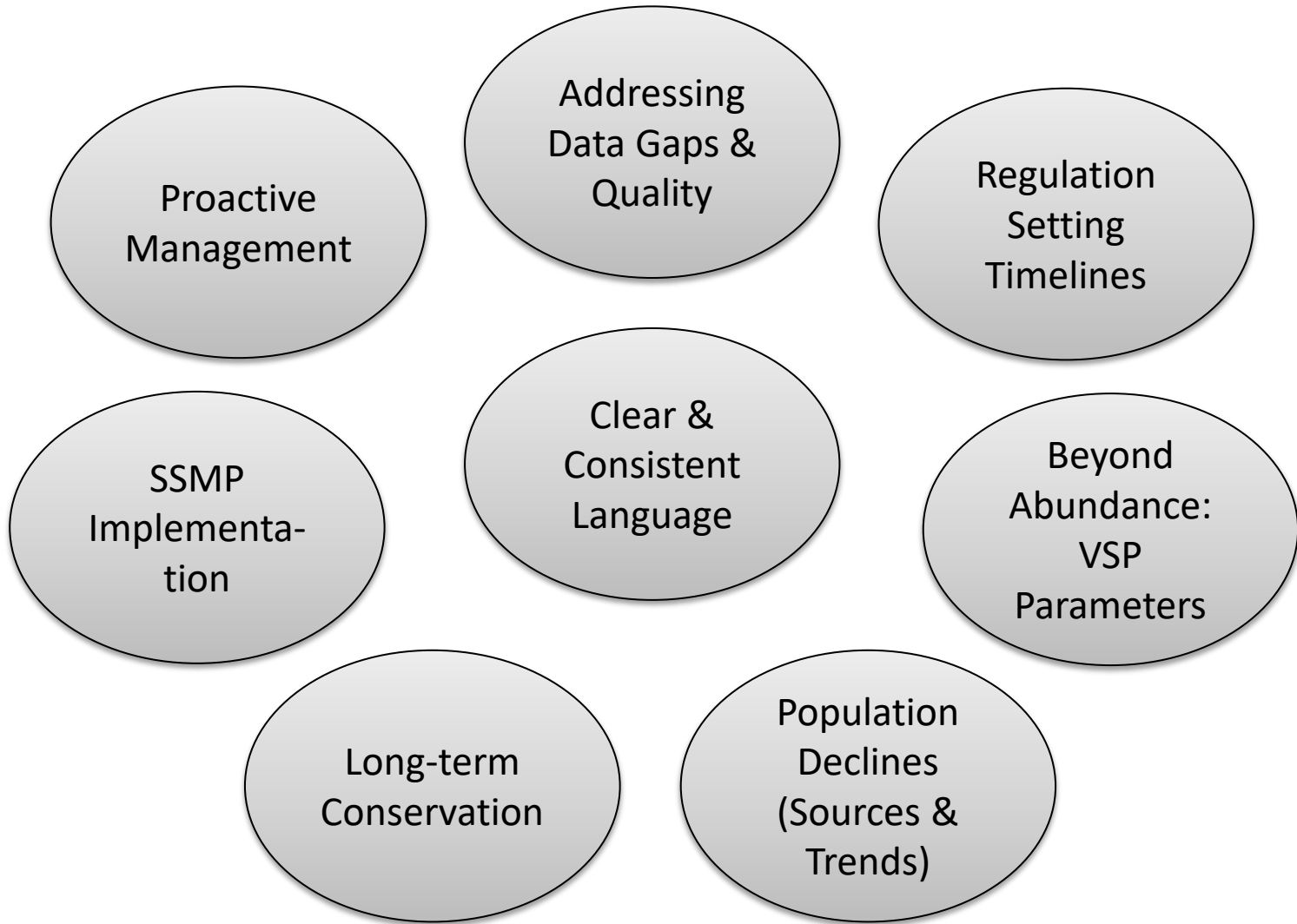
Review from Last Time: Group Discussion

Topics from Last Time

1. Background Section
2. Communications Sections
3. Regime Classification Approach
→ Coastal Steelhead Proviso
Implementation Plan



Feedback Themes





Monitoring & Evaluation

Document Structure Recap

- Intro Pages (Title Page, Acknowledgments, Table of Contents, Executive Summary)
- Purpose Statement
- Background
- Plan Framework
 - **Monitoring & Evaluation (M&E), Fisheries Regulations, Hatcheries, Habitat, Socioeconomics**
- Basin-Specific Plans
- Communications
- Regional Management Plan Vision
- Critical Research
- Concluding Pages (Timeline, Budget, Conclusion, References, Appendices)



Monitoring & Evaluation

1. Regime Classification
2. Assessment of Methodologies
3. Quantitative Methodologies
4. Database Management





Creel Monitoring of Recreational Winter Steelhead Fisheries

Why conduct creel surveys?

- Quantify impacts from recreational fisheries on direct and incidental catch
 - ESA listings – depressed stocks
 - Agreements with co-managers and other groups (ex. NOAA)
 - Follows agency mission
- Options for monitoring limited by fishery type (harvest vs. catch and release)
- Can provide in-season catch updates

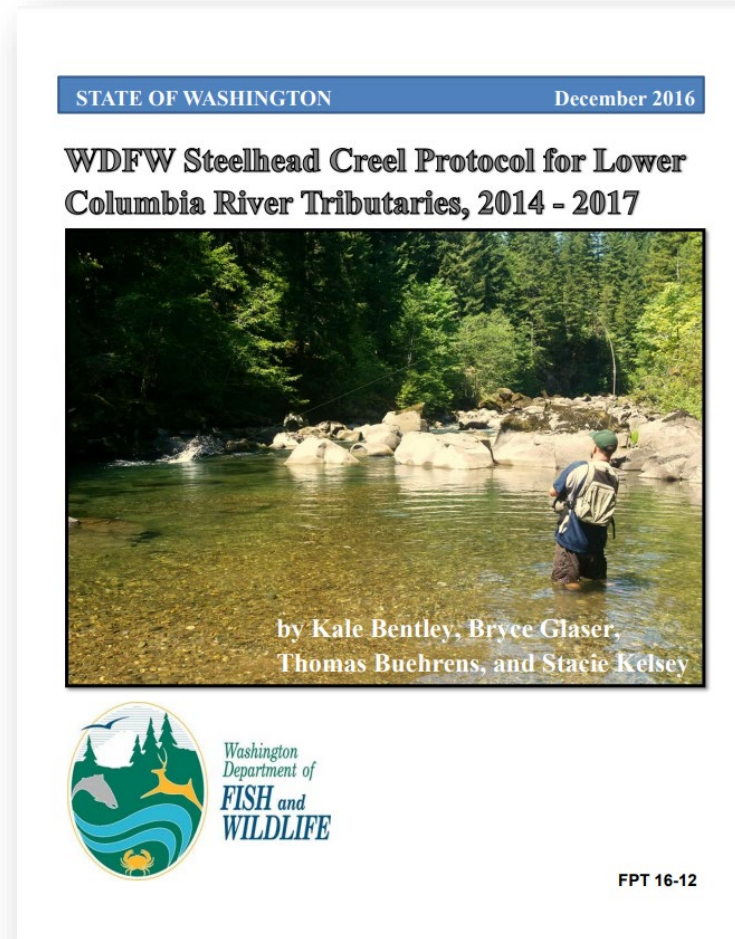


Photo courtesy April Bosley



How do we implement creel surveys?

- Roving creel method
- Combined existing protocols (Hahn 2000) with methods developed in other regions
- Key portions of creel data
 - Effort Counts
 - Tie-In Counts
 - Angler Interviews



What are challenges to steelhead creel?

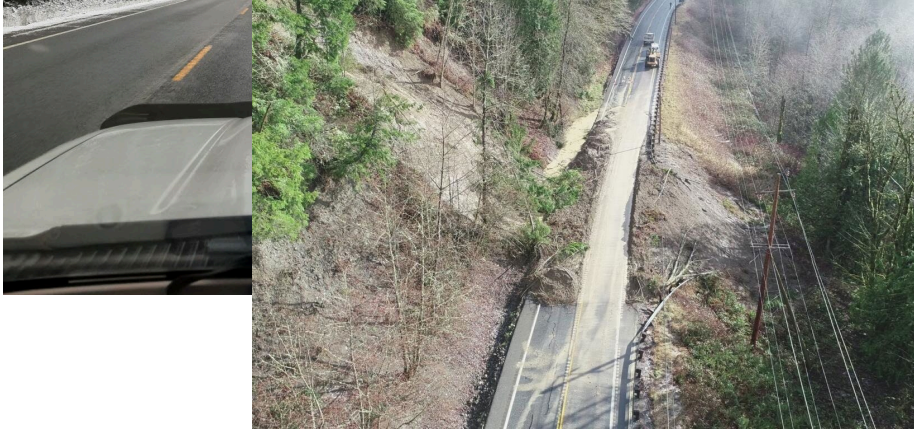


Photo WA State Dept of Transportation

- Winter weather
- Access issues
- Tie-In surveys
- Staffing issues
- High cost



What results do we get from creel surveys?

- **Estimates of catch, effort, and catch-per-unit-effort (CPUE)**
- Multiple analysis techniques
 - In-house spreadsheet model (Hahn 2000)
 - Bayesian, state-space creel model (T. Buehrens and K. Bentley)
- Goal is to accurately estimate impacts, preferably on a weekly basis

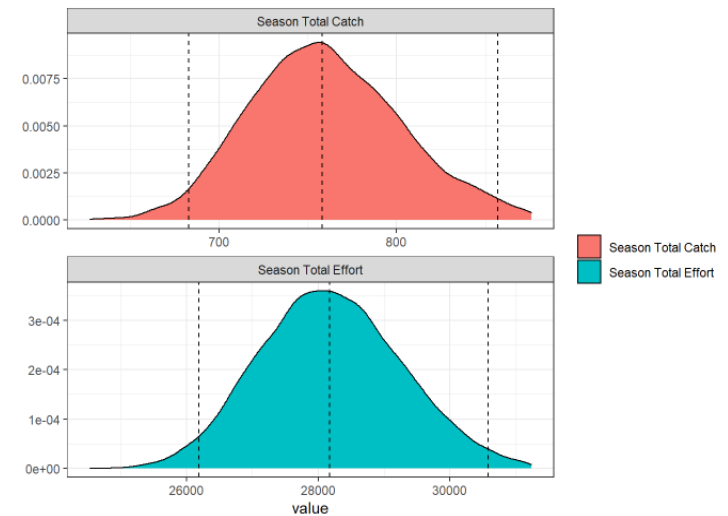


Figure 5. Season total catch (fish) and effort (angler hours). The middle dashed line shows the posterior median or 'best' estimate. Outer dashed lines show 95 percent credible intervals.

Figure courtesy Thomas Buehrens from preliminary 2021 catch and release Skagit creel data



‘Next-steps’ for creel monitoring?

- Developing field
 - Standardized protocols
 - Electronic data capture and storage
 - Modernized creel model
 - Reproducible analysis and reporting
 - Validation of results



Photo courtesy Andrew Fowler





Acknowledgements

Thank you to Kale Bentley, Thomas Buehrens, Randy Cooper, Kathryn Sutton, Andrew Fowler, Evan Booher, Jenni Whitney and many other biologists for designing and helping implement creel methods and analysis.

Thank you to all the surveyors and additional staff who collect data and make creel projects possible.



Questions?

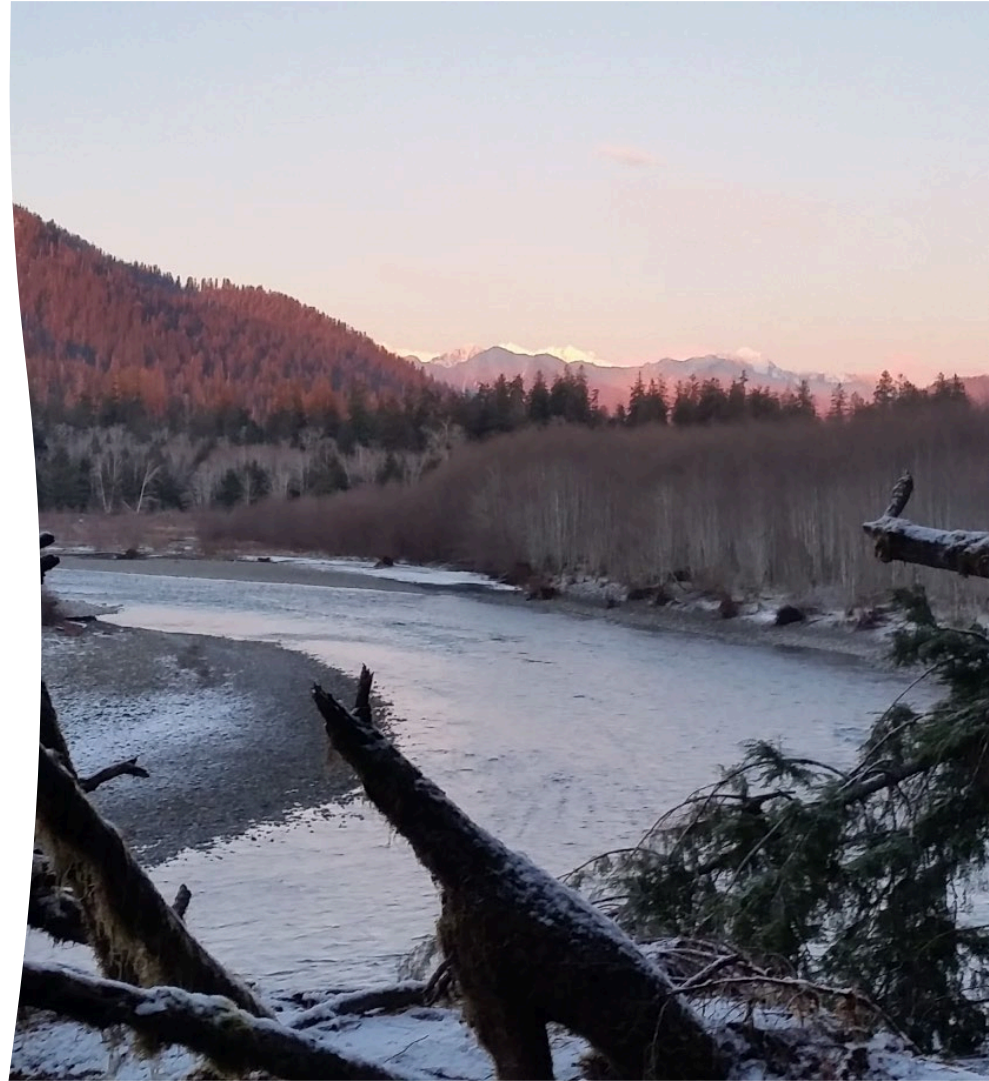
Amy Edwards

Washington Department of
Fish and Wildlife

Stock Assessment Biologist
Region 6

amy.edwards@dfw.wa.gov

(360) 480-0131



Validation of Results





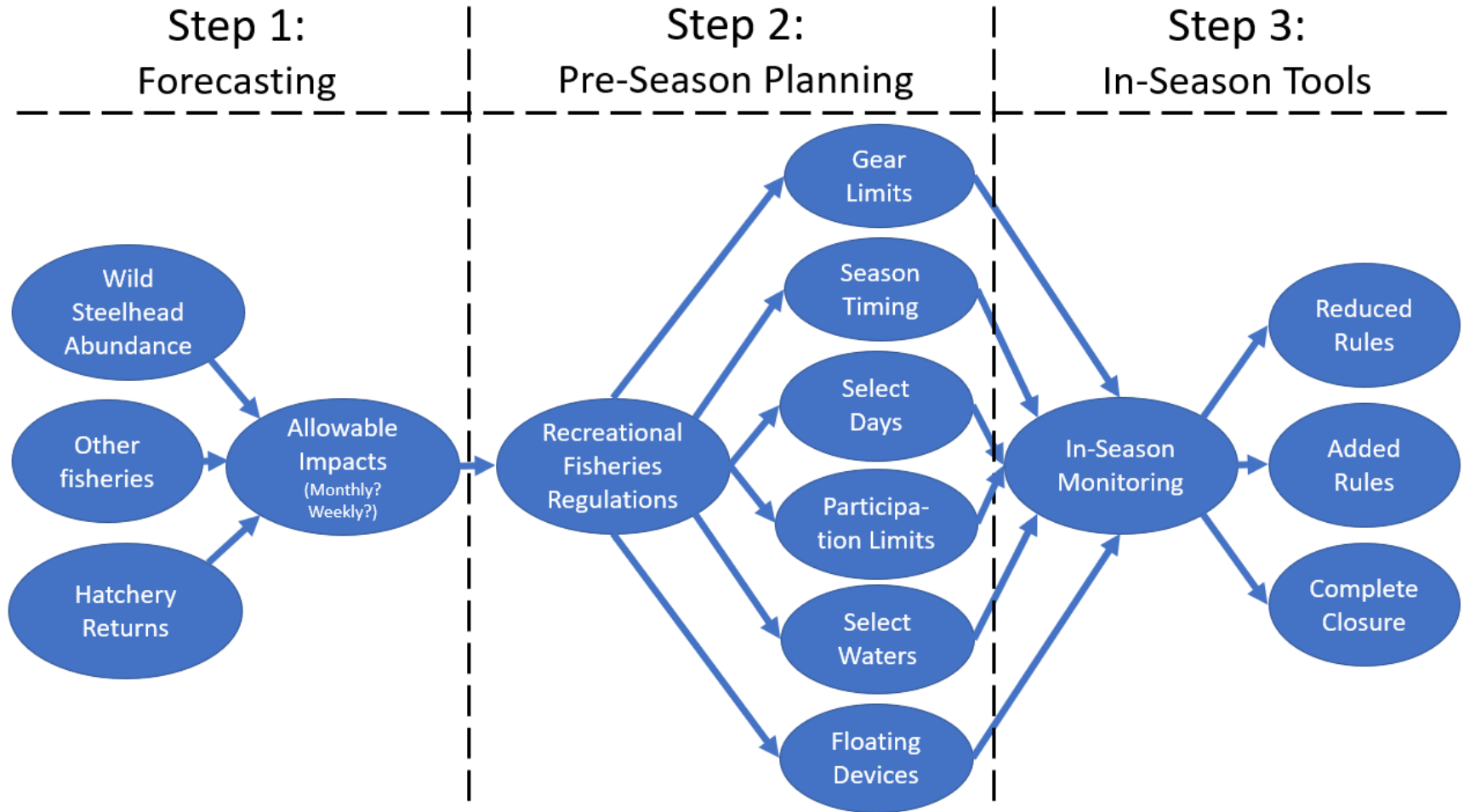
Fisheries Regulations

Regime Classification

- **Maintenance:** The full spectrum of possible recreational fisheries will be explored and evaluated against management objectives.
 - **Transitional:** The full spectrum of possible recreational fisheries will be explored and evaluated against management objectives, with priority on removal of hatchery fish without disproportionately impacting runs spatially or temporally.
 - **Conservation Focus:** Fisheries in the Conservation Focus regime will be closed to recreational steelhead fishing.
- *Management objectives may change over time*



3-Step Regulation Process



The goal is transparency.





Wrap-Up & Next Steps

For Next Time

- Choose a coastal river and consider how the fisheries regulations discussed might impact that river, both in terms of biology and socioeconomics.
- Are there alternative methods the Department should consider when determining fisheries regulations? Come to the next meeting prepared to discuss.
- Review documents





Public Comment

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





Thank you!