Puget Sound Steelhead Advisory Group (PSSAG) Meeting Notes

July 25, 2017, 12AM – 7PM Hampton Inn, Lynnwood, Washington, 98036 Drafted by Cole Caldwell and James Scott

Agenda Items discussed at the meeting:

1 Introduction

2) Coarse Scale Assessment Methods & Results

- Artificial Production Programs Gary Marston
- Fishery Management Thomas Buehrens

3) Hood Canal & Strait of Juan de Fuca recovery Scenario

• Building on the Hood Canal recovery scenario, develop a recovery scenario for the entire Hood Canal & Strait of Juan de Fuca Major Population Group (MPG.)

4) Hood Canal & Strait of Juan de Fuca Steelhead Portfolios

- Discuss and update draft Hood Canal portfolios informed by recovery scenario for full MPG and coarse scale assessment.
- Develop initial fishery and hatchery proposals for populations in tributaries to the Strait of Juan de Fuca.

5) External Messages

• What are the 3-5 messages regarding this meeting that we want to provide to other interested stakeholder?

6) Public Comment

7) Thoughts on Meeting

Advisors Attending

Andy Marks

Rob Masonis

Gary Butrim

Curt Kraemer

Jonathan Stumpf

Curt Wilson

Derek Day

Roger Goodan

Al Senyohl

David Yamashita

Jamie Glasgow

Mark Spada

Public Attending

Nick Chambers

Staff Attending

Jim Scott (co-facilitator), Cole Caldwell (co-facilitator)

Annette Hoffmann

Mark Downen

Jennifer Whitney

Mike Gross

Thomas Buehrens

Brian Missildine

Anja Huff

Beata Dymowski

Notes from the meeting per agenda item:

1) Introduction, Agenda Review, and Group Progress Status, and Process Review Notes

- Jim discussed that the meeting would largely encompass the group reviewing parts A-C of the decision making process matrix; reviewing the results from the WDFW technical analysis; reevaluate the Hood Canal decisions based on the WDFW analysis; and work on decisions for Hood Canal and the Strait of Juan de Fuca (SDJF) as a whole (see attachment).
- Jim emphasized that within the Hood Canal and SDJF MPG Table that red squares represent where we are currently, and that the black circles represent what we are seeking to achieve (see attachment).
- Ouestions from the group:
 - Group members expressed concerns that the handout materials had terms and acronyms that were unfamiliar. The group asked that the definitions section of the group binders be updated and provided to the group before each meeting.
 - Group members recognized that the PSSAG assessments were not "final", and that the tribes, NOAA, and others would weigh-in on the fishery and hatchery resource management plans and on the recovery plan.

2) Coarse Scale Assessment Methods & Results Notes

- Artificial Production Programs Brian Missildine presented on the WDFW Hatchery Program of the PSSAG course scale assessment results.
 - The WDFW reviewed and modeled the PSSAG suggestions using a Demographic Model for Gene Flow (DGF). This model uses surrogate information to attribute for missing river system data (e.g. Dewatto).
 - o Brian reviewed and presented a review of all model parameters and assumptions to the group.
 - Group members discussed a variety of potential biases that could result in under- or overestimate of gene flow.
 - o Brian reviewed the results of the DGF analysis for East Hood Canal, South Hood Canal, Skykomish River and West Hood Canal.
- Questions from the group:
 - o Curt Wilson requested to receive and review the raw data used for the model.
 - o Rob Masonis stated that the model has a lot of assumptions, is worried about the lack of data, and questions why some data is applied and why other data is not. He aspires for truer results that provide a better idea of when fish spawn and the abundance of fish.
 - Group members suggested that hydrographs could be used and correlated with the model to help management and group decisions (for spawn timing).
 - o Curt Wilson is concerned that the model is applying what we know about one watershed to another that we are lacking data on.
 - o The group has questions and is concerned about the DGF limit of 0.04.
- Fishery Management Thomas Buehrens presented model results for harvest rates and what populations could sustain and support harvest.
 - o Thomas emphasized a process that support short and long-term goals.
 - O Thomas utilized a Bayesian approach and Hockey Stick model (after determining that it was the best fit across different stock recruitment model comparisons) to produce simulated results on system specific Capacity (**K**), and Productivity (α) projections.
 - Marine survival was a key model parameter and was accounted for within the model.
 - The Hockey Stick model can be applied for specific life stages and can be standardized across different watershed types.

- After comparing various habitat parameters to model **K**, accessible stream length was found to be the best fit for the model. The group pointed out that other data is also relevant and likely would help describe variations.
- \circ The chosen model and statistical approach accounts for uncertainty (more for **K**, than α).
- o Harvest rate is dependent upon marine survival.
- Risk tolerance quantiles were established at: 0.1 = Primary, 0.25 = Contributing, and 0.5 = Stabilizing.
- Three critical threshold models were applied in the exercise: Model 1 represented an extinction vortex (Depensation); Model 2 represented effective population size considering genetic degradation; and Model 3 represented quasi extinction thresholds.
 - The group questioned the 4X threshold parameter and would like to discuss why this was the chosen metric.
- All model outputs represent conservative harvest rates and were based on 2% marine survival.
- Questions from the group:
 - Rob Masonis suggested being more conservative with group decisions and not managing for the minimum. He also emphasized that the group should identify what data sets are missing to improve management and decision making processes.

4) Hood Canal & Strait of Juan de Fuca recovery Scenario Notes

- The group began building on the Hood Canal recovery scenario and developed proposed recovery scenarios for the entire Hood Canal & Strait of Juan de Fuca Major Population Group (MPG.)
 - o The group suggested changing "Hood Canal/SJDF *Recovery* Criteria Scenario" to *De-Listing* Criteria Scenario.
 - o Group Task A results were compiled and entered into a spreadsheet. All final group result met or exceeded the established Federal criteria!
 - Group Task B results were compiled on charts and paper and provided to Jim for compilation.
 - o Group Task C was not accomplished for every group due to time constraints. This item will be addressed at the next meeting.
 - The group pointed out that Segregated Programs have more problems than just genetic issues. Rob M. wanted this noted.

5) Public Comment and Group Feedback Notes

- A representative of the public (Nick Chambers) stated that he was happy about the progress and looked forward to attending the next meeting.
- Group members suggested that the group present the PSSAG conclusions to the WDFW Commission. NOTE: It was determined that this should be added to the PSSAG objectives.
- Group members suggested using the recovery planning process as a tool to build support for the tribes.
- The question was asked: When will the group identify wild steelhead gene banks?
 - Jim stated that the Elwha River has already been established as a Wild Steelhead Gene Bank and that the portfolio developed by the group would identify populations with and without hatchery programs.
- Group members emphasized the message that Steelhead have further meaning to the group than just
 meat (i.e., it is the state fish, there is cultural significance surrounding the animal and activity, and
 that the people of Washington care about and share an interest in Steelhead conservation and
 management).

- A challenge was made to the group to come up with catch and keep scenarios for proposal considerations.
- The group re-emphasized that recreational fishing opportunity is important.
- What is the WA State Attorney General definition of Game Fish (Jim believes this is defined within WA State Statute)?

6) Key Message to Stakeholders Notes

- PSSAG is making good progress and working together well.
- PSSAG members are listening to each other
- PSSAG members are serving and representing diverse interests
- WDFW staff input is exceptional and is helping the process.