

Ad-hoc Coastal Steelhead Advisory Group: August 11 Meeting

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Welcome & Updates

- Meeting purpose and agenda
- Action item review
- CSPIP draft status
- White Paper and Fish Committee Presentation

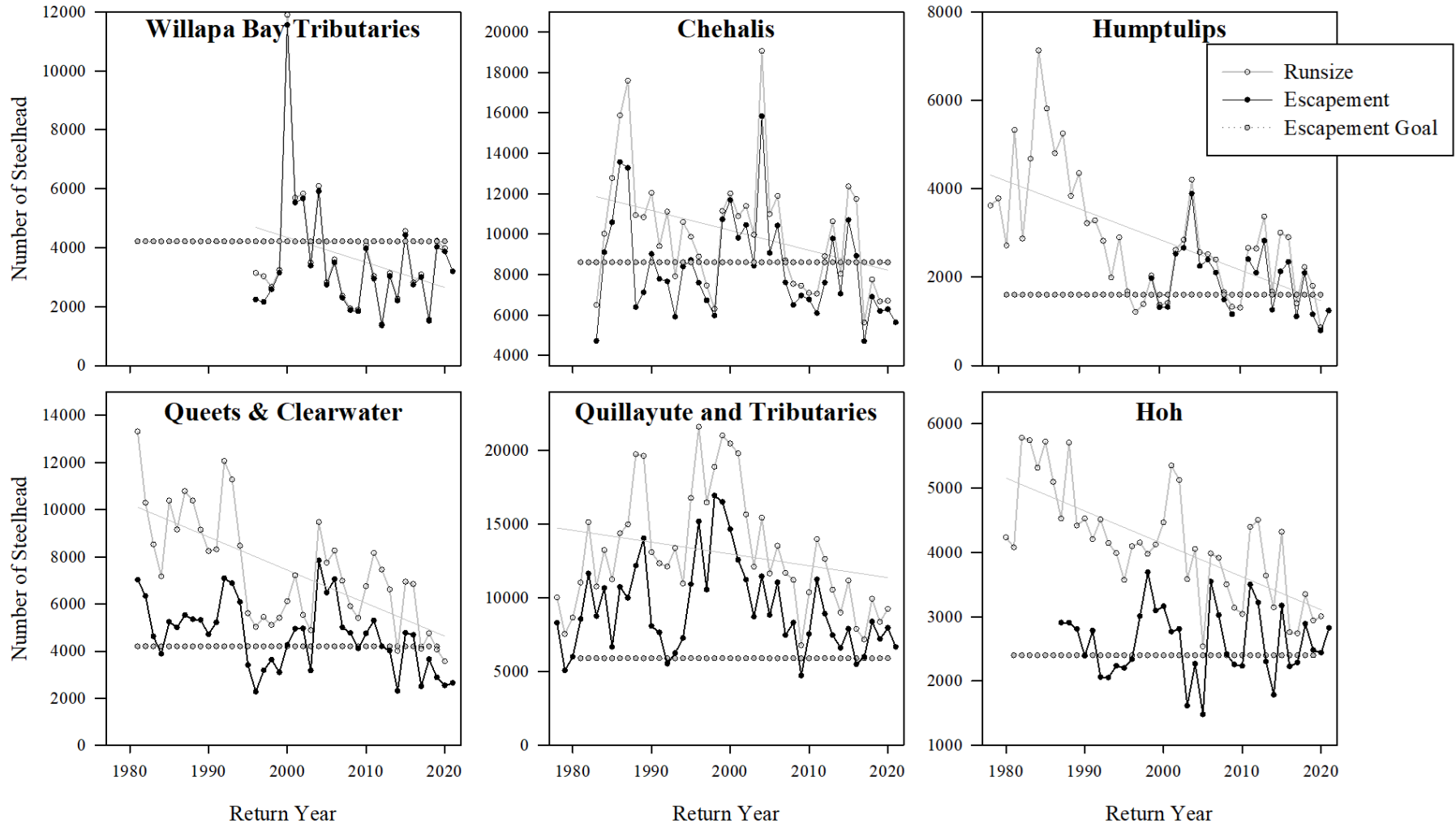


Fish Committee Presentation- Proviso Language

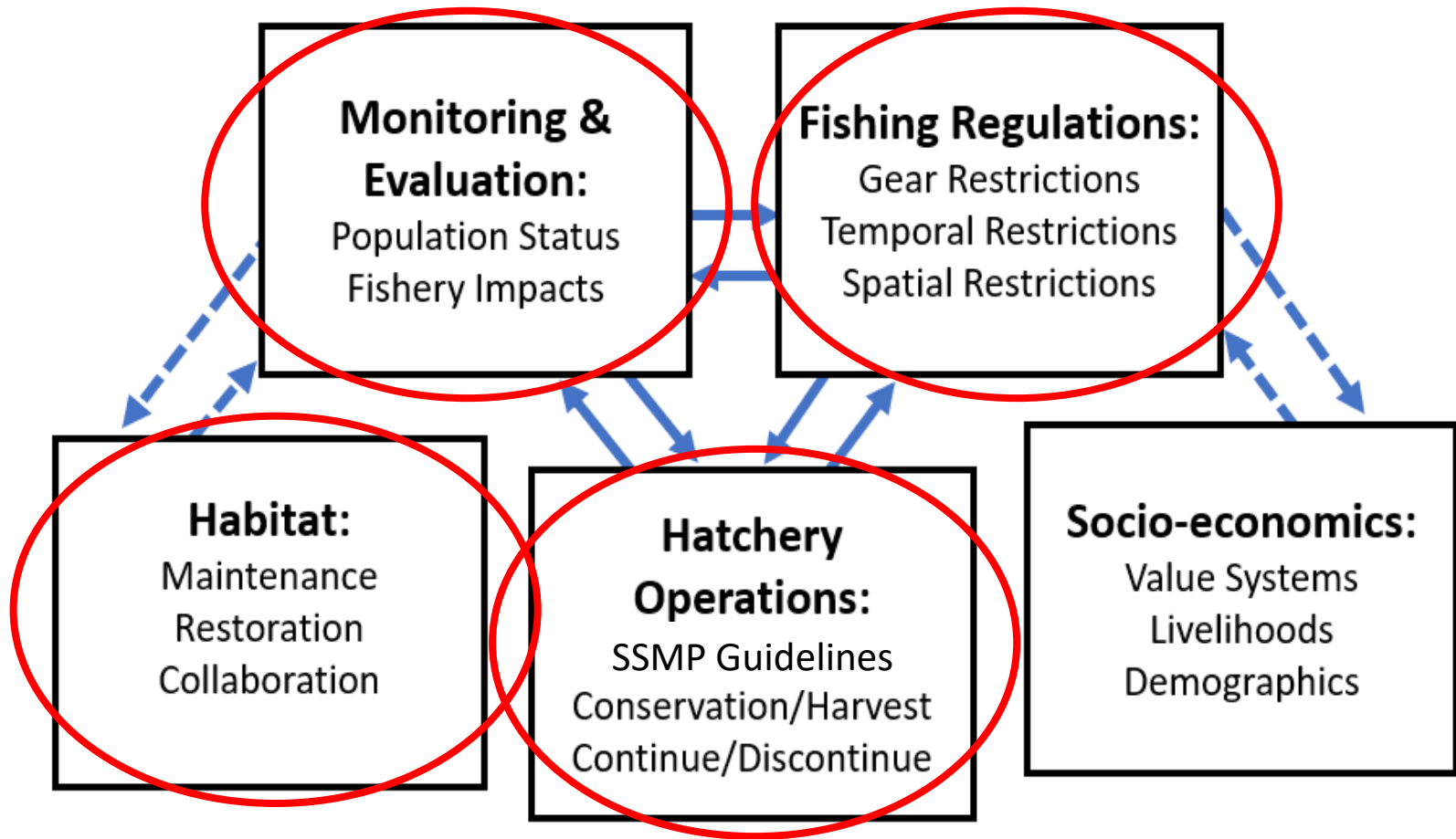
\$200,000 of the general fund—state appropriation for fiscal year 2022 and \$100,000 of the general fund—state appropriation for fiscal year 2023 are provided solely for the department to develop a plan to protect native and hatchery produced steelhead for each river system of Grays harbor, Willapa bay, and coastal Olympic peninsula. The plan must adequately protect those fisheries for healthy runs year-after-year as well as provide reasonable fishing opportunities. The plan must include active stakeholder input and include an outreach strategy sufficient to keep conservation and angler interests well informed of proposed changes in advance of annual fishing seasons. The plan must be reported to the appropriate committees of the legislature by December 1, 2022.



Fish Committee Presentation- Steelhead Escapement

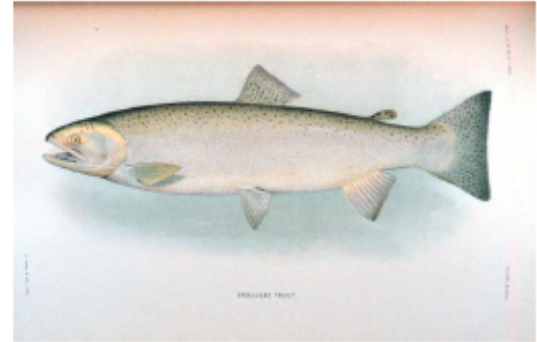


Proviso Implementation Strategy



SSMP Artificial Production

- Homework report-out: *“Read the artificial production section of the Statewide Steelhead Management Plan. Come to the next meeting prepared to discuss.”*
- *What did you want to discuss today based on your reading of the Statewide Plan?*



Washington Department of Fish and Wildlife

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

February 29, 2008



CSPIP Structure: Hatcheries

1. Hatcheries section of the Adaptive Management Framework
2. Hatchery program-specific modeling of how many hatchery smolts can be released within genetic thresholds (sliding scale approach)
3. Potential actions for how hatchery operations can be updated, beyond release scaling, to reduce genetic impacts and maximize catch
4. Wild Steelhead Management Zones



Proviso Language

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	Conservation Focus	Transitional	Maintenance
Wild Steelhead Abundance	Unable to design a fishery that will confidently meet management objectives	Below escapement but fisheries still possible within management objectives	At or above escapement
Monitoring and Evaluation	<ul style="list-style-type: none"> • Increase the spatial distribution and/or frequency of spawning ground surveys above baseline • Increased reliance on SONAR for in-season & post-season population monitoring 	<ul style="list-style-type: none"> • Increase the spatial distribution and/or frequency of creel monitoring and tie-in surveys above baseline • Increased spawning ground surveys 	<ul style="list-style-type: none"> • Ensure baseline Monitoring and Evaluation protocols are carried out
Fisheries Regulations	<ul style="list-style-type: none"> • 3-year mandatory fishery closure 	<ul style="list-style-type: none"> • Follow 3-Step Regulation Process • Target hatchery returns • After 3 of 5 years below escapement: <ul style="list-style-type: none"> - 3-year hatchery targeted fishery followed by 3-year mandatory closure 	<ul style="list-style-type: none"> • Follow 3-Step Regulation Process • Diverse opportunities available within SSMP management objectives
Hatchery Operations	<ul style="list-style-type: none"> • 3-year mandatory minimum releases (Hatchery Equilibrium Protocol) • Maximize facility attraction and hatchery fish recapture • Relocate surplus hatchery returns 	<ul style="list-style-type: none"> • Scale hatchery releases to remain within genetic thresholds • After 3 of 5 years in Transitional: <ul style="list-style-type: none"> - 3-year mandatory minimum releases followed by reevaluation (Hatchery Equilibrium Protocol) 	<ul style="list-style-type: none"> • Scale hatchery releases to remain within genetic thresholds • Potential for increased smolt releases given improvements



Hatchery Targeted Fisheries

- In the Transitional regime
- Spatial and temporal components
 - Need to assess overlap with wild fish
- Paired with increased creel above baseline to monitor and quantify in-season impacts



Hatchery Scaling

- Smolt releases will be scaled to remain within genetic thresholds (pHOS, PNI & geneflow)
- Rates of pHOS, geneflow and PNI are affected by run timing, survival rates, wild steelhead abundance, trapping efficiency, the number of hatchery fish released and other factors
- Proviso Implementation Plan should provide tools to remain within SSMP guidelines as the factors above vary though time

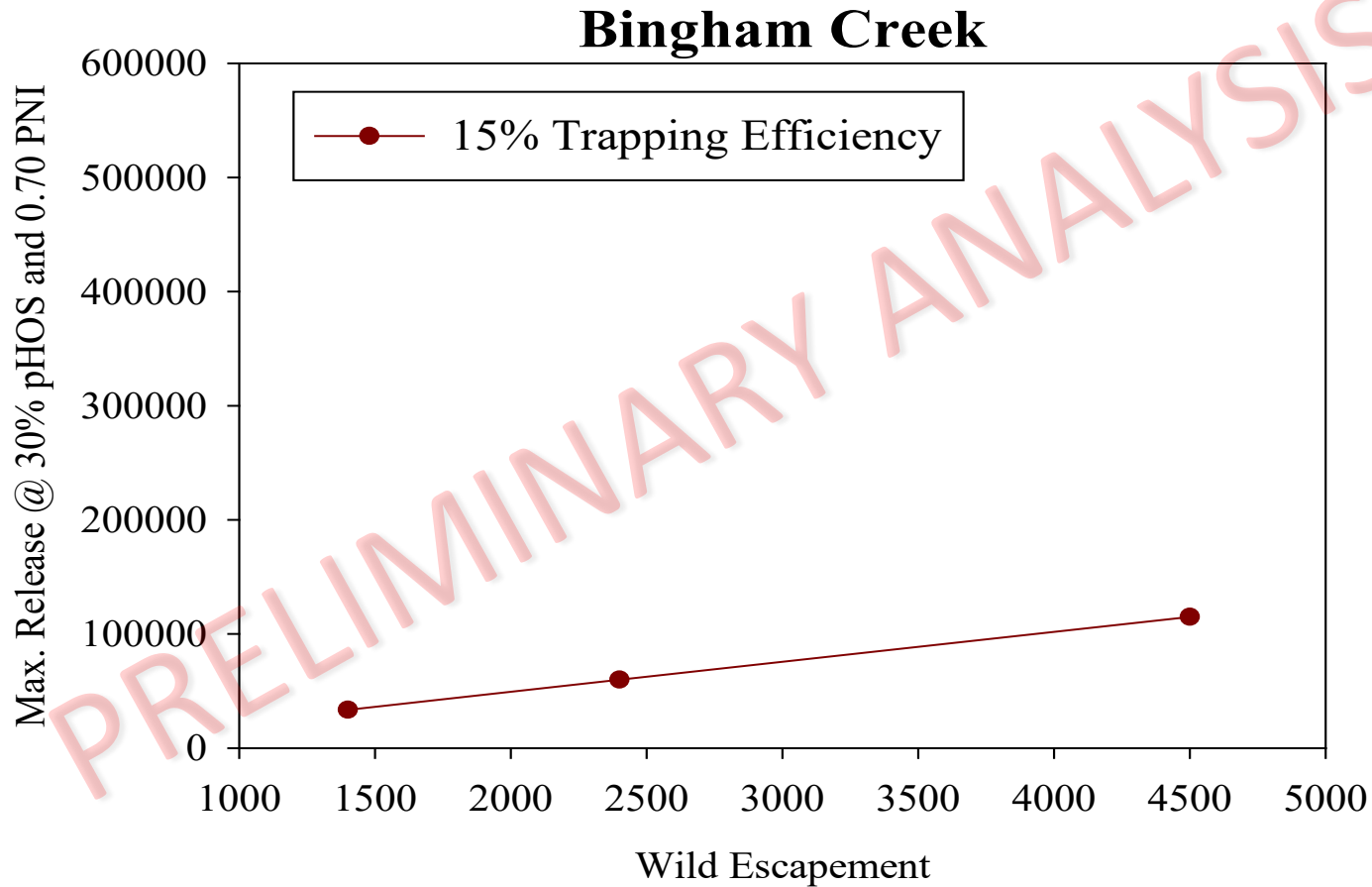


Modeling Tools

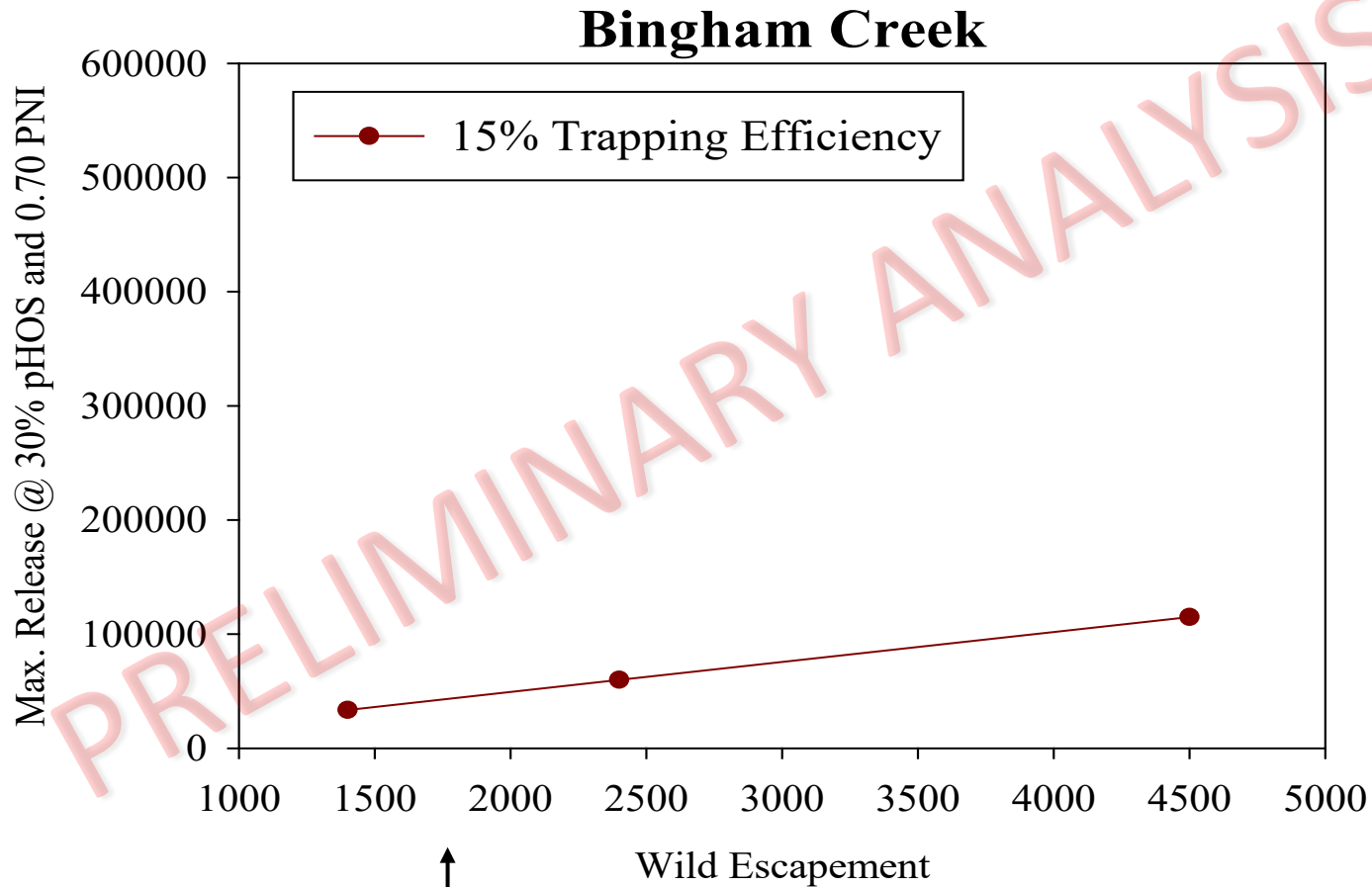
- The Statewide Steelhead Management Plan (SSMP) indicates that hatchery impacts on wild populations should not exceed 2% geneflow for segregated programs, and 30% pHOS for integrated programs (with PNI \geq 70%)
- Estimates of geneflow and pHOS have not been evaluated for coastal steelhead programs since their inception
- Models Used
 - Integrated Programs Modeled with the AHA Model
 - Segregated Programs modeled with the Demographic Geneflow Model (DGM)



Hatchery Scaling



Hatchery Scaling

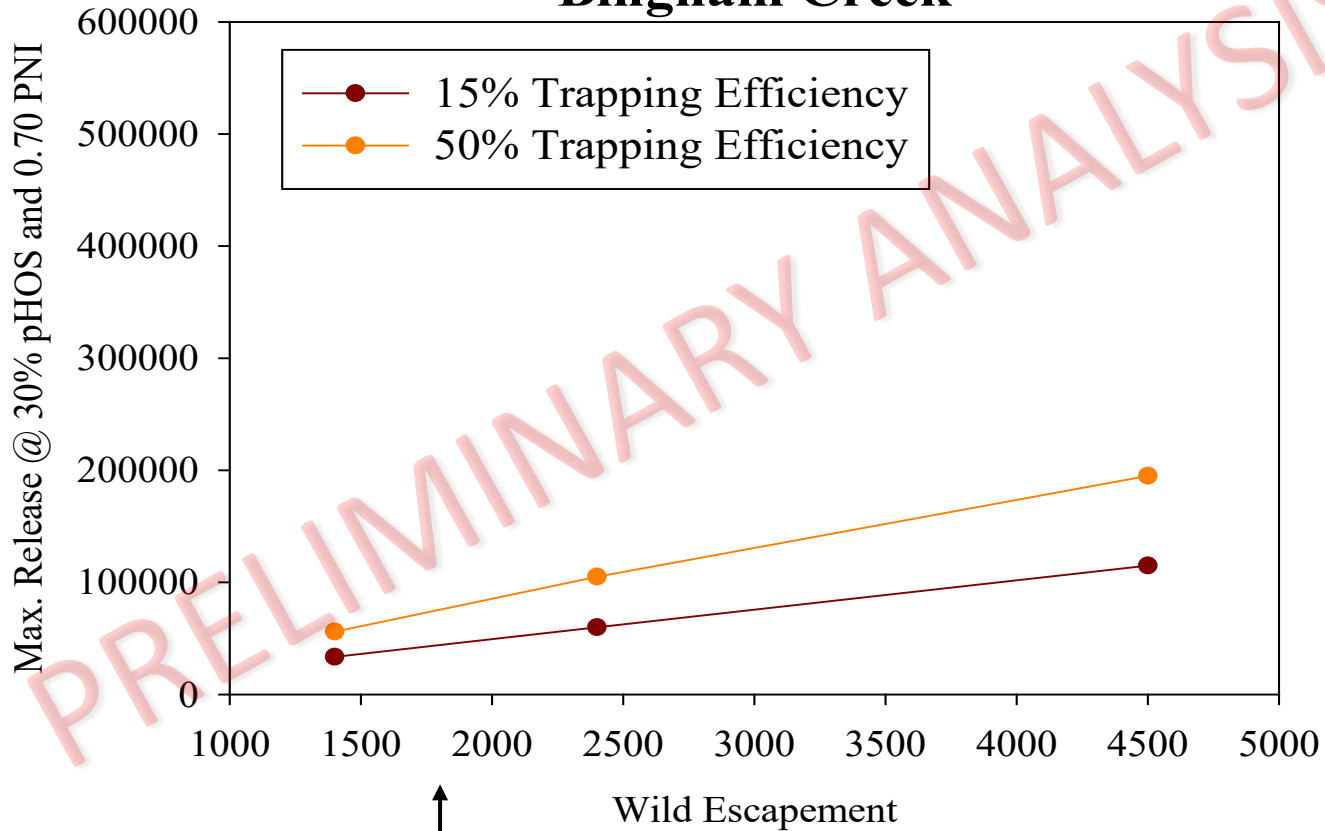


1,704=Recent 5-year average



Hatchery Scaling

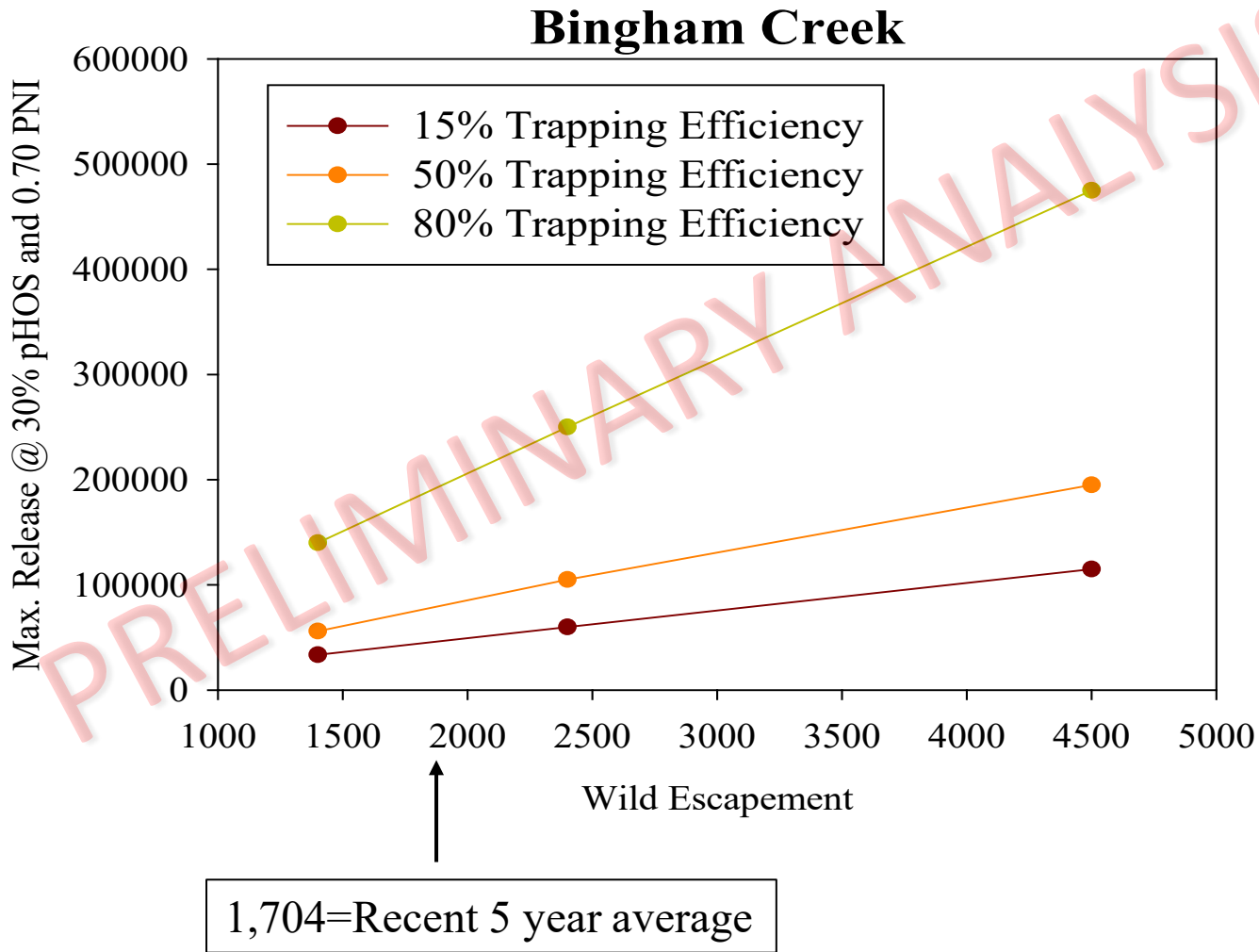
Bingham Creek



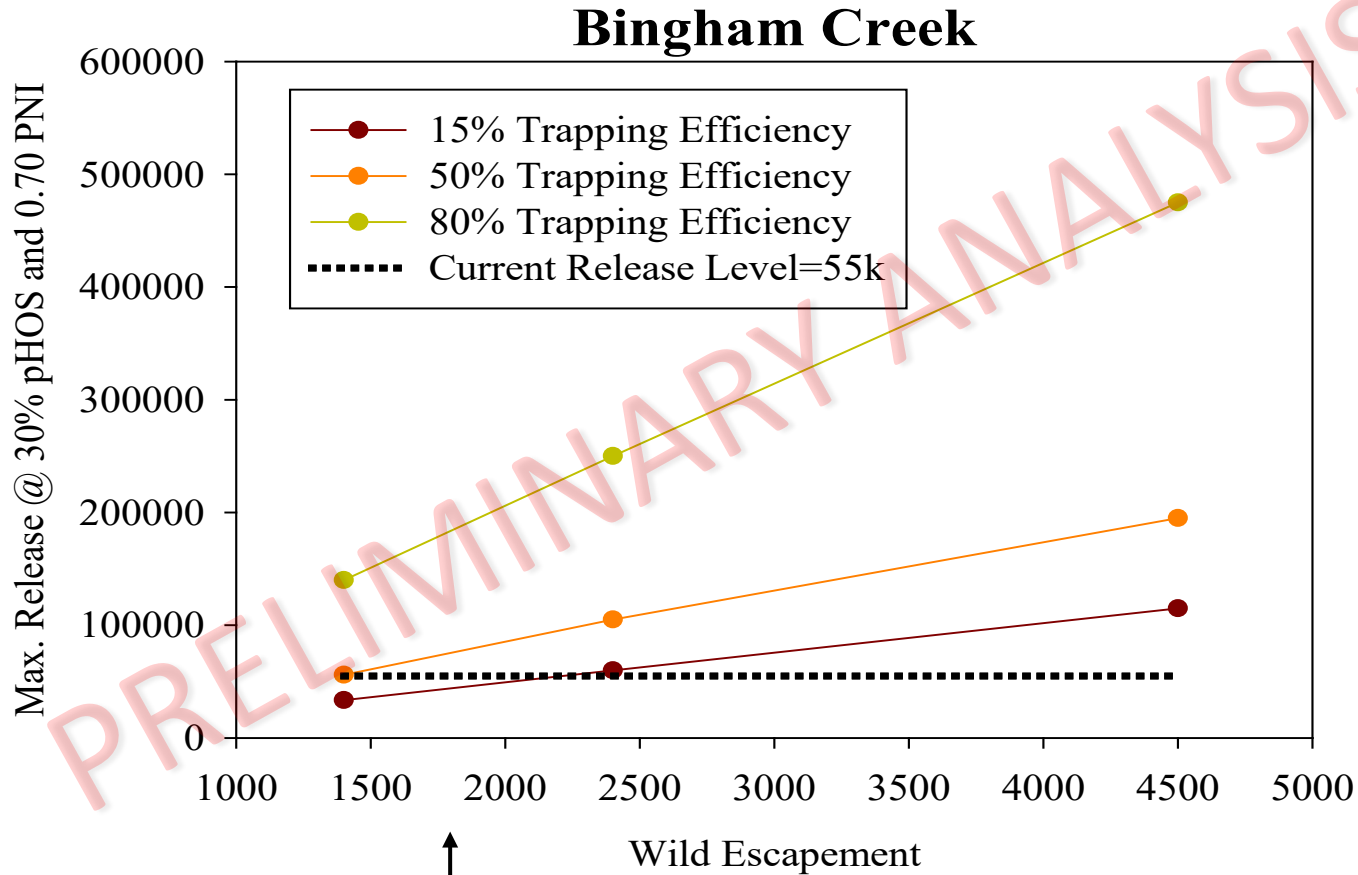
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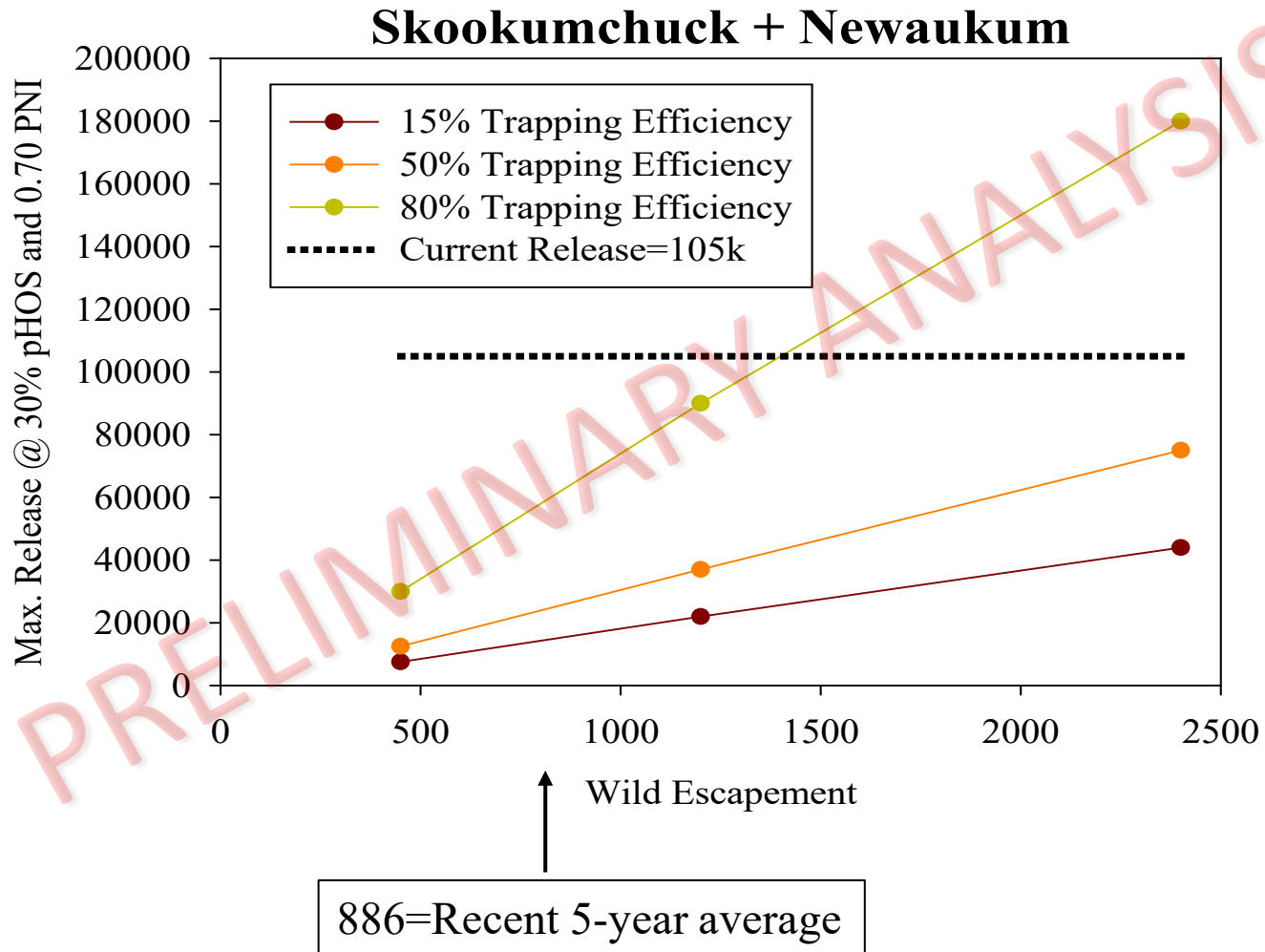
Hatchery Scaling



Hatchery Scaling



Hatchery Scaling



Additional Considerations

- Discontinue out-planting for segregated programs without trapping facilities
- Increase homing and site fidelity for integrated program out-planting



Naselle Hatchery, 1963



Additional Considerations

- Consider mandatory retention of hatchery fish, especially during years of low natural-origin returns
- Prioritize research on short and long-term impacts of integrated vs. segregated programs as well as risks and benefits



Additional Considerations

- Improve certainty around DGM and AHA model input parameters, including research on productivity to validate literature values
- Explore implementation of conservation – oriented hatchery programs



Wild Gene Banks (aka Wild Steelhead Management Zones)

- 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 & comanager process



WSMZ Criteria

- Areas must contain populations with relatively stable population abundance trends and a six-year average of >300 spawners.
- Areas may not contain on-station hatchery production or releases; however, they may contain streams that currently support off-station releases.
- Consider relative usefulness of given locations as control streams for research
- Consider designation of given locations as WSMZs for other salmonid species





Discussion Questions

- *What are the most important hatchery programs to maintain/build on for harvest?*
- *What are the major risks from hatchery programs for coastal steelhead (which rivers/programs)?*
- *How can WDFW manage/minimize/mitigate hatchery risks to **wild** steelhead?*
- *Can coastal hatcheries be used to support steelhead recovery (e.g., conservation programs)?*
- *What are the risks/benefits of segregated vs. integrated programs?*

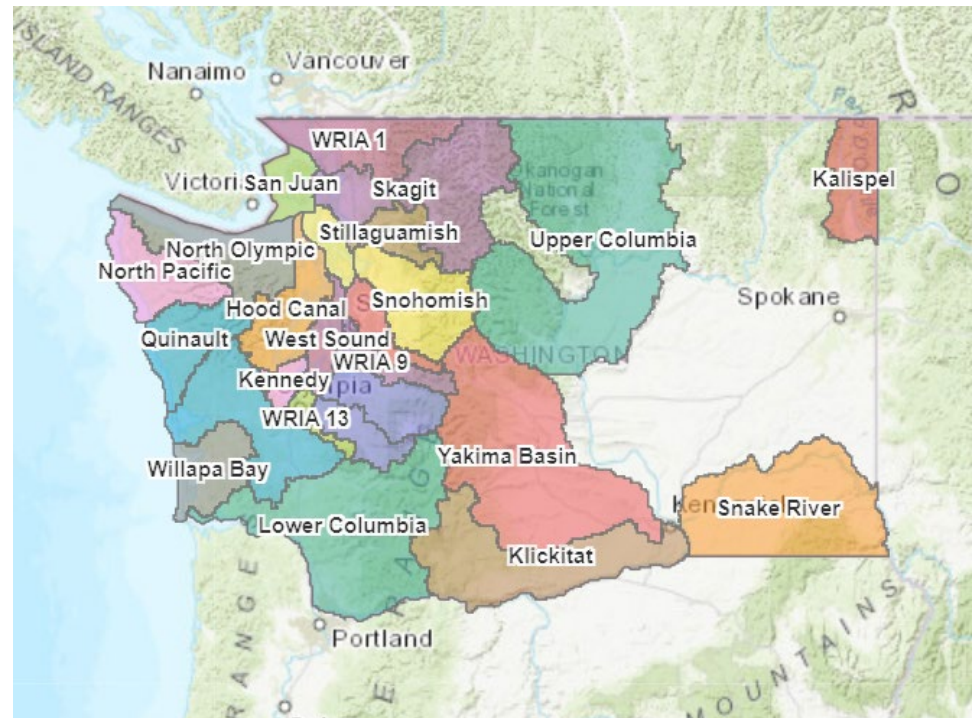




5 Minute Break

Habitat Background

- Addressed in the Statewide Salmon Recovery Policy (RCW 77.85)
- <https://app.leg.wa.gov/rcw/default.aspx?cite=77.85>
- Habitat projects are carried out according to watershed-based and locally implemented projects under the direction of Lead Entities



Salmon Recovery Lead Entities

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



Habitat Background

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)



https://en.wikipedia.org/wiki/Bogachiel_River





Discussion:

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

Wrap-up & Next Steps

- Post-Meeting Materials:

Future RMPs, Human Dimensions Section, Critical Research

- Next Meeting:

Monday, September 12, 5-8pm



Wrap-up & Next Steps

Homework:

1. Think about the following question and come to the next meeting prepared to discuss: What **research** is critical to improving coastal steelhead fisheries management?
2. What are the most important next steps in advancing management of coastal steelhead? How might those steps fit in to Regional Management Plans?



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

