

PSHAAC Meeting Notes
Thursday March 8, 2012

Attendees

Members

Andy Appleby – HSRG
Lee Blankenship – HSRG
Dick Burge – Wild Steelhead Coalition
Frank Haw – CCA
Michael Schmidt – Long Live the Kings
Al Senyohl – Steelhead Trout Club
Frank Urabeck – Sport Fish Advisor
Roger Urbaniak - PSA, Iss. Hatchery

WDFW

Heather Bartlett
James Dixon
Brodie Antipa
Jon Anderson
Ken Warheit
Christina Iverson

1. Updates on PSHAAC recommendations for Puget Sound Chinook utilized in our Co-manager (HAIP) planning.

Brodie Antipa gave an update of HAIP status for those in Region 4. Still having some Baker Lake sockeye discussions concerning an increased program size and potential associated fish health issues.

L. Blankenship - Regarding the Green River, it seems like doing the MOU before completing the HAIP is a backward way to proceed?

J. Dixon - We are developing the MOU to incorporate hatchery reform into the process, pushing forward prior to issues with stock at Palmer Ponds.

F. Urabeck – Will any of the groups discussions be implemented by deadlines? When will any of the suggested changes happen?

J. Dixon – We are moving toward consensus with co-managers.

L. Blankenship – Can we please clarify “priority” on the PS Chinook matrix? State that this means not likely to make the PNI goal of .70 goal by 2015.

A. Appleby – We should work to define triggers to start managing for pHOS, measure of habitat recovery, for example re-colonization has taken 32+ years in the White.

H. Bartlett – WDFW supports spring Chinook re-introduction and sockeye with the Skokomish Tribe. Which Chinook stock to push forward as the recovery stock, spring or fall, is under discussion. We need to ensure fall Chinook viability.

F. Haw – What does the genetic data show?

M. Schmidt – Knowledge of the Skokomish system runs are from historical accounts. Seems to indicate a spring North Fork Chinook population, and a fall South Fork population. This is also compared to the hydrograph data. There is some dispute about the validity of this information.

Group Discussion:

F. Urabeck – What is our target for work products from this group?

A. Appleby – Let's work together and keep getting closer to consensus, not just set a date. 2015 is our targeted goal.

J. Dixon – reaching a consensus on data, harvest, et cetera to modeling a program for recovery is needed, and this can take a long time.

J. Dixon – BiOp in Elwha called for M & E and adaptive management, needed trigger points, estimates & schedules for plan, HSRG found lacking need to develop more robust plan.

F. Haw – What is the escapement on the Dungeness of spring Chinook?

J. Dixon – Good question. Would the White River stock be a good re-introduction stock for the Dungeness?

H. Bartlett – Exactly, this is the type of information we need to consider. For example, in the Skokomish we discovered the White River stock may not be the best for a re-introduction stock, as the White run has a more fall timed Chinook population based on genetics and hydrograph data.

D. Burge – Regarding the Elwha recovery, how will this work to reach agreement? Will we have a workable plan with the tribes?

J. Dixon – Not sure, we do have pretty similar goals long-term.

J. Dixon – Ken Warheit will be here to present Dave Pflugg's presentation, which actually contains WDFW genetic data for Skagit steelhead populations

H. Bartlett – We will also be discussing the draft steelhead summary objectives

Skagit:

D. Burge – Regarding the Skagit discussion, should we wait until the preliminary genetic data has been finalized to make a final recommendation? There are some members of the group that feel we can use the Skagit system to study how hatcheries affect a system, and therefore use it as a model to make some assumptions about how hatcheries could affect others, with respect to introgression et cetera.

H. Bartlett – Will more information really change our outcomes from the group? Marblemount program issues?

A. Appleby – We are not just finding data that there is introgression, we are just refining how much and this may change how we wish to change the Marblemount program (more or less).

F. Haw – Release locations and program changes could mean a different score for a WSMZ recommendation.

D. Burge – Skagit, Stillaguamish, Snohomish are all places fishing is now gone. There are some people that want to fish the Skagit.

Ken Warheit presented **introgression data for steelhead in the Skagit system** - Slide 2 of Pflugg's presentation, in which he is analyzing WDFW data, can be interpreted various ways; it appears to be a mis-interpretation of the data. The WDFW lab used the structure program, in which the populations can be grouped; second slide shows an average of introgression for each of the 15 groupings. This exercise using this data is erroneous. You can arrive at the same introgression rate of 50% whether you have 5 individuals fully introgressed and 5 with none, or you have 10 individuals with 50% introgression. This is misleading. Power of the data is lost when we have a mixture of two base populations that share a portion of baseline genetics (hatchery derivatives and wild). We would need to do a back cross to assign parents of each F1 fish to look at percent of introgression (75/25). We also should run the mixture of through the assignment program repeatedly to get an average for each group's variance of potential introgression. The introgressed fish are individuals where the statistical data is not significantly different from the hatchery fish.

J. Dixon – Also should we revisit Warheit's January presentation data, of 212 juveniles, is that the "right group" to evaluate introgression rates? Don't we really also need adult genetics?

M. Schmidt / J. Dixon – Program ranking is also a risk assessment & harvest ranking issue, if Pflugg's presentation has adult data it may be more relevant and show true introgression.

A. Senyohl – Are we seeing ghost effects? Cut programs, minimized pHOS in Skagit, we have done a lot over the years to minimize introgression, has it worked?

K. Warheit – Analyses should be run with 2 clear hypotheses to see if the investments we have put into the Puget Sound are minimizing introgression.

F. Urabeck / H. Bartlett – Everyone was heard and record will show strong feelings on Marblemount program and risks, it still needs to meet standards by 2015, or it is gone. Public input on eliminating steelhead at Marblemount, yes absolutely.

D. Burge – Correct me if I am wrong, can you currently monitor fisheries right now genetically with the tools in your lab?

K. Warheit – We have the capability to come up with a mechanism to measure domestication. We can also monitor overall RRS (relative reproductive success) or productivity of hatchery and natural populations (M. Blouin) in wild systems. We have 4 programs with Chinook in Washington where we have parentage and RRS analysis with smolt genetics. A UW grad student has partnered with WDFW to run Hood River data. Marblemount segregated stock study is approved for genetic studies. We have 16 *O. mykiss* SNP microsatellites.

Break until 1pm

2. Puget Sound PSHAAC Coho Population table designation updates

J. Dixon - Aside from chum, coho is the “backbone” of harvest in the Puget Sound.

In the Comprehensive Coho Management Plan (CCMP):

Primary means – after natural fish escapement is met fisheries can happen.

Secondary means – natural fish escapement is secondary to harvest objectives

CCMP is not distinctly aimed at conservation benefits, but no reason not to align with Hatchery Reform Initiatives. There is no TRT analysis of what population structures are, maybe set up a geographic boundary? Currently they are all treated as generic fall coho populations.

F. Urabeck – Do we want a wild coho population in each watershed? Coho are not listed, should we apply HSRG standards to unlisted populations in an attempt to “stave off” listing? Should we use Chinook georegions?

R. Urbaniak – Clarify 5%, census estimate total spawners system-wide, index expansion, clipped fish/total fish? Coho spawn in high water, hard to obtain all carcasses; all rivers have indexes done yearly for tagged/marked fish.

A. Appleby – Homing site fidelity is high on tributary water.

M. Schmidt – Last column of coho table? Use it to rank instead?

Nooksack/Samish:

There are no actively running coho programs in the Samish. Might have a stray problem?

Skagit – parse out species, could be four major spawning aggregates. Should we push for more sub-structure information for populations? Pick a North Sound potential WSMZ for coho? 7/7A Independent WSMZ tributaries? No current program.

B. Antipa - Upper NF wild “primary”, co-managers may want to revisit a coho hatchery

Mid Puget Sound:

F. Urabeck – Regarding the Cedar, UW is working on getting data on the stray rate, believed to be 5-10%. He would like to see the Cedar pulled out separately, designate as Primary, and protect it from the Issaquah program strays (keep it less than 5%).

A. Appleby – What is WSMZ pHOS level? Most information indicates we could be close to pHOS. We do need information on pHOS in the Green.

Question to the group – Does anyone know of South Sound tribes fishing selectively for marked coho with beach seines? We will see what information we can find.

Closing:

Next Meeting: Revisit coho, outline steps for pink, chum, and sockeye. April 17, 10 a.m. to 4 p.m. in Rm 537.