

## PSHAG Meeting Tuesday, October 4

Attendees

### WDFW

Heather Bartlett  
James Dixon  
Jeromy Jording  
Annette Hoffman  
Anne Marshall  
Sara LaBorde  
Bob Leland  
Charmane Ashbrook

Attendees

### Public

Michael Schmidt - LLTK  
Al Senyohl- Steelhead Trout Club  
Dick Burge - Wild Steelhead Coalition  
Nick Gayeski- Wild Fish Conservancy  
Frank Urabek - concerned citizen  
Hal Boynton - concerned citizen  
Andrew Marks - CCA  
Frank Haw - CCA  
Roger Urbaniak - PSA/Issaquah hatchery  
John Barr- HSRG  
Andy Appleby - HSRG  
Norm Baker-Sierra Club

Tuesday, October 04, 2011

9:09 AM

Heather- So hope everyone got the agenda, and we'll update the governor's budget package, and start off with the Green/Skokomish Chinook from last time. We'll focus on Steelhead for the majority of the day. We'll have one break, and a later lunch. We might also move downstairs after lunch given the amount of folks we have. Two meetings ago I provided a verbal update about budget scenarios. So I'd let you know about closures and significant reductions. When we submitted our supplemental budget we were thinking shaving, in respect to hatcheries. That would keep us whole in our 11-13 biennium. (Goes over the Aug 17 letter to the tribe) We then realized that wouldn't be enough, so we identified additional savings. We have submitted FBD forms for review to make those changes, we are setting ourselves up to take those.

Frank U- Obviously as these fish come back you aren't taking eggs. Are you taking eggs at Humptulips?

Heather- they have adults on hand but not spawning at this juncture. We only have days to get funding to possibly save some of these things. We have had some objections to the issuance of our change forms but we are still in a path to implement.

Frank U- do the tribes have a veto power?

Heather- Legal, maybe.

Hal B- What about coho, is that still on the table?

Heather- Yes, and we are anticipating to implement.

Hal B- Is there another forum for discussing the reductions in Grays Harbor?

Heather- you mean another public forum?

Hal B- yeah, we are concerned there.

Heather- we have fielded a lot of calls, even from legislators, and we are poised to take those cuts. We can talk outside about Bingham if you'd like, but let's keep moving here. So in Aug we needed to identify 5% and then an additional 5%. The commission considered the package, and wanted the Dept staff to go back and consider additional hatchery reductions from what we originally provided them. That additional option was Samish. I wasn't sharing that at that time, and since they have considered that we have provided that in the Governor's package. I'll get you a copy of the Memo we sent to Marty Brown to OFM. In the last 3 years we've had to make significant changes, we've lost \$41 million of GFS in 3 yrs. At 10% that would take us over \$50m loss of general fund in 3 yrs. At this juncture we've done everything we've can to operate efficiently, but we are now cutting core functions.

Al S- so you are tapped out.

Hal B- so Nemah is in the cut package also?

Heather- yes, and Hoodspout cuts the chum in Hood Canal in half, and cuts the Chinook program there as well. We focused our reductions on general funded facilities, and programs that we could gain some conservation benefit or that had no role in a conservation benefit. We did everything we could to minimize sport fishery effect. Samish is the farthest north, and the principal recipients are the Indian and non-Indian commercial fisheries.

Norm B- Are there populations from Canada that would re-establish there?

Heather- there are already populations there. Samish was a segregated program. So we are focusing on cuts to the commercial sector.

Al S- so has there been any positive feedback from the tribes?

Heather- The FBD change form process has resulted in objections from some of the tribes. Some of them are thinking about how they could pick up some of the funding.

Al S- so nothing really

Heather- Correct. We don't have MOU in place that require those programs to stay. We did change Issaquah from a permanent reduction to an inseason reduction, which makes it a one year deal now.

Andy- those programs that were reduced based on conservation needs, I'm assuming you don't want money for those.

Heather- we could add about 250k and meet a contributing criteria for the Cedar.

Andy A- Right, and the distinctions are important to make. The concept of conservation will drive refunding, if the purse seines or gill netters want to fund some of these things.

Heather- Just so you know the revenue forecasts have continued to get worse. So now its over a \$2billion shortfall, and some places may have to make reductions over %20. So much of the state budget is committed to things that can't be changed.

Andy A- SoK-12 is 1/2 of the state budget, DSHS is another 30% and both of those are constitutionally untouchable, and so the hill argues over just 15-30% of the budget.

Heather- So OFM is being asked to put together a budget package of what a reduction could look like. Because of the time scale and deepness of cuts were based on implementation as of July 1, the earliest we could implement would be Jan 1 of 2012.

Frank U- and so we could see something more than 20%?

Heather- yes, and people are looking at more hatcheries. Hatcheries are vulnerable because they are clear, front and center, and funded by general fund.

Sara- They've also not been cut yet. We are \$50million short in general fund and we haven't closed a hatchery yet. That ox hasn't been gored yet, and you've got a pile of people in all the Natural Resource Agencies that are focused on that.

Andy- the general fund is spent in Puget Sound and Coastal hatcheries. There's only one part of the state.

Frank U- Ok, but people need to understand that fishing is already poor, and they need to be able to react at the lobbying level if need be.

Sara- I agree with that, but just realize what the landscape is.

Heather- so we have 18 hatcheries are under general fund, and they are as Andy A said in Puget Sound or coastal WA. In the letter to Marty Brown we passed to you it shows that fish food costs have gone up, and so some of the things we've done is to release fish at smaller sizes to cut utilities. Our federal funds have started to decline. Our license fee revenue is inadequate to sustain us. We have gotten private sources but we are losing ground. We did say further cuts will hurt the economy, and it eliminates fisheries on the coast that leads to direct loss of jobs. Less protection of resources will result as well, and so the picture is fairly bleak. And remember this is just at the 5-10%.

Hal B- so Nemah is on the table?

Heather- It's on the table. At 5% its Hoodspert. At 10% its close Nemah and Samish.

Nick G- The further cuts would reduce staff and HPA protection?

Sara- No, its likely that the HPA program would go away, although that would take legislative action. We went after a fee for it and we couldn't get everyone on board to support the fee, but that will be back on the table. We are about to really lose the only protection source we really have regarding habitat. The governor's office recognized the importance of the program and last time it was initially slated to take a \$5million hit, but the governor's office only hit them \$1m after all the talks.

Frank H- so did you attempt to recruit support for fees there?

Sara- yeah, but you guys were focused on the license fee increase.

Nick G- Private money to protect the program that would be the one.

Heather- any additional questions?

John B- Can you give us any future predictions?

Heather- maybe in three weeks we'll see. The governor has indicated that across the board is not the best case scenario at this point. We have begun to meet with the tribes and we've had some one-on-one meetings with them.

Frank U- but you're meeting with them on the 5%-10% and they have lobbying power, but it becomes a different situation as it moves into the governors office.

Heather- I've participated in some meetings at this juncture, and I've been pleased with the approach the tribes are taking. They are looking at a bigger picture and there influence is going to come in other situations.

Andy A- I've never really felt like the tribes have some kind of veto power. The classic example is the reduction of the fall Chinook in Hood Canal, because there we have a signed document that says 'you will produce this amount of fish' and there were still reductions that came down.

John B- Yeah, but that signed agreement came with the caveat of budget issues being a reason to allow reductions to occur.

Frank U- so they don't have a treaty right to block this?

Sara- the State is not obligated to fulfill treaty rights, that's the federal government who has to speak to the treaty right as they are the treaty signatories.

Al S- so you're not anticipating the tribes will go to the governor yet? I think we would like some financial help.

Heather- presumably the tribes are considering the economics of investing in the production, and they contend that it's our responsibility to fund it.

Al S- my point is cooperation is needed here.

Heather- We've asked for their help, and they are willing to provide that but it may not come in the form we need.

Sara- Historically it seems to many that the tribes have veto power, but we have 3 months to implement it, and every month is like one full employee's wages. Numerous administrations have taken cuts they know they can implement and then move forward rather than trying to implement those that are would take a lot of political play as the more time you waste trying to get them done, the more money you are spending. What can you implement to get the cut in by July 1 is the real issue, as the sooner you take a cut the smaller it has to be.

Al S- my position is the opposite of that though.

Sara- I understand, but we are at the point that we are past that. Some tribes will come to the table and put money up. Some tribes will have the power to bring legislators together to talk about the cut, but the end result is if we wait to see the outcome and we don't get funds then we have to take a cut that amounts to 6 months of money in 1 month, and that really hurts.

Frank H- but it's egg take time right now.

Andy A- recognize this isn't a one shot deal folks. For the next 3-4 years we'll be able to work out deals. Yeah we might miss one year of brood stock collection but fish will still be returning to make up hatchery programs needs for few years.

Heather- Correct, like for Issaquah we're taking fish to account for the reduction. We aren't concerned about a lack of fish, but for Hoodsport/Nemah/Samish we are operating at status quo. One caveat, Samish was a one year as it would take more time to implement.

Roger U- so if the tribes have a certain period to talk about funding, doesn't the public have the same opportunity? If there is that availability and what are the time frames?

Heather- Great question, as the Purse Seiners are currently funding McKernan and are thinking about the Hoodsport cut of chum as well. Issaquah groups would have to come together outside the agency as the Dept can't solicit for money.

Al S- how many people went through the hatchery at salmon days this year? 100k?

Roger- I don't know.

Heather- they do still have several large programs there, as its still fully functional. So on that down note.

Andy M- so are being backed into a pay to play scenario?

Andy A- Now to be honest, hatcheries are hugely subsidized with federal and local money.

Andy M- So the wildlife account is funded by recreational license sales. You've reflected that by trying to hit the commercial / tribal fisheries production lines. The Puget Sound Hatcheries are general fund so I understand that...

Heather- True as the funders are getting a benefit, but it is still a state resource. With the Purse Seiners, yes it is was their money that is funding the production but they don't 'own' it. Last year there was some legislation that would create a dedicated funding into specific hatchery production, and the recipients would have been the only benefactors, however the problem is that it's a state resource and every tax payer has a right to access it.

James- One thing that's not that well known is that the different funding levels based on license sale types. There are different levels of funding based on license sales going into different pots, and so you have to realize that license sales currently don't make up the amount necessary to pay for salmon production.

Andy M- So what is the role in trying to help steer direction here? Are we advising on this area?

Heather- I looked at my job as just providing a report on these issues for your information and to show you the landscape of where we are at fiscally. I don't expect an input or reaction here, and we'll try to cover our next Agenda item and then move down to room 175. So for the Green / Skokomish we may have a bit more discussion. So for Green whether its primary or contributing is the discussion. Seems like we are leaning towards a contributing now, correct?

Frank U- So I thought we had to get an intermediate designation. I can support a contributing.

Michael S- A goal has to be established at some point, regardless of how much information you have now.

Frank U- I'm willing to accept that. I can go with contributing.

Nick G- With the understanding that we will see some development of these intermediate bench marks.

Heather- given that the Soos Creek hatchery is a work horse for the fisheries a big reduction would have significant affects.

Frank U- I would move the HMP up to a more near term. Rather than reacting about that, we'd like to see a public process to help shape that and I'd like to see that language changed. With regard to Howard Hanson I'd also like to see some language change to clear it up. The other thing is that big slide area below Geyser Park may have productivity affect.

Heather- So one of the things I've added is under near term is re-evaluate productivity estimates for Green River.

Frank U- correct, but include that slide in that.

Nick G- I do think moving the HMP to 2013 is valuable.

Frank H- Is there any historic documentation about Chinook above Howard Hanson Dam?

Hal B- Yes.

Andy A- so there isn't a WSMZ designated in Hood Canal? I think I remember the policy dictated that we needed to, or were we loading up in another basin?

Nick G- We did talk about the Elwha, and the Snoqualmie is checked off. So for the Straits we did capture the Elwha.

Heather- so for the Straits we have one, but for Hood Canal?

James- we have supplementation programs there.

Heather- So I'll update the table and for the near term actions I'll add what Frank said. How about the rest of it?

Sara- begin public process for the Chinook HMP is the last thing they're suggesting.

Heather- thank you.

Frank U- I thought we were going to get funding last year for a rebuild of Soos Creek?

Hal B- It didn't make the cut.

Michael- is this group talking about funding priorities?

James- Soos has to be replaced if we want any substantial production on the Green.

Heather- So we're fine with the long-term action goals?

Sara- I don't know the Green, but on a map the blue line it makes looks pretty wide. So for a Green river weir can we evaluate the Nisqually first before tying a bunch of asks for money there?

James- not only that, I think the words 'if needed' would be a better fix there, as we might not even need a weir in the Green.

Heather- so for the Skokomish recommendations here are we ok?

James- so these actions are prior to making large reductions?

Andy A- ok that makes sense.

Frank U- So a discussion that I had with James about the Green and we asked him to do MSF by everyone including the tribes we didn't have a weir in there. We could use a weir to affect a MSF effect if the tribes wouldn't go to MSF right?

James- the difference is that differential would be reduced in the Green. We need a productivity re-evaluation, but in the Skokomish the productivity is so low that there's really no production at all.

John B- Do we have an idea of the productivity with smolt monitoring?

Sara- no

John B- so we're willing to buy that the Skokomish is not that productive, and the Green is more productive?

James- Yes, based on returns that we are currently seeing now. There's just not as many fish coming back. In the Green we've seen declines in outmigrating fish, in addition we see total numbers that are recruiting into Soos we are seeing lower numbers of NOR fish.

Sara- so when you say more HOR, we are now showing that the majority of fish that were returning were actually HOR in the first place, and now we are classifying them as hatchery due to increased marking of the smolts?

James- yes

Frank U- so how do we find productivity if we don't have smolt outmigration?

Sara- the M&E is yet to be developed.

Frank H- what you need is getting some fish to develop in that system.

Heather- what's the timing for the development? 2-3 years? I'll move that into the short term then.

Sara- NOAA needs to make a decision about the stock there. The kink in this is that the FERC doesn't say anything about a fall Chinook population, but not purposefully.

Heather- So the rest of the portfolio?

Hal B- Maybe for the Green that the run timing is moved back 3 weeks and so that the fish come in during warm water temperatures and maybe an integrated program would be a good goal to have.

James- you could say a properly run integrated program, but the genetic tying of the programs is hard to overcome.

Heather- so I've added that in some of the short term actions. A two stage integration would come from that. I'll clean this up and send it back out.

Frank U- so we are producing a product here, is this in the end going to make a difference on the end product of an MOU with the tribes? We would hope to know that the tribes are hearing what we say here.

Heather- that's the expectation. We can't presuppose what the outcomes going to be.

Michael S- I am concerned that there will be a final product. If it's a situation that we can't capture everything in a standing document, once we depart we don't have anything that captures our recommendations.

Heather- so one of the things we had talked about was capturing things on the website, and its on our to-do list.

James- This process is slated to go through February, the intent is once we get through coho our meeting schedule is easier. There won't be so much work going through the meetings.

Heather- if you have ideas on capturing the work we do here bring them forward. This next year when we update our commission this process will be important to alert them of.

Frank U- You've done a good job, you produce a summary and send it back to us, and we try to capture that, and we have the notes. The capture or product that we come up with in as much essence in the original form is important.

Andy A- what did the Cowlitz group come up with?

Sara- simple production tables

Heather- so how to capture a formal document, capturing the recommendations of the group, and I think we're done with Chinook. Lets head down.

### **PUGET SOUND STEELHEAD**

Heather- So Anne Marshall is the agency's representative to the TRT. She is going to help us get oriented to what the technical review team is thinking.

Anne M- so I am assuming you passed around the 3 major population groups with the independent populations broke down. That is the product of the last couple of years. We as the TRT have two tasks, that being the 1st, and then the 2nd task is coming up with the viability criteria for the populations. The draft will describe the populations and the VSP criteria. The Co Chairs are Jim Myers and Jeff Hart. For SH it switches from DPS from using the ESU as its in the USFWS purview. Several TRTs exist, and we've tried to use some of the previous strategies along with our own techniques. So why would we identify historical populations? Our template is that the historical template is the only sustainable template we know about. There's not a lot of data for SH, as they weren't commercially harvested, they don't leave carcasses as consistently. (Slide show) So the independent populations will be the template that the recovery plan will be based upon. The TRT doesn't do the recovery plan, but we develop the criteria for long term persistence. We did have historical data (pre-1970) so old CRC from the 1950s and earlier. There were a lot of early hatchery efforts and there were a lot of early biological survey reports, as well as anecdotal accounts in print. First we had to establish historical presence. Abundance data is what we were really missing. We used Gibbons et al. for parr production based on the historical abundances to estimate smolt capacity, as well as minimum genetic variability to keep a population viable. So we estimated a 80 km<sup>2</sup> was the smallest basin that we thought of as self sustaining. So then after this we went through a tier 2 criteria came geographical distinction. But this brought up whether places similar to say Skagit was 1 population or a group of independent populations. We had to group them, and the genetic data may reflect contemporary conditions but may show some insight on how tributaries components may differentiate. Our data are very

incomplete for steelhead, and we had to make assumptions and used what we termed a gate analysis, and we ended up grouping winter/summer populations together. We ended up with 3 Major Population Groups. This influences Recovery Planning by forcing recovery to be spread across larger boundaries.

Frank U- are you anticipating the WRIAs are going to do the SH recovery?

Anne- I don't know

Nick G- That's really not the role of the TRT.

Anne- right, and we will provide recovery criteria, for the DPS recovery. The Recovery Group can look at what the % needed for recovery and politically pick which ones they focus on. The main goal is for everyone to review this set.

Nick G- within river basins where's there's likely to be no data, was there discussion how you prioritize were there would have been more genetic variation? I'm thinking of the Klickitat where there are distinct breeding populations that might be important to preserve.

James- I think genetics wise the list includes the independent populations SASSI wise. The genetic variation you are talking about won't be the only factor, as VSP evaluates the geographic distribution as well.

Anne- So we are considering O. Mykiss trout populations as important reproductive components as well.

Hal B- so the Elwha summers were there.

Anne- So when I've talked to the Agency biologists they don't have records of that.

Hal B- but I don't think we had to punch summer SH on record cards until after 1968.

Frank U- I'm still trying to understand the historical context. What do the abundance number mean?

Anne- The abundance numbers or the basin characteristics will guide us to what viability was.

Frank U- so back in time for wild stock it gives you what?

James- so do we have functionally extirpated DP S?

Anne- the Baker possibly. I also note that there are some components that are still under discussion and up for debate quite a bit. A lot of people aren't convinced that the lower Skagit had a population. A lot of the south sound tribs had a lot of discussion, as we don't have any data on them currently.

Heather- so as we move into the review of our SH populations we may or may not have SASSI designation so something to think about. Can we get a copy of the presentation as well. So should we break for lunch and then we come back and get started on SH.

## *Lunch*

James- (Explains the handouts) So folks had asked about the possibility of evaluating introgression, and so we've provided a paper on some analysis on that. Also provided is some work Ken Warheit has done for some of the stocks. The question about the expediency of when we need to make changes is that for the vast majority of programs we have diminished or completely quit. The remaining integrated programs are mostly supplementation programs that are there to stabilize the natural stocks. The harvest programs are the ones we need to focus the HSRG standards against.

Frank U- does the Statewide SH HMP set the stage for us here?

James- to some extent it does. It sets up the definition of WSMZ.

Heather- so for integrated and segregated programs we indicated in the plan that HSRG standards had to be met. The WSMZ clarified no hatchery production present and that it could be a large component of the population.

Andy A- while it didn't make a population designation the plan was more conservative than HSRG standards in it's limit of gene flow.

Heather- correct.

Andy A- ok so it doesn't give you the leeway that we could use with Chinook.

Heather- But now that we had the commission's policy to use to develop population designations we can use that.

Andy A- but both policies were adopted by the commission.

James- but the conversation goals in the SSHMP is different than the measurable pHOS. The genetic introgression isn't easily measurable, as it's the result of pHOS limits.

Frank U- Yeah but with pHOS we go out and can see that, so I need to see how this translates.

James- beyond the genetic aspects of how we measure brood stock management, putting a lot of fish on the spawning grounds or smolts out then compete with the ecological component of the NOR, especially for SH.

Dick B- I assume that assumes precocial males.

James- its not pHOS, its gene flow.

Heather- Yes Dick, the gene flow is that measure. With pHOS there is some differential in run timing, and if we do a census count we'll have some origin measurements. When you do a gene flow check maybe the effective population spawning is low enough to meet both policies.

Dick B- so the latest information we have on gene flow is Phelps 94, 97?

James- no Ken W has done some more recent work.

Anne- and the Hood Canal work may be available. Sampling of fish also may or may not have been done to evaluate introgression. But HC hasn't had big SH programs.

Frank U- so are we going to be informed or not here? It sounds fuzzy.

James- Well we have some information, and based on what we have there is evidence that introgression is there. The magnitude is a big question. The levels that we see is evidence enough that if we have a really important population for recovery then what risk are we willing to take.

Frank U- ok as long as we can get a measurable amount

Heather- we can't do that Frank

James- if it's significant enough to detect then I would say it's above the 2% introgression rate

Heather- If a segregated program can't be determined by 2015 if it's posing a risk it will be gone. Right now we have a lot of programs that we don't know. If any of these programs are of high value then this group needs to identify that.

Nick G- I just want to 2nd you Heather that greater the uncertainty the greater the risk. If we need to use a surrogate of pHOS, I'd say we use the .05 or less.

James- a good point to make here while there's a lot of evidence that fitness levels are lower in SH in particular. None of these are listed as the primary factors in the listing, habitat was. The prevalence of hatchery stocks was mentioned but not as a factor in listing. That's important in terms of hatchery actions, and for recovery to occur on the NORs they are more susceptible to hatchery influence.

Frank U- Ok but the issue is that if we start shutting down all the hatchery programs, you can't bring them back, EVER. It's unequivocal to any of the other species, it's the guillotine for fishing those programs and fishing.

Frank H- Why can't you.

Frank U- Because of the self imposed rule the Agency is proposing.

Hal B- You can still use in basin brood stock.

Frank U- Yeah but the segregated programs are essentially gone.

Michael- is there any information of habitat potential?

Hal B- Freshwater? That habitat hasn't gotten any worse, but the salt has been. That's not linked to us.

Michael- that is linked to you, as I'm the facilitator there in the Puget Sound Partnership arena.

Andy A- it doesn't remove the responsibility of this group.

Hal B- in the mid 80's 70% of the SH came back to harvest, and now it's down to 5%.

Anne- One important thing I have to mention, if there was actually introgression from Skamania fish we would be able to detect that solidly, it's the Chambers stock that is the issue. We used samples from lower river traps that were 100% assigned to the Skamania stock and that does show ecological risk.

James- so the 2010 status update for Puget Sound SH, this shows the status of the listed DPS. This could be used as a recent snapshot of the way the populations are trending. Pages 209-211 show the major population grouping trends as lined up with the MPGs Anne presented earlier. There are only 2 populations that are at or above 1, and those are in the Olympic MPG. So the first population:

### **NOOKSACK WINTER SH**

James- so SASSI identifies 3 stocks within this population.

Frank U- so has the smolt production constant?

Heather- it was 2x this size.

Frank U- that's important to know, as it looks like things are plummeting but cuts have already been implemented. So over the period of the returns have the production changed?

Heather- no, so the decline was due to other factors.

Nick G- since the '99-00 return year the releases were higher, and no lower than 150k?

James- Yeah, so all of the returns are from the original larger programs that were constant over time.

Frank U- Ok, that's clear. Because in context of harvest, weather, and other conclusions then can be factored in.

James- the trend is very similar to other watersheds.

John B- but it was pretty bad to begin with.

James- so the '97 paper the researchers looked at Chambers stock and took more contemporary samples in the '90s and has the distance shrunk, remained the same, or distanced themselves from the returns. And they showed a growing distances. Anne pointed out all these samples aren't the same. They all meet a minimum level of data for a stock that we didn't have data prior, some of them were a multi hundred some of them were maybe a few dozen. Its very important.

Anne- the Phelps work were all mashed together, where as the more contemporary data allows for a different picture.

Frank U- how do you translate that into gosh we're concerned about the hatchery program and introgression? I don't see us getting there.

James- So this data shows that in the Nooksack we have some individuals assigned directly to Chambers Stock. Anne brought up Skamania showing up like a beacon, but Chamber won't. That may mean a stray smolt from 2 Chambers parents, but the information we have it doesn't seem a reduced release size has a genetic risk to the natural Nooksack population. We can disclaim it heavily on the #s of samples we have, but it doesn't address the ecological component of competition.

Frank H- another dimension is the cost, and is the result worth it.

Heather- you can use the economic analysis of the programs to help determine that.

Michael- I'm still trying to figure out where we should care the most. Is there a native population in a watershed?

John B- do we have EDT like data?

James- no, we don't even have a completed viability analysis. SH is one thing, wait till we get to coho. We put together everything we know about the populations at this time.

Michael- to me then we're not fit to designate population designations. If you have a standard for hatchery programs then follow that, and don't designate.

James- well for Chinook we were asking where you felt things were inadequate. This is akin to that, but there are certain stocks of SH that are going to be higher priority for recovery. Summer SH in Puget Sound are more of a rarity than winters. Unique life histories should be candidates for high viability goals. The recovery group will make formal designations.

Michael- If I'm uniformed I don't think I can give a reasonable opinion. So for Nooksack is it a unique population.

Anne- the TRT identified it as a unique population, relative to other populations.

Heather- this is out front of any recovery options.

Michael- what's the Dept's preferred approach then?

James- as a first cut lets look at the populations that have programs on them. That may help us, as it's a handful of stocks that we produce fish for anymore. There's no current evidence of introgression with Nooksack. So do you see this program as a need for change.

Nick G- Poor returns seem to indicate a cost/benefit ratio. The program also poses some ecological risk.

Annette- we are currently adjusting the fisheries to keep the brood going. We've been in this 4 year planning session as we will not receive out of basin brood. In Whatcom creek we're developing a brood using Kendall stock, and every year we've had to close the fishery.

James- so last week we passed out the memo from Jim Scott/Ron Warren that outlined that programs would need to become independent on developing broods. The in basin brood stock collection was one of the major changes, along with the out of basin planting of smolts.

Frank U- because we have these things in play, we should give some time to judge recent changes. Because there is no introgression evidence here, I vote to leave this program.

Annette- we don't have escapement estimates here due to environmental conditions. There is also no historical estimate, other than 1,500 based on index counts in lucky years.

Nick G- so this seems to be another aspect of the uncertainty, and if the release goal if appropriately sized, how are we able to monitor the pHOS? These sorts of uncertainties lead me to be a little more harsh on the program, or at least identify an interim period of adjustment.

Frank H- discontinuing the program is probably consistent with growing the NOR population, and possibly then using the money for the program elsewhere.

Heather- My recent time has been looking at costs quite a bit. It costs \$286 to produce a fish.

Andy A- if we said 1/2 the lb being produced here was SH then we took 1/2 the budget, and then we did the math for the resulting harvest.

Heather- with that information it shows that these are expensive fish. We put 255 into average sport cost, and the estimated economic value is total personal income is \$138k annually. We produce these fish for harvest and every year we've had to close the fishery down to get enough.

Frank U- how many tribal fish harvested?

Jeromy- Looks like 20-30 fish.

Frank U- so nothing essentially. Part of the problem then is that these are esoteric decisions, how big is the fishery?

Annette- we haven't had a creel up there since I've been there.

Bob L- not since the '80s likely.

Andy A- what if we started with the populations without programs on them. That might make this a little easier.

James- the reason I suggested using the ones where we have programs is that not having a roadmap puts us at a loss for a natural population and determine its importance.

Sara- I don't see why we need to designate them at all. It seems to me you have to mess with these hatchery programs to a large extreme.

Hal B- that's only if you think they're doing something to the populations.

Sara- NO, they are saying it's an issue due to ecological concerns. Tim Tynan has signaled that.

James- So what do you want to do about Summer SH in Puget Sound? That is going to be NOAA's biggest issue with fish in Puget Sound.

Frank U- Well if I knew that we were going to make all SH populations all Cedar R catastrophes.

Nick G- What's valuable I think is that if we went around with the populations that have programs, we can at least determine if we have pHOS. When we circle back we'll at least know what we have and what we don't have.

Heather- ok, and I think it would help the group to know that all of hatchery programs on SH are at risk. If we don't know then that prioritizes what we need to do to fix things.

Hal B- have you ranked the programs in terms of returns, we should rank them that way.

Michael- so for Kendall we can write down unknown pHOS, possible ecological interaction.

Anne- I have to say again that introgression was not the purpose of the samples.

#### **SKAGIT RIVER**

James- so we have tribal harvest, and several stocks identified by SASSI. Marble Mount still has a program, and the Barnaby Slew program was discontinued in 2008. So the prior program was roughly double.

Hal B- So for cost effectiveness the plants versus the return rate for the last 5 years.

James- so we do, but they aren't ordered by cost effectiveness, but by watershed. I'm guessing this is the 1997 Phelps document. Only 1 stock had a genetic difference that was smaller difference from Chambers than the original Sauk sample, which could be evidence of introgression into the Cascade. The cost benefit is \$116, but 1,800 fish into the catch. Historically its been a very popular fishery.

Anne- so at the top of that sheet it has the ancestral groups. The 8th genetic group was from Soos and Tokul, as it contained the genotype from those hatcheries.

Nick G- so the genotypes you had are in the end

Anne- the best groupings that displayed.

Annette- so the Buckley line, what does the .043 mean?

James- it means that the sample group had .043 lineage assigned to Cedar/Green stock.

Nick G- so does that mean (19 individuals) had greater than 50% assignment to that group

Andy A- why don't I make one more run at this? It was in 2008 or 09 during one of those budget cuts, one of those were SH, many of those were put in place, no more off station plants, hatcheries closing

their traps unless brood stocking, etc. None of the information has a reflection of that, and practices were just done.

Frank U- and we haven't seen the results.

Nick G- so are we monitoring?

Anne- so there is a bright spot that on the Skagit we are looking to see if we can sample smolt on the Skagit to answer some of this. When that study is finished we'll have a better look regarding introgression.

Hal B- we don't plant any Skamania in the White R, there's been no plants for a long time.

James- we had a large program there for a long time, and spatially they could stray into there.

Dick B- so adding to what Anne just said, the preliminary information from the study is 10-11% introgression in the Skagit.

James- as you can see Chinook may have been easy.

Michael- so is the Skagit a really big population?

Anne- it's the biggest population in Puget Sound

Michael- so should it be a WSMZ?

Dick- Our recommendation is to close the program. The wild fish fishery is very important. This river shows that it could recover quickly.

Michael- are there places that could compensate for that fishery? This is just a first draft.

James- so we have NF Nooksack, Whatcom Creek, Stillaguamish NF, Cascade, Skykomish, Snoqualmie, Green River, and Dungeness. Those are harvest programs. The 1st place we don't have a program is the SF Nooksack where there isn't currently a program released. We don't have currently any data, other than it's a summer. Making it a WSMZ is really window dressing, but it's a candidate. The Samish program has been discontinued, and it was the population with the highest introgression.

Michael- how many fish are returning?

Annette- 500

James- so it's a candidate. So is Skagit a candidate? We have a program that operates there currently.

Nick G- there are 2 unique summer populations here, and I would say there is a case here.

James- but you are talking full year utilization here.

Nick G- I understand but the VSP criteria also allows for life history to be considered for significance

Michael- so what the total run on the Skagit, and what % does the Sauk make up of that?

James- the Sauk-Suittle is a larger run.

Nick G- can't we say we want more of a portfolio of N Puget Sound Summer Run if we can?

James- the main question here is if we have a Chambers Winter program can I have any WSMZ in the sub basin?

Andy A- I think you can, even with the

Heather- So I think the group is comfortable with the Sauk, and maybe the whole thing.

James- So Stillaguamish Winter is different than the Deer Creek summers so the 1st one is a winter that occurs at the confluence of both rivers. So at Whitehorse we used to SF plants, and over the last 4 years we've transitioned to making every effort to get brood stock.

Sara- so is Stillaguamish a candidate?

Andy A- Deer and Canyon Creek.

Heather- yes.

James- so if those 2 are candidates you'll be limiting the White Horse production based on strays.

Dick B- So this list for introgression rates how do we relate the different rates?

James- so the question of whether the main stem WH programs are affecting the NORs.

Dick B- And I think does it make sense given the Phelps report on introgression.

Michael- just remember you are making it as a candidate. You are trying to say do this as a goal.

James- I think Dick is saying we are violating it for the Stillaguamish Winter, the 2% gene flow. The evidence is that we're violating that.

Andy A- So the summers are still candidates.

James- so Snohomish, I know the Skykomish harvest is the largest we have in Puget Sound.

Sara- so Snohomish is not a candidate.

Nick G- Wait a minute, the Skykomish is very important

Andy A- but not as a WSMZ, its likely to be a primary

Nick G- But yes as a primary, ok.

James- so the Pilchuck in the lower Snohomish, although this has been planted for decades we have discontinued that.

Nick G- so the Pilchuck was rather famous for NORs and it seems to be a candidate then.

James- It's very unique so it's a candidate.

Sara- so the Snoqualmie

James- so Tokul Creek used to supply most of the segregated programs. So now we just have an on station release, the harvest is quite substantial.

Michael- so the Snoqualmie is another really important fishery

Frank U- you bet

Sara- so not a candidate

James- so NF Skykomish we are seeing large introgression. Tolt we aren't planting anymore.

Nick G- So there are 2 distinct populations. The NF tends to have more stray fish, and most of them are Skamania legacy fish. The SF we saw 50 or 55 SH all were wild fish.

Al S- So we aren't transporting fish anymore there.

Anne- so the NF Skykomish DPs it doesn't matter if it's a WSMZ or not as it would affect the hatchery program.

Annette- well the NF could be because Reiter is below it.

James- So north Lake WA is already a WSMZ.

Anne- there is a special case with the Cedar, as this used to be all the same basin with Green/White and the drainage is likely to stay this way for the next 100 years. Historically the data could stand alone.

Sara- so it's not a candidate as it no longer exists. So Green is not.

Michael- so there are 3 SH programs in the Green. The population is too low, and so it doesn't seem like a candidate.

Sara- so the Puyallup? A candidate.

James- it's a small population and a candidate, White is not due to a recovery program.

Sara- Nisqually?

Group - yes.

Sara- south sound tribes? - No.

James- so for East Kitsap and East Hood Canal there is No.

Sara- So South Hood Canal?

Anne- yeah that is a very stable population.

Sara- so Union and Tahuya, but Skokomish is a no. So West Hood Canal - Hamma, Dosewallips, & Quilcene.

James- does anyone know anything about the Sequim SH?

Sara- so Sequim Winter is a yes. How about Dungeness? No, Okay then what about the Straits?

Michael- so if there is a need for relocating the harvest program in the Straits would that affect the flexibility for making changes to Elwha?

Sara- what kind of harvest is there on the program?

James- they are releasing 50k right now. Both the Agency and the tribe are entering into a moratorium in the river. What Michael's referring to if we could relocate the program. The tribes between are a candidate (the Straits independents).

<b>Wild Steelhead Management Zone candidates</b>	
<b>North Sound</b>	<b>South Central</b>
SF Nooksack Summer	Puyallup / Carbon Winter
Samish Winter	Nisqually Winter
All Skagit - Maybe	
Sauk - Yes	<b>Olympic</b>
Deer Creek Summer	South Hood Canal Winter
Canyon Creek Summer	West Hood Canal (Long Term all)
Pilchuck Winter	<i>Hamma Hamma</i>
Tolt Summer	<i>Dosewallips</i>
	<i>Quilcene</i>
	Dungeness Summer/Winter
	Sequim Winters

	Straits Independents Winters
	Elwha Winters (Long Term)

James- so for Elwha, we have two programs that are operated one is a segregated program and a variably sized integrated program.

Sara- so long term it's a candidate.

Group- yes

Frank U- so they are capturing all fish to try to retain the fish that are spawning in the gravel right now?

Heather- so we will update the Chinook tables to reflect what we did today, and we'll call that table final consensus after one more review. Then we went onto SH and the populations (per above table).

James- so what about the Dungeness I missed that.

Anne- they'd have to be spatially separated and for the current bios that we talked to they didn't suggest to split the two.

Sara- so do we want Dungeness as a candidate or not?

Group- yeah ok.

**NEXT MEETING October 13 1-5PM**