PUGET SOUND RECREATIONAL FISHERIES ENHANCEMENT OVERSIGHT COMMITTEE MINUTES June 23, 2015

MEETING CALLED BY	Dave Knutzen
TYPE OF MEETING	Advisory Group
FACILITATOR	Ryan Lothrop
NOTE TAKER	Colleen Desselle
ATTENDEES	Ryan Lothrop, Colleen Desselle, Laurie Peterson, Gregg Williams, Michael Schmidt, Mike Gilchrist, Dave Knutzen, Ron Warren, Art Tachell, Norm Reinhardt, Edward Eleazer, Rahmi Aiken, Jason Smith, and Steve Chamberlin

Agenda Topics			
DISCUSSION	Introductions		
Went around the r	oom with introductions.		
CONCLUSIONS			
N/A			
ACTION ITEMS		PERSON RESPONSIBLE	DEADLINE
N/A			

DISCUSSION	Review Agenda			
We do not have a quorum today, so will dispense with the subcommittee updates.				
CONCLUSIONS				
ACTION ITEMS		PERSON RESPONSIBLE	DEADLINE	

DISCUSSION Approve previous meeting minutes					
CONCLUSIONS					
No quorum.					
ACTION ITEMS PERSON RESPONSIBLE DEADLINE					
Tabled to a later date. Committee					

DISCUSSION Long Live the Kings (LLTK) – Resident Fish Potential

As a brief refresher for those who do not know, we have been working on the Salish Sea Marine Survival Project, a big U.S./Canada effort to find out the cause of decline of Chinook, coho, and steelhead. It looks like it is the juvenile component that may be driving that, but with Chinook there is also interest in what the contribution of residency is to the marine survival of Chinook. We are working on developing a research component to address that, and last month submitted a proposal to the recovery board to try to get at that question of what is the relative importance of residency to survival of Chinook and also what drives residency and what does it determine. Basically there is some potential indication that sometime along the early growth period for fish as they are moving out of the marine environment is that there is a growth trajectory that ultimately ends up in residency, and part of this is to get at that growth trajectory. We are looking at it through the lens of fish recovery, but it contributes broadly to fish in Puget Sound because if we can figure out how important it is, relatively if it is important, it increases the value of the resident component. We are focusing on Marine Area 7 Chinook as it is a large contribution to the resident base.

In the generic sense we are getting very expensive analyses; different types of ways of carbonized isotope analysis where you look at the carbon composition in the otoliths to look at the migration patterns from Puget Sound and out into the ocean to try and get how long these fish are resident, where they are resident (which areas), and use the scales to see which areas are contributing most in growth. What is important for these fish? DFW and NOAA will be doing most of the analyses, and then LLTK and another non-profit are helping. The idea is to use this as a starting point, and because the residents occupy that area in a large way, to get a handle on what the relative contribution of residents are to the populations

and then also to get the connections between the residents and the habitat. Looking at the contributions of residents to the natural populations as a next step, we would be looking in the San Juan [Islands] to determine what natural populations are represented as residents and then later build in to go back to those spawning grounds and pick up fish. We will have a resident marker by then and be able to say what proportions of the fish returning to these rivers are residents, exhibit residency, and then you could say, "what does that mean for that population?" It is possible that we can determine which areas the resident fish are from. The isotope work, the work that looks at movement, has been good enough to establish herring populations spawning in Cherry Point versus South Sound, so you may be able to get to that level of resolution. Part of understanding the natural composition is you might find one of two things:

1) that the natural component up there are predominantly Canadian fish and that may change your exploitation rates a bit; and 2) that there is predominantly some portion of the South Puget Sound that is not doing very well.

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This is a 2-year project. We will use a small subset of fishers who know the area. Salmon recovery funding board is providing about \$250,000.

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ACTION ITEMS	PERSON RESPONSIBLE	DEADLINE
It could be helpful to get letters of support from this group if you are interested. It could help us in the funding process.	Michael Schmidt	Application is due July 1, but it could be as late as December for process.

DISCUSSION Commission Presentation – Update June 12, 2015

Laurie, Norm, Dave K., and I gave an update to the Commission where we provided a background of the PSRFE for the new commissioners, briefed them on our goals and objectives, and stated what we are looking to for the future. We have shared the presentation with you, and it is available on the website. It went well. They are very interested. Moving forward, what are the next steps?

They want us to be innovative with projects heading into the future program. Ron stated that if you have an hour, listen to the audio then you can hear the passion of the Commissioner's voices about what they want to see out of the program. This is the excitement, this is the direction they would like us take to this program." It has come down from the Director to the Fish Program and you guys are the ones making it happen on the ground and making the regions see that.

Dave K stated the message he wanted to carry forward is that - just a history of the program, it was a Chinook program that was self-taxed, and the whole idea was to be supplemental to the existing hatchery production to increase opportunity, and over time we have lost that. We have turned into more status quo hatchery production rather than trying to be additional on top of what the state has done. It is not the direction that was originally intended. When asked what we would do differently, I suggested that we have input on the budget because at times I feel like we are just told what the budget is rather than being asked what the budget should be. In hindsight, with a little more thought I would have answered the question by saving that when we re-wrote the legislation (and some of this has to do with Larry Carpenter's comment as well because he asked about how our budget has been rolled into the main budget, and then we get a percentage), maybe we would be better off with an actual stamp. I like the idea of a stamp personally, because there is some glory in buying a stamp and signing your name across like you did on the duck stamp. The other was the Columbia River program, it is my understanding that the Columbia River stamp, the agency comes to that oversight committee with a bunch of proposals that they would like to do and the oversight committee actually ranks them and says, "okay, these make the grade and these go away." It is more like a grant process whereas ours is just kind of status quo. If you look back six years ago this sheet would have the same exact hatcheries on it, I believe. Not to say that is necessarily bad.

Norm stated that basically he had been talking about the transition of the program as well. We started out back in the late 1990s specifically as a blackmouth program. One of the Commissioners asked about it...survival rates of our yearling program, but that translates across steelhead and also coho, especially

in the south Sound. By transitioning into a smolt program or a zero program, the residualization that we get from the increased production of zeros could be equal to what we are actually getting to survival from raising yearlings. In other words, if we raised 300,000 yearlings and only get a half percent back, or if we raise 3,000,000 zeros, we may get that same half percent, plus we are significantly adding to the summer and fall fishery in Puget Sound. We would love to go back to a yearling program. People want that, especially old guys. But, the reality is we are pouring money down a hole.

Ron stated that he did like Commissioner Mahnken's comment about that the agency should be trying to watch the zero to yearling survival rates in case it warrants a shift back. There are some things that we should think about as we are trying to write and get our HGMPs approved for our Chinook programs to offer that flexibility depending on survival, but also to be watching those other stocks as indicators for us. Certainly we can all talk about the challenges that we had with the yearling falls at Minter. Just from inception, we struggled there. He didn't think that it's necessarily a fish cultural thing, but that it's the animal and its unlikeliness of going to a yearling stage where it has adapted to that location. It was nice to hear the Commissioner urge the agency to watch that for changes in the future and to be adaptive.

Art asked how long the PSRFE has been going to a predominantly zero production in south Puget Sound. It doesn't appear, from his point of view, to have contributed to actually anything as far a resident population. Ron stated that one of the most recent shifts is that we had been raising the yearlings that are currently at Minter; those had been going to McKernan, reared on pathogen-free well water, and then back to Tumwater Falls for release. Because we were asked to vacate our net pen program in Percival Cove, we no longer had the ability to operate the net pens and the ponds with the current ponds, so we opted to shift the PSRFE program to Minter, keeping intact the 0-age production at Tumwater Falls. From a 0-age perspective, that was a slight reduction I am sure others can talk more specifically about reductions, but it was making sure that we maintained, like Dave said, through some really difficult and trying budget reductions. We had made cuts. The PSRFE OC opted to say, "hey, we can buy back these production pieces." And the pieces that we cut (which were greatly reduced from how we would normally push those into the facilities and their budgets), and got a pretty good bang for the buck that we had. The net pens were abandoned because their stray rates and their effects on nearby wild populations, not water quality. Dave K stated he thought that at the time it was a knee-jerk reaction: the ESA; straying of Chinook salmon, etc. Perhaps there were ways to mitigate, reduce the straying of this and that. Instead of evaluating them, they were yarded out because at the time (you have to remember back in the early 2000s, hatchery bashing was a popular thing). We were close to probably losing all our hatcheries, so the state had to do some aggressive measures just to get the pendulum to swing.

Norm: the only reason I am asking about the net pen closures is that the people have asked me because south Sound was heavily dependent on those net pens. We had excellent black mouth fishing. What I had heard is that they were shut down because of environmental conditions, all the feed and whatnot hit the bottom of the barrel. But in actuality what was going on is ESA hit and they were looking at stray rates going into the tribs. Ron stated that he thinks how he would describe it is the primary reason was for the stray rates, but a secondary reason was environmental concerns.

Mike G stated that he has always been a big supporter of yearling production in south Puget Sound, but, he has argued many times with people that we need to keep feeding the pocket of that to be able to do research and to continue to monitor their health and their contribution rates. Problem he sees is the population we currently have is not going to provide that information any way because it is performing so poorly. What else can we do? What are we going to do with that population so that we have some sort of represented population of yearlings in south Sound that we can track? Ron stated that everything we are using at south Sound is Green River origin and/or Skykomish origin. I am going to guess Green River origin is at Hoodsport because it was at George Adams and it probably shifted northward when that facility came on line. I would guess that it is more origin and a local adaptation. Icy Creek from an ideal rearing condition is perfect. Now to put that same stock someplace else that is less than that and try to get it to survive, or like we were doing with Deschutes where did the Green River stock go? Well it went to McKernan and then it was shipped to Tumwater Falls and expected to survive. Well when you are trying to move fish during early smolt in preparation for outmigration, you are doing a lot of pond-to-fish that we did not have a lot of flexibility in because of where the facilities were located, so it was a difficult

situation. Maybe, if and when, we build a new Deschutes facility that is improved, then we can reentertain to look at yearling production within basin, but that was a tough situation to ship the fish all over the place and expect something from them.

CONCLUSIONS

See above.

ACTION ITEMS PERSON RESPONSIBLE DEADLINE

DISCUSSION Hatchery Evaluation Report

• Presentation provided just for PSRFE programs. Dave K asked about Puget Sound sport including winter: what is the percent harvest? Add all harvest across the board for that program, not escapement, 23% of all fishery types are PS sport. Actual harvest compared to harvest rate is forecasting based on number released. Actual harvest forecasting out based on our contribution rates. If you look at harvest for PS sport or winter sport is equal to (apples to apples in a sense) to freshwater sport, ocean sport, ocean troll, treaty troll – all scaled to the 100,000th size for this group, that way you can compare one program to another versus actual harvest is based on your release size. Just a head's up on the fish cap and costs and productions and such, this is jumping a little out of the reach for what this report does, but I wanted to jump back to the UW presentation (see next topic).

CONCLUSIONS

The harvest number is what we actually did harvest. For comparing these programs it might be beneficial to hide the actual harvest.

ACTION ITEMS	PERSON RESPONSIBLE	DEADLINE
	Rvan Lothrop	

DISCUSSION University of Washington – Business School of Engineering

They developed a model that incorporates data collected on hatchery sites to look at utilities, salaries, basically all levels of costs excluding fish feed (as there is no easy way to track that at this point). They were able to develop a model and provide that to the department to get a more accurate estimate of the actual costs to produce a fish at a hatchery, release a fish at a hatchery than what we have for the fish cap costs for the 2012 numbers. From my understanding, they received honorable mention at the competition – did a very good job. Next step is to improve actual cost of production. This is an instrument to give a better cost analysis of production, and better overview of what we are paying. Try to create a standard metric to get actual production costs as we move forward to get a standard of what we will pay and what the department will cover. We are reviewing for costs. Fish cap includes all costs, PSRFE is what Jill [Cady] was able to pull from the reports.

CONCLUSIONS

See how to incorporate the portions we can use. This is a living report – any improvement ideas are welcome. We are limiting facility metrics from this, spring water, well water, etc. We can expand. Ron stated you have to look at the nuts and bolts of all the facilities as there are differences in what is available to each facility. Go to www.RMIS.org to query and obtain this type of information. Mike S suggested brood 06 should be removed due to the poor fish culture performance.

ACTION ITEMS	PERSON RESPONSIBLE	DEADLINE
Get details from which areas of Puget Sound where the catch occurs. Would help explain zeros at Minter.	Ryan Lothrop reported in Erik Anderson's absence.	Ongoing

DISCUSSION Budget – 2013-15 PSRFE BN Status Update

Not much change from last meeting. Adjusting coordinator fund. Spending authority increase 240K to put us at about \$2.8-2.9M for the biennium. We can roll money over, but do not want a large amount as it can get scrutinized and moved.

There are two accounts at Wallace; one is about \$10,000 over and the other has \$8,000 remaining. We can take some of the \$8,000 positive to help balance out the \$10,000, or the PSRFE fund as a whole can balance it out. There still is a \$2,500 difference, where we will be negative. That is only 1% of the budget, but the budget is taken seriously at the hatchery and they want to get it to zero. This is for a new

expense; instead of doing a double-index tag group, otolith marking was done to track these fish throughout the Sound wherever they land. That \$2,500 represents that cost for the electrical charges for doing that work. The new expense at the hatchery for otolith marking is part of the PSRFE program to know where the fish originated and where they are going. Otolith marked 100% - this new expense is to meet or keep up with current facility operations. The Tulalip tribe was kind of a prop on this. They paid for the infrastructure to get the otolith marking going. This has saved the Department hundreds of thousands of dollars, and it has been a collaborative effort on both parts to get this done. If this is something that requires a different request from PSRFE, then we can work it out. It was not brought forward as the hatchery budget was flush, but when this occurred we did not have the funds, so we adjusted our PSRFE portion for the costs. This will be an ongoing process for thermal marking. There are a lot of things [happening], a lot of relationship-building conversations that occur with our tribal comanagers at a technical level, what we can and can't do within hatchery production/monitoring, and we help each other out whether it is spawning ground surveys or working adult ponds.

Norm stated that he does not recall ever hearing about it. When looking at why some (budgets) are not averaging, and it is because you moved to this without clearing it with the PSRFE. We meet on a quarterly basis, and when we ask why expenses are over, we get it might be feed costs, it might be this or that when possibly a new program was implemented because of strays in that particular watershed [and we are not told]. My concern is looking at the \$10,000 variance, I think you suggested the PSRFE program drove all of it. Ed: No, you heard me wrong. Norm: Whether it is that, or you do the \$8,000 thing, I kind of get that. My concern is if this is happening there, is it going to happen in other programs that we support financially, and will we have to determine to take a look at the budget for each one of those programs because of strays, because straying is not isolated to that particular area. Is this a cost we need to be aware of up front going into a new biennium so that when we sit here and we try to figure out some way to think out of the box and do things differently, all of a sudden we may be faced with, "oh we forgot to tell you we need an extra \$100,000 for..." We need to know this up front so we know how to better how to advise the department and the Legislature.

Mike G stated that he is a little concerned that if this is a responsible way to track strays in this system, why is it not the responsible way to track in any major system? Then it gets further into the rabble that it is "enhancement" not the way the program was set up. It should have been, "they are doing this population and the otolith marking beyond the population, we'll be coming into putting in money to do this over and above what was normally produced in a perfect world, but..." Ron stated that he will try to answer: "Long history of the PSRFE program and starting off with a dedicated fund and was supportive of it being combined to where the survey splits aggregate fund three ways. The growth of that is no different in the growth and how we structure the funding of these projects. It was done in a way that was not fully supportive and discussed with the oversight committee until after the fact. We have to a better job of that within the agency. In the same vein, you have to look at what the PSRFE OC fund is actually paying for, and the fund isn't paying for 100% of the cost to rear the group of fish that is there, nor do I think it was ever intended to do so. When new initiatives come along [such as] Commission policies that say that you have to follow HRSG principles for broodstock management, understanding stray rates, [and] working with co-managers that require us to do things in a different way. Should we do a better job of informing you where those activities occur, when they are occurring? Yes. Did we do that? No, we didn't. I am not sure that we are structured in a way without making these meetings mandatory by the group that is here, in the field, and then some to keep you informed 100% of all the day-to-day operational changes and expenditures that might go on. Our base assumptions versus our end points in budget control and expenditures. So what I think you heard is that \$2,500 was the otolith marking this year, and the previous year another fund source paid for that, and is this [going to be] an ongoing cost? Depending on those other fund sources, I am going to guess that it is. Could it happen at other facilities? I am guessing that it could. Will we work to absorb that through other state funds if we have them available to us? Absolutely. If we can't, we have to come back here and to talk to you. We have to do a better job of that. I think what Ryan was talking about earlier is that I would love to standardize our approach in how and what we are paying for at each of the facilities".

There is concern that propagation at other facilities because the PSRFE budget doesn't really absorb those kinds of things very well. Ron stated that none of the state funds do because we often are flat-lined

for decades (it seems like) or at least multiple biennia in a row. We know the need for operation changes within that period of time and you don't get any additional money, and all of your other expenditures are going up. We often do not get a sympathetic ear when talking to the Legislators because our feed costs are going up, or gas prices went up exorbitantly, or the local PUDs are raising water rates, or the local PUDs power rates are going up. This committee does not require the base assumptions for each of one of these master index codes and the activities to raise those fish. You did not ask, nor should you ask, what our line items of power, fish food, staffing, marking, transportation; any of those things that occur during the normal day-to-day hatchery operations. That is up to us [the Department]. The PSRFE is approving a line item for a facility and a certain amount of money to raise a fish, and you are leaving the rest to the experts. What I am trying to say is we have to do a better job of saying somewhere along [the way] and approved by you, "hey, here are some changes in base assumptions that we had and it could cost us extra money. We have to do that. And, here is how much it might cost us. We have to do that for Laurie and Ryan's sake and we have to do it for your sake so you are mentally prepared to say when you get to the end, "Well we are \$10,000 over at Wallace, the coordinator has been chronically underfunded, but then we are \$15,000 over for coded-wire tag fish marking. I will commit to work with those involved to try to figure out some kind of way to provide quarterly reports that everything is going according to Hoyle or that we have problems to you as a group.

Art: I think as long as the fund is using it truly for what it is supposed to be – enhancement, it is when it strays from the actual enhancement of fisheries that the question should be raised, and it should. Ron stated I thought in this case to be able to provide enhancement and be able to continue the production level where we are. The rules of the roads continue to change, and we have to change with it whether that is an additional cost for the PSRFE program or state funds or through co-manager input, we have to face that and do a better job of making sure you know what is going on.

Mike G. asked if the Department will be able to get enough to stabilize roughly what the stray rates are? Ed stated that his take on it is that in going forward we need to be responsible to know where our fish are going. Ron stated he wanted to expand on what Ed said, in that by making sure hatchery programs are viable and broodstock goals are being met, from a stray rate in the system and/or a contribution rate elsewhere, whether if in-system, in harvest, those terminal area fisheries, whether they are tribal or state, that we need to be able to track those fish and have that understanding. If you are looking at what your PHOS is and making sure you hit our numbers, but you may be very back and forth on that over the course of a 5-year period; you're staying within a period and you may get some relief from long-term marking. It is going to be a long ways out before we start to have that comfort level of actually knowing what those cycles look like and having that trend line and have the confidence to tell you that you can stop otolith marking. Sampling and taking otoliths is occurring in the Skykomish.

Dave K stated that he is glad the Committee is paying for the marking and not the reading. He thanked Ed for attending and told him that the PSRFE is just reacting, and as Ron said, communication needs to be open. Back to the Soos situation, there was a lot of bad blood between the committee and the Department with the whole audit thing. The money was being spent but nobody really knew why it was being spent the way it was. It got better, and we got to the point of saying, "You are the Department, you're the ones that need to do the program," so we kind of backed off as an oversight committee, and now it seems like this is where the communication is going to be key here. It seems as if you could go to sleep and three years later you can look at the spreadsheet and it is the same. We are missing a gear here. I think there is some power between this committee and the dollars the agency needs and the good work the staff does. I think we could go an extra notch here, but right now we are at the point of saving every single time, "Whoa, what's this?" I assume that most of these numbers are going to go to zero (not negatives) by the end of the month. I would ask Ed, the money should be transferred around because this money carries over in your other account, and that money doesn't carry over. If you go down to the coded-wire tagging marking it looks negative, but in reality we increased some of the tagging. Ryan stated that Laurie and he did a little exercise to ensure they would not have any problem with the spending authority on what is actually happening at the end. As long as there are no surprises, we should be able to pay our bills.

Ron asked how to report - brief write ups by code everything is fine, but to talk about just the general

rearing, fish health, and funding of the PSRF program from a ground level and all of our assumptions are holding through for planning for our budgets or whatever. That way it is a nice double check for all of us as we go through the new biennium. What I don't want to do is ask staff to do something that you guys are not going to like, so as we put something together, we may just in between meetings get some general input whether this would be helpful and whether the chair or co-chair would like us to send that to the whole committee or wait until the next meeting to have further discussion on what those might look like. I also don't want to add to the workload.

Rahmi: We already have one that Jim [Jenkins] has created, the only piece it doesn't have is the budget piece. That is just what we filled in. We have one that shows the production numbers, what they should be and what they are, and how they were marked, for every brood year that we have on station or that we just had on station. The only piece I would add is a column for the budget.

Ryan: Our licensing office had an error which cost us money. Response management error is in warmwater. Because of this, we are hesitant to give numbers until all is double, triple, and quadruple checked; not providing sound numbers but a cushion. We would not have to do this if [we had a] stamp. Next time they contact us regarding the survey, we want to put a clause for payment in, in case they have another error.

CONCLUSIONS		
See above		
ACTION ITEMS	PERSON RESPONSIBLE DE	ADLINE

DISCUSSION Budget - 2015-17 PSRFEF BN Planning (Purple and green sheet & stapled set)

The purple and green sheet is what is actually in our account. The stapled sheet is a forecast and licensing update – the numbers will not match up.

We are tracking pretty well and we do not have any issues of coming behind the forecast. Without going into detail, you can see we have \$760,000 in the account. As you know we had that issue where our licensing program miscalculated and we had to provide funding to cover it. Last year Responsive Management (contracted group to develop the survey and carry it out) had an error where they hand entered and typed in the values of the survey response (participation rates) and had a typo in there which affected the warmwater enhancement group by \$300,000. Because of that, even though we see everything tracking consistently, but a little up, nothing out of the ordinary this year, the company who develops the forecast for us is hesitant to jump to conclusions without double and triple checking. When I sent out the email it stated that our forecast for this next fiscal year is 1.38 million, the original forecast, he scaled it back from what he wants to say it could be if everything is correct, but he is giving us a cushion Spending authority should go through. We have close to \$2.9 M for the biennium.

Dave K asked if the state is going to come up with a budget and tell us that we are funding x production and x facilities and x \$? We love to use the buzz word "innovative" yet we are not innovative. How do we become innovative? Do we need to go through the budget line by line and say, 'yeah, we want to keep Wallace because it is a good program, and we want some yearlings, and etc." Should we go through the process of making decisions or is that a futile exercise; do we just let the Department tell us what we are doing? Ryan: Regarding the legislature stuff, if everything stays status quo, the Coordinator funding is going up by \$5,000/year extra. All other programs go up about as a lump sum about \$30,000 including cost of living for all employees, and then potentially some adjustments for the bios as well, which really is only me. Ron: that's on the base assumption that all of that goes through the muster... Ryan: This is kind of a middle ground based on what the House says versus the Governor so we are kind of in the middle. As a whole, it is around \$40,000, everything combined, plus/minus \$3,000-4,000. We talked about that last time; that it is going to soak up all our spending authority, it is not. Laurie P stated that she thinks there is room for innovation. Steve C said it sounds like instead of going line-by-line and maybe we are jumping to what are some ideas?

Innovative Ideas:

- Michael S stated that he would like to throw something out there for consideration; we're thinking about doing a stage-release strategy looking after differential survival between places that are along the lines of doing something similar to zero but something similar to what you guys are doing with Chamber's jumbos late summer and possibly along the lines in winter if we can actually achieve that. The reason being is to just see if you can manipulate a fish to be entering an environment to see if you can get better survival. Your Chamber jumbos, you guys did it one or two years. Did they actually survive better? Absolutely, and we are now dealing with that situation with our warmer water temperatures so had those opportunities, but those were taken away about two or three years ago. So, the hope is that in addition to increasing production that we have the capacity to do that. We will have to seek some funding to do the differential tagging and then some of the other work. One of our board members is a geneticist and we are talking about doing a full parentage analysis to do some actually tracking families and then we will see what happens with the families themselves and how they contribute so we can get into modifying fish in a very unique way once you get all this information Hopefully, that is innovative. Dave stated that this is innovative and that he would like to us do something like that, however he would like to do it in Chambers or some place in deep south Sound rather than north Sound as we need to get to contributing to our Puget Sound populations as much as we can.
- Rahmi: I know I have talked to my fish health specialist on what we can do, and we have thought about doing like a September or October release instead a yearling release, releasing them when they are still alive. Dave K: this is like a jumbo release, a new release for Minter? Yeah, essentially a jumbo release is what it is.

Ryan: Before we dive too much into that, I think I should jump back to the Commission presentation, the next steps, goals that we have to achieve that we already came to some conclusion on. Up on the screen: report completed in 2015, evaluates production of other species like coho, etc. (even year pinks) and to come up with other ideas and it's innovative per se. Laurie: These are performance measures in our guiding document.

Rahmi: For coho, too, we have a delayed release coho that we do for south Puget Sound for year-round catching of yearling coho, like we do with the delayed release and I know there is some talk about getting CWTs in those to see if it is really worth dumping all the money in and keeping them from smolting because we see small fish back at the hatchery, and is there a value in that more than there would be with release a month earlier.

Ryan: Next point is some other ideas for sockeye rearing. We are not the experts in that, but we have folks out there that are and Laurie and I talked about maybe we only have to get in one room and create a memo from that meeting and that will be one idea. I know that there is a whole group devoted towards this that we can utilize on this one. What is the cutthroat trout harvest in Lake Washington? Because the major limitation to the sockeye program is the trout and the cutthroat. Dave K: so if we are going to talk about sockeye for a second here, we do have a line item of \$20,000 for counts at the dam, and at one point we said that we did not want to continue funding that if we were not going to get serious about lowering the escapement threshold number because we are never going to have a harvest of sockeye ever in Lake Washington. So we have a 350,000 escapement threshold, until that number gets down to like 150,000, it is a waste of time. We need to get serious about saying we want to see some changes in that escapement threshold or for that \$20,000 we see no reason to keep funding that. Tell them if they want to do it, great, they can keep doing it, but there is no reason for us to do it. Ryan: I am aware of where we currently stand on that (and Ron or Laurie can jump in); you have heard that has been a lot of back and forth on the 350,000 target. From what I understand it is sitting on the Muckleshoot's desk right now for final approval, I believe. Every year what happens is when the numbers get closer they talk about changing things so my assumption is we are that close to maybe getting there. I will also mention, that we may want to at some point invite Aaron Bosworth down or we go up there as he has had some discussions with the tribes about even working out some limited fishery even if we don't hit the 200,000 mark, there might be some alternative ideas about making that work.

Norm asked about the sockeye at Cedar – thought we were supposed to get lots of sockeye back. They are raising the fish but they are not coming back, and we are looking at something innovative, and

somehow getting a Lake Washington fishery and increased angler participation; thinking out of the box can we help to figure out how to get them past all the walleye so they can outmigrate so that we can have 500,000 sockeye come back. Steve C stated that walleye sounds like recent addition. Why not do what Oregon is doing with the pikeminnow and just put a bounty on them and then the sockeye can get past the walleye? There is \$20,000 here for counting. Dave K: my answer would be to say that the Lake Washington sockeye study, if UW is involved with it, and it's been one year into the study and they have another year to go, at the conclusion of that then I think it would be appropriate for this committee to consider areas where we can help. Norm: you know we want different ideas on how to increase participation and how to revitalize – you brought up sockeye fisheries in Hood Canal for the future. We know what happened in Lake Washington with the sockeye fishery.

Ryan: The next two points: 1) identify underutilized stocks like flounder, cutthroat, chum, and pink to promote essentially; and 2) develop additional tools. We are kind of already doing that. We are going to create in-season for example: pink website, map, all that to get people educated and teach them how to go catch and be successful and hopefully recruit lapsed anglers. Some of that stuff just kind of a lot of little things I do on the side, but any great ideas, if something comes up that we can spend some money on.

Ron: Speaking of the little things you do on the side, did you hear Commissioner Carpenter say that we ought to be at the boat show this year? We should get together in the next couple days and pencil in what we are going to do, what the dates are, and... Laurie: we have done that in the past. Ron: Yeah, but he was also talking about the clinics and workshops, so that is a lot of work.

Ryan: Moving on, and this is one that Dayy Lowry and I are working on; it doesn't cost you anything and it will get done. The rockfish stuff is probably something we need to jump into because there is a recovery plan coming up by NOAA that we have already provided a lot of comments on, and from what we picked up on that recovery plan outreach is a huge component, and we already planned on doing that. The reason not to do that is that there are other entities working on that: PSA; WDFW as well, so identification, increasing use of descender tools (not just having them), and find ways to teach folks how to fish and not encounter rockfish. Obviously, we can go buy descender tools for the start-up. That is the easiest thing we can do right now and I have talked to Dayv Lowry. PSA is going to hand out those things, but we need to hand them out internally through dockside creels and things like that. For a starting point, he indicated that if we can spend \$4,000 right up front, that would be a good kick-start. I don't see why we cannot afford something like that. The descender tools have limited availability. Part of the issue is that stores don't have a reason to carry them; people are not going to go buy them until it becomes mandatory. So giving them away is the guickest way to get them in people's hands. My understanding is the Sequelizers are in the hands of most of our Puget Sound charter boat captains right now. That is where, one way or the other, we need to jump on board. Some stuff we are thinking is we can create this big package for anyone who goes fishing to have this ID sheet, keychain (with IDs), outside there is this brochure for rockfish descending tools, device, and actually have the descending device wherever we go, boat shows, docks, all that, the Seattle Aguarium, etc. That is just ideas on how to get these into their hands. There is a Hunter's Education, but there is no Fisher's Education, so we need to find a way to make it happen.

- Logistically, could you send out a mailer, because you have the addresses of the people who buy the licenses, could you send out (regionally) just a slip of paper that states we will be at this boat launch facility on day X, come by and get yourself a descender and pamphlet or whatever because mailing it directly to the people would be cost prohibitive, but if you at least let them know that you are going to be there, I wonder if it would increase the number of contacts you could make?
- Instead of doing the keychain thing, as popular as those salmon ID charts that you put out, I think that
 would be more effective for rock cod identification, the 8.5 x 11" ones, especially if you started it out
 with canary, yelloweye, and boccacio. Maybe that would be a good boat show thing, somehow or
 other identifying rock fish, whether it is in a presentation part or the display part, and if you could have
 some real species, that would be awesome. We probably could get real fish through Lowry.
- Make some kind of reward if you identify it correctly get a free descender device. Ryan: I think we
 have some room on this one to work with Dayv Lowry. Maybe we will bring Dayv into one of these
 meetings.

Any other quick ideas? We should be thinking about others and create a list. Steve C: how about recoupment of hatcheries space after February 4, with the great capitulation of 2014 where all those steelhead are not getting raised. There is plenty of room at Marblemount. They have a whole section that used to raise steelhead currently not being used – maybe some trout in it, but that is it. There is plenty of room there to raise Chinook, either ones or zeros, and Marblemount has a great contribution rate for winter and for summer. Dave K: so you are saying utilizing current hatchery space for a new production group? Norm: my concern is that after NOAA does their 2-year thing, if the state decides to go back into hatchery production, where would we be sitting then?

Is an even-year pink a possibility? Ryan: there is some genetic difference between odd- and even-year, that is the reason. If we could somehow freeze the eggs, hold them over and raise them the next year (that would take some money), and I don't know if the science is out there quite yet to do that. From what I understand, the genetic part would be the way to jump-start that. All the way up through Alaska, there is odd-year mixed in there. The odd-year have a genetic makeup of pink during the odd years is better off to deal with changing ecosystems. They are just more suited to survive even years.

Dave K: One idea that I think would be an innovative idea is back to my earlier comment that we got rid of net pens, but a lot of the talk is that the fish are not surviving past the Narrows Bridge. I think it would be very interesting to take fish from south Sound net pens and hook them to a barge and barge some up past the Narrows. Another is to barge them all the way up to Point No Point and release them and see, you have to pay attention to straying and different types of issues, but see if you can get them past the hard point and into the feed type of thing. Could you even increase survivals that way? I think this could be something that could be explored and could be pretty well partnered up. Michael S: From a perspective of steelhead and marine survival rates. That was one thing that was discussed two years ago and the two reasons why it went down: 1) just the feasibility of it; and 2) stray concerns and the ability to determine whether it actually makes a difference. Dave: I would use coho because coho don't stray as much and you want instant results, you don't want to wait five years to learn something. Dave P: I discussed briefly with you at the last meeting, is whether there is any way forward to do some work on strays and net pen raised Chinook as to whether there are procedures that could be implemented to mitigate for that straying factor? That would be more a longer-term thing. I am not saying in south Puget Sound. If you were to perhaps take your hatchery facility up there on the islands, if there was a way to put them in a pen, I think you even brought up bring them back, I don't know exactly...Michael S: So if you rear them in a pen, but stage your releases out of standard release site and you use the pen to deal with your density issues and then you actually bring them back to the hatchery for acclimation and release in phases. You get around your rearing capacity issue and you may reduce straying because you have enough acclimation period,. Chinook don't take long.

Dave K: Let's definitely think of other ideas, but production groups, if any of those are going to change, those have to be determined soon. There is a whole process for that. Ryan: Yeah, staff and all that so I don't even know how quickly we, it would be hard to change something for this fiscal year. It would be more along the second fiscal year. I am not saying you can't make something happen this fiscal year, but depending on what you are asking might take some time if we do shift.

Dave, now we have the ability like at Wallace to otolith mark, we can really pay attention to those Chinook we are releasing, and so if we want to be creative with some different release groups like having a fall release group portion, we have the ability to mark them and do those things in the short-term. It is going to take a long time to analyze. Dave K: My thought is you are not going to get any recoveries in a fishery when it comes to otolith marking, so it doesn't mean anything, and we could care less how many fish you get back to the rack, it is all about how many you get in the catch. Rahmi: You are going to get information from smolt to adult return at the hatchery. Dave K: Yeah, but you would be better off staying with the CWT then you would truly know which fishery they are contributing to and what the increases are, but I think it is a great idea. That gets back to Minter maybe having a different release strategy, your jumbo program whatever it might be, things that are going to cost: more water, more energy, and more feed. However, we have to be more creative or we are just spinning our wheels. I think you were correct in bringing up our goals, whether we have increased license sales due to the pinks, or the big reserve that

we keep adding money into, at some point it is time to pull it out and see if we can do something different.

Identify under-utilized stocks. Five new tools to increase awareness of opportunities: boat show, clinic, workshop, 2015 ling cod hatchery feasibility report

That is all that we have to accomplish very soon. So far we have:

- jumbo release
- release strategy at Minter
- rockfish ID
- descender s
- changing the escapement threshold at Lake Washington.

Ron stated that the group should keep in mind the furlough effects. Base funding; increase to be applied where? What it was? What it will be? ID red flags. Change to better strategy/ies; what changes will it entail. Outreach is separate from coordinator.

Gregg asked if the June meeting is the right meeting to be talking about the future budget changes. Should it be earlier? Ron stated that on February 16, we will develop our next biennial budget – so a year out. That is when we want to hear about major changes. Other little budget changes should be discussed... that is when we need it. It does not have to go through Commission. If occurring in the fall, it is not too late. We do need to have those kinds of conversations earlier than later. Gregg stated that we need to take into account ripple effects. Ron stated that if recommending a significant cut in one program to go to another, there are implications. We do have rules on how to conduct business in that scenario – other than lateral moves or domino effects, we have certain obligations. We have to figure out what we can to and talk to the tribes.

Focus on one or two things – maybe have a conference call.

Ron stated that if we get the budget, we need time to get our ducks in a row. I suggest tail end of August. Keep in touch via email and walk through it depending on budget outcome.

ACTION ITEMS		PERSON RESPONSIBLE	DEADLINE
DISCUSSION Wrap-	ln .		
	ation? To use Doodle Poll.		
CONCLUSIONS			
ACTION ITEMS		PERSON RESPONSIBLE	DEADLINE
OBSERVERS			
RESOURCE PERSONS	Colleen Desselle and Ryan Lo	throp	
SPECIAL NOTES	·	·	