

# Anadromous Salmon and Steelhead Hatchery Policy (C-3624): Implementation Progress Report

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Overview on the progress and status of the Policy's 10 Guidelines, and update on the development of the Co-managers' Hatchery Policy

# Development Co-managers' Hatchery Policy

- **Meeting dates**

- September 15, 2021 (Policy and technical staff)
- November 18, 2021 (Technical staff)
- February 3, 2022 (Technical staff)
- March 10, 2022 (Technical staff)
- March 16, 2022 (Technical staff)
- *April 15, 2022* (Technical staff)

- **Progress**

- May 2022: anticipate outline and list of policy questions for policy makers

- **WDFW Team**

- Laurie Peterson (lead), Eric Kinne, and Ken Warheit



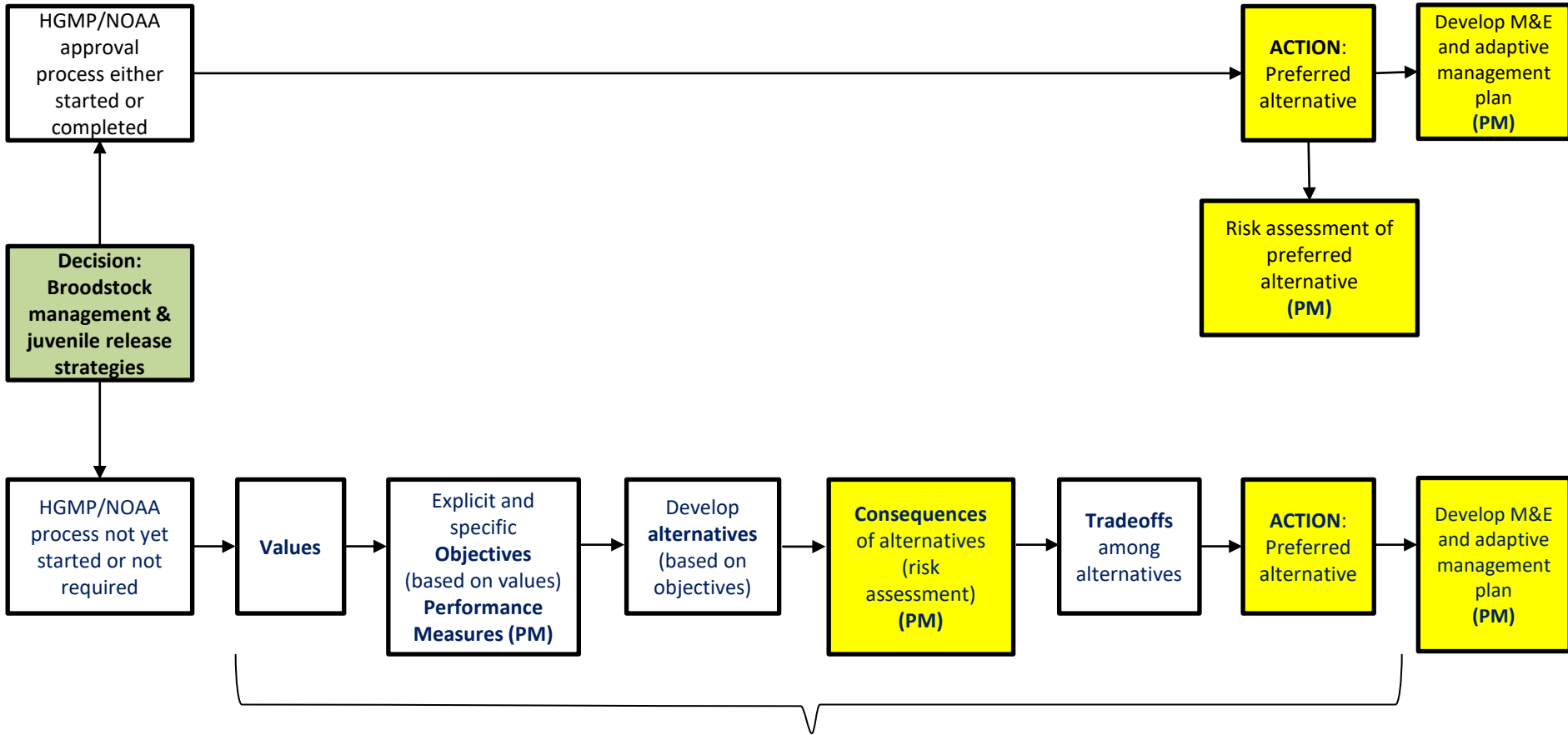
# Guideline #4 & 5

(Guideline #1 – 3 feed into #4)

- Hatchery Management Plans (HMPs) developed for every anadromous salmon and steelhead program.
- HMPs reflect balance between minimizing genetic and ecological risks and providing ecological and societal benefits.
- Balance achieved through a structure decision-making process, including a science-based risk management framework
- SDM and risk analysis developed in the Technical Procedures Document (TPD).
- TPD or individual HMPs will require environmental review (SEPA)



# TPD - Workflow



Decision making process and risk assessment



# Guideline #6 – SRO Prey Initiative

- **Funded SRO Chinook production**

- State funding – WDFW, Co-managers and PUD – 12.2 million
- Pacific Salmon Treaty – States, Co-managers, USFWS and PUD – 11.65 million

- **Funded SRO coho and chum production**

- State Funding – WDFW and Co-managers
  - Coho – 3.375 million
  - Chum – 8 million

- **Continued implementation of the January 2021 Master Plan**

- Voights, Kendall and Sol Duc received funding in 21-23 capital budget
- Additional projects will be included in 23-25 capital request – under development



# Guideline #7 – All Chinook, Coho, and Steelhead Propagated in Hatcheries Shall be Externally Marked\*

- **Fish marked/tagged in 2021 = 101.2 million**
- **Fish marked/tagged in 2022 = Anticipated 114.5 million**
  - Adipose clip = 90.1 million
  - Adipose + Coded Wire Tag (CWT) = 16.7 million
  - CWT Only = 7.1 million
  - Ventral Clip Only = 0.6 million
- **Trailers**
  - Auto trailers = 11 (3-5 staff)
  - Manual clipping trailers = 27 (up to 13 staff)
  - Manual tagging trailers = 2 (10 staff)

\* Except:  
(a) as modified by state-tribal agreements;  
(b) for conservation or other management purposes; or  
(c) to fulfill other research needs.



# Guideline #7 – Continued

- **Problem Statement**

- It is increasingly difficult to staff manual marking trailers
- WDFW is struggling to get all the fish we are legally obligated to mass mark completed each year

- **Actions Taken**

- Purchase of 4 additional autotrailers (2020 and 2022)
- Implemented increased wages and gas bonus for contracted laborers
- Increased outreach via social media
- Calls for volunteers
- Double shifts/weekend shifts

- **Proposed Solutions**

- Transition manual marking to Auto fleet
- Purchase 1-2 autotrailers each biennium to phase out the heavy reliance upon manual mass marking





# Guideline #8 – Hatchery Funding

- **21-23 Major Capital and Minor works projects directly tied to hatcheries that fall under this policy**
  - Major Capital – \$73.5 million
    - Wallace
    - Kendall
    - Voights Creek
    - Soos Creek
    - Minter Creek
    - Naselle
    - Hurd Creek
    - Sol Duc
    - Cowlitz
    - Deschutes,
    - Forks Creek
  - Minor works – \$6.5 million
- **These projects address passage issues, intake screening compliance, effluent treatment, aging infrastructure and climate change**
- **WDFW also received an additional 1 million dollars in 21-23 for hatchery maintenance.**



# Guideline #9 – Premium status to selected wild populations

- **Requirements**

1. No substantial genetic modification from past hatchery practices
2. Healthy condition with little or no same species/run hatchery influence
3. Exists in relatively high-quality habitat enabling natural selection to climate change.

- **Progress**

- As part of overall hatchery package proposal for 23-25 biennial budget, funding to genotype candidate populations.

- **Concerns**

- Requirement #1 may be difficult to detect using current technology and understanding of genomes for populations affected by integrated hatchery programs.
  - Currently, domestication hatchery effects are based on relative reproductive success studies, not by interrogation of genomes
- Obtaining representative tissues collections is challenging



# Guideline #10 – Hatchery adult management

- **Completed capital projects**

- Improved Passage and adult collection

- Forks Creek
    - Soos Creek
    - Samish
    - Voights Creek

- Updated intake improved acclimation and adult collection

- Humptulips/Stevens Creek

- **Current capital projects**

- Improved Passage and adult collection

- Naselle
    - Wallace

- **WDFW continues to work with Co-Managers on ESA compliance and Biological Opinion (BiOp) Implementation**



# Questions

