## PSRFE Oversight Committee Minutes, October 29, 2018

Note to committee members - if you know you made the statement, please put your initials in place of the question mark, and return it to Colleen. Thank you.
Present: David Stormer (DS), Colleen Desselle, Mark Baltzell (MB), Don Freeman (DF), Mark Riedesel (MR), Troy McKelvey (TM), Dave Puki (DP), Steve Stout (SS), Mike Gilchrist (MG), Gregg Williams (GW), Brian Missildine (BM), Jim Jenkins (JJ), and Dave Knutzen (DK), Kirt Hughes (KH)
Absent: Norm Reinhardt [tried to hook up via conference call], Art Tachell
DK: Introduction - Mark Baltzell introduced Brian Missildine - Team lead for the Hatchery Evaluation group.
MB: Review Agenda.
DK: Approve previous meeting's minutes - Motion to approve. Seconded. No opposition. Approved.

## BN 17-19 Budget Development - DS

Budget - We have about $\$ 140 \mathrm{~K}$ positive variance. Brian had an internal meeting re concerns on the tagging programs for the agency. We may try to form a group of staff to provide thumbs up or down - deciding where the program makes sense, and where we need to start learning and coordinating efforts through the Hatcheries, Science, and Management Divisions. We are looking at the challenges we are facing, and Brian has put together a proposal. In addition, we have:

- a page from Gary [Marston] that speaks to the success on to where we are getting "bang for the buck" on our hatchery releases (sport), and where we are seeing the best adults per thousand released;
- an escapement report;
- a document on eggs that we have already taken, and production increases that we are doing for brood year 18. This is our response toward SRKW and what we can do this year, and
- a proposal from Art on a possible net pen project in the Point Defiance area.
?: - would like staff input on data gaps, where are the holes, are there other things like that we can funnel some funds into, and what can we do to increase sport opportunities?
MB: Volunteer Angler Report - has morphed. Some area have great information such as Area 13; Area 6 is not obtaining good information. It waxes and wanes. MR: I sent an email out regarding a possible creation of a MAP. I used the Hunter Master Program (MHP) as a guide for this program. This could fulfill data gaps, data collection, and increase angler opportunity not only from information gathered but also provide opportunity for anglers to go out and sample at certain points in season or maybe before the season opens. Maybe create bubble fisheries to increase opportunity. We also know that the test boat is very expensive to operate and maybe this could help by not incurring additional costs. DK: Would this be a complement to the professional sport fish...? MB: When we first started doing our Voluntary Trip Report (VTR) Program, we had a group of folks who had extra training; learned fish identification, handling procedures, and those kinds of things. We spread the VTRs everywhere we could.

What we found is that we were not really getting participation; even the specially trained anglers were not really helping. This could be a complementary data set or supplementary depending on the area where you want to get your estimate. I can see benefits, but there are challenges such as getting volunteers to do the work that we pay people to do is an issue because the union comes back with, "you're taking work away from people we pay to do that job." I am not saying it is impossible. There are enforcement issues such as knowing which of these anglers are fishing and when. This requires thinking through issues. It is probably going to take some time and effort to implement logistically and make it work efficiently. I am not sure we have the time to do that now. MR?: I am aware of the MHP, but I do not know the benefits and such. ?: Some of the benefits of the MHP are that they may be selected to be able to go in and do a damage hunt, a controlled hunt, hunt a problem area, or an area with high population where they can be somewhat selective. They have been through extensive course work/training, and they have become a steward of the resource. That gives them some special opportunities to go do some of the things that are not necessarily available to an over-thecounter tag buyer. [For the MAP,] I envision this: where there is an increased opportunity for an angler, maybe DFW wants pre-season data in Area 9 for sub-legal fish; you can contact some of these anglers versus putting a test boat on the water - you might have 20 anglers who are qualified and have signed up for that area, but not everybody is available. You can use that resource and say, "okay, we have contacted these four boats and they will be fishing these dates to collect data (and the season is not open). Obviously, there are some constraints within Enforcement and managing that, but that would be an increased opportunity for them. That may be for the top $10 \%$ of the fishers; we have some anglers who excel and they are going to be the anglers who are more prone to go down with this MAP. So how do you couple that so that it benefits the regular angler? Using the data collected, it may show high impacts to the resource and we are not going to get much opportunity; or it may show that impacts on the stocks in these areas during these times are low, and therefore in the next handful of seasons the recreational opportunity will increase because of what the impacts show. What I do hear on this is that we do not have enough data. This is an idea to help the Department - not to detract from jobs but supplement them. You can take this out to rivers and other fresh waters, but for this group we would focus on salt water. That is the big picture. There is a ton of logistics and things to work out, but if we have extra funding. DP: Would there be an opportunity for Department personnel to collaborate with this pool of MAs? You could have one person from the Department on the boat with one or two other anglers who are part of the program to:

- provide some semblance that is a test fishery (the staff member would be wearing Department gear clearly identifiable by Enforcement from shore); and
- it would make the data, (I think), that much better, that is if you could actually pool a MA with Department guide so that the personnel is doing their job, but he or she has a better (or another) vehicle that does not cost as much money.

MB: I think there is potential, however I do not know from the legality standpoint on how that would work but... DP: One of the problems I have seen in the past, and I have seen it in crabbing. If somebody has pots in the water, or if somebody has a deer strapped to their vehicle, some others think that it is okay to go and do these things, so we get a lot of inappropriate activity because they see someone else doing it. MB: I think that those would be in the details of whatever you do so that it is clearly identifiable and obvious of what is in effect. Clearly identifying the gear/the boat, or the boat could have a special sticker. There are some solutions to that. Take the burden off the Department and put it more on the angler...train them how to sample (DNA samples, scale samples...). If part of the requirement was that these volunteers had to receive training through the Department to be able to go out and have these extra opportunities, I think people would; I would do it. I think the requirements are involved for Master Hunters, and I know you are doing some of this stuff already, but to increase participation requires a little more karat involved. That is the main complaint I hear about VTRs is that it is like, "well I filled this out, but it is used against me. I don't get any additional opportunity because of this." Whereas this is, "I get to go do something." It is outside the norm, an extra feature. DP: If there is a partnership between the MAP and the Department, they could co-mix to improve the quality of the data you receive. MB: Yeah, there would have to be some kind of partner in training, absolutely. ?: I was thinking about the karat idea. Is there some way we could expand on what we have now for our VTRs where we could come up with some way to incentivize it somehow? DK: I think your issues are going to be the same. You can give someone $\$ 1,000$ or a VTR, they are still going to lie to you on what they caught. You have go back to this Master program, an elite class. The MHP is an elite class. They get to go on various things; you know deprivation hunts and things like that. They have to put in lots of hours, lots of training... what I am trying to say is that you might be better off with an elite program, something with a very limited number of people and you have a high scrutiny on what makes or breaks you. Treat it like a job. Also, I wanted to say is what you are proposing though, is...you talked about money and how to manage it, someone would have to define it all out - a budget for the program so it actually could happen; not just throwing another thing on the Department on how they could collect more data. It has always been interesting that fishing is the one thing that does not require much criteria. Every other thing requires a much higher criteria when you go out. ?: Does this have to go through the Legislature? MB: It would be one of those things where we would want to identify those kinds of data needs far enough in advance so we could build in extra impacts into the pre-season planning model to account for extra data being collected in these times and areas, and when we are anticipating on doing it. We usually do pretty well about buffering our impacts especially when it comes to things like test boat accounting and that kind of thing. We could buffer up that test boat accounting in the pre-season planning model, and that would encompass those extra impacts we could see. DS: Accounting for these impacts in the harvest would have to occur, right? MB: Supposedly, we have to account for everything. DP? Based upon what you are reading is, the scale of it, with there being extra
data collected to advance things or...because unless you get enough sample size you would essentially be playing Russian roulette with your data. One bad trip and you have got your lower Hood Canal stock caught in area 11 or wherever, and that affects the data going forth. I am curious on how big it would have to be to be beneficial. MB: I think it would depend on the kind of questions we were trying to answer. You might have to think about doing it for multiple seasons before having any confidence in that data. One of the things we are hindsighting right now is that way back when we started test fishing, we never wanted anything and we never collected the tags on anything. Right now we are looking retrospectively saying that if we had collected tags on all those juvenile fish we intercepted, we would probably be better off in our modeling now, knowing the geographic distribution and what stocks we were intercepting where and when, but now again, sample size is everything. If we had been doing it since 2007, we would probably have enough tags to save something by now, however if you are just looking at it on a year-over-year basis, we probably do not get enough encounters on a yearly basis to make a bit of difference on anything. Our ultimate goal is to be able to collect enough data in those times and areas where we are lacking and it has the potential to increase fishing activities down the road. Maybe besides east Area 6 or the north end of Hood Canal in Area 9 in the summer. Can you think of other areas where we could expand time and area, opportunities within Puget Sound? DK: Let me ask you this. Other than Area 13, where are we fishing 12 months out of the year? I see lots of room for expansion. MB: Okay, point taken. ?: Getting back to the value of something like this and to the lakes exactly, I thinking about the Skagit steelhead program last year, which almost did not happen because we did not have monitoring. If we had had a trained crew of 6-7 anglers that could do some of the monitoring, we could have expanded that fishery a little bit. The same thing with opening day lakes. We have a big battle every year getting people to get out onto these lakes. If you have a pool of anglers who are willing to do this, you know what I am saying. If there is opportunity there, and the people that do sign up for something like this actually do want to volunteer. It is not like a trip report where you are setting out this pile of papers where everybody is grabbing them and not even filling them out; people who fish and want to join something like this, I think they would be more diligent than that. KH? The MHP is part of the agency Administrative Code, so it is not in the RCW. ?: I think a MAP would attract a higher moral compass, the higher moral standards, and that would be behind it and getting them into the program. Hopefully it would capture some highly accurate data. Some of the data we currently receive is cream-of-the-crop, coming from the best of the best anglers out there fishing, giving somewhat skewed high numbers as opposed to some of the real-world, average anglers. A program like this, where we are going to have some good anglers could potentially help correct that. MB: Remember when we are getting data from the VTRs and the charter anglers, we are not necessarily doing the full-meal-deal biological sampling getting lengths, scales, and that kind of thing. Essentially we are getting encounters by size and mark class; so legal, sub-legal, marked and unmarked. They are helping us apportion the whole pool of fish into those categories so we can come up with some idea of how big of an impact we are having
within any fishery. What I am hearing is that we would be asking these folks to expand and go more toward the biological data collection where we are getting lengths, scales; genetic samples. This is assuming that they would have stay within a legal limit for the day. They can still keep fishing and collect data, but they just have make sure to turn everything else loose. DK: Unless you are having them collect coded-wire tags. ?: That could be a karat for the program. Perhaps you can make a special exception such as "I really needed to collect accurate data from out of [Area] 8-2," so you are allowed (for this timeframe) to wand them and if they have CWTs, bonk them on the head, and you have that data. There is your karat. MB?: That would still require us to do an emergency rule that provides only that individual the authority to do that. ?: So you would have to publicly announce that then? I am intrigued enough with the idea, and thank you for bringing it up. I think it is an interesting proposal. I am unclear on how it dovetails into our little stash and being able to tap into it. I wonder if there is opportunity for the staff to write up a couple of pages on what this would entail from an agency standpoint. The infrastructure, the costs, and... DS: I could look up the costs estimates. ?: What it would be, and from your [agency's] experience on how to program - if there is a staff member that has to oversee it, what that will take, all that. MB: We can come up with a couple of pages of information. DK: I would sum up that I think this is something we have talked about in the past, and there is some merit. If there is some extra dollars to put toward something, it makes it easier to do. We are a bunch of citizen volunteers and not experts on sampling or what statistics or data points you need. If we have opportunities to collect some data points causing an expansion or the ability to maintain our fisheries down the road, I would ask the Department to give that a good shake. What would a program like that look like? Then I hear you too, Mike, on you never know what you might find out there, but to me we should not be scared of finding out what might be right for the resource. If there is something that is right for the resource, we should be doing it. My assumption is that we will actually go more toward the positive. You get some of those wacky CWT recoveries that get stuck in the model for a long time and it is because of one data point. If there are more data points we have out there, it nullifies those wacky ones. Norm has been pinging me trying to get in, so I am going to get him on the speakerphone.
MB: This might be a good time to put forward the Hatchery HEAT unit proposal on how we may use some available funds. BM: The gentleman next to Dave mentioned CWT backlog. I want to address that too because they make some dollar signs within my mind. I just recently took over supervision with the CWT lab. We are still backlogged to sometime in 2017 with our basic hatchery heads. We have a list of priorities that we need to take care of such as test fisheries, Chinook, summer Chinook, etc. To help address some of that backlog, we received a one-time additional grant of about $\$ 5,000$ from PST to fund three additional temporary positions from August until December. That money is out in December, and I do not know if we are going to get anymore. We are certainly willing if this authority wants to fund a position there. We did that to try to get some of that backlog caught up, but you know as fish come in, we still have plenty of work to do. We can discuss this in detail if you would like.

I did not know this until recently, this group had funded a group of fish at Icy Creek. I think, up until 2 years ago we were looking at dropping what we were paying for the CWTs for that Icy Creek group, unless PSRFE wanted to pick that up.
We definitely want to keep the 100 K yearling at Hoodsport, and we are looking to fund up to 200K of Tumwater Falls 450K groups - so there would be one early-timed release, two normaltimed releases, and one late-timed release. Those fish are already staggered on their releases so it would not take a lot of effort; just different tag codes for those fish. What we are looking at with early- and late-timed release is what do the returns look like? Are we getting the best smolt to adult return from the early, the normal, or the late? Are the fish coming back any larger from the early, normal, or late-time release? A reason why we are looking at that is the Governor's Executive Order to increase prey resources. Chinook salmon has that component in its survival - increased survival and increased size of Chinook upon return. This is a challenge. * Another is funding 200 sub-yearling out of Hoodsport. That is with the two 100 groups with the normal-timed release. We have some grant money we are hoping to receive in November as part of the orca research that would fund that additional $\$ 100 \mathrm{~K}$. * I think we are doing something similar out of Chambers Creek. We have been doing that for a couple years and should start seeing some returns next fall. We are starting to see some jacks on those. * CWTs are an important component on looking at where our hatcheries are contributing to fisheries. For example, Wallace Chinook has a huge proportion caught up in the Canadian fisheries. We use this data to see where our fish are caught, what the smolt-to-adult survival rates are, and looking at what the size of the fish are on return. An example we are using for CWTs is out of Gorst Creek where we are definitely seeing Chinook returning at a smaller size over the last 10 years. We are also seeing a lot more 4 -year olds with less 3 - and 5 -year-old fish returning back to Gorst Creek. That is some of the data used from CWTs. We are looking for some help with funding. Our budget is tight, and we feel all these studies are important. We want to get some long-term data sets and get some good information out of those.
That is a brief of my proposal to PSRFE. JJ?: When you are talking about late releases, these are late-timed releases that are going to be marine returning fish because a lot of our obligation is for blackmouth. You are not talking late enough to try to residualize these fish are you? BM: For example, we have some of Chambers Creek program releasing them earlier in April, then our regular time would be May-June, and then the late time would be like August or September for those. So whether those fish could hang out and residualize in Puget Sound, I do not know, but that data would show eventually once those fish started returning up there. They are caught in a blackmouth fishery if they are not caught somewhere else. I do not have a good answer for you for that one right now. DK: So $\$ 100 \mathrm{~K}$ in the head lab from AugustDecember, is that running through December? BM: The end of December, we will be down to three less staff unless I can find other funding on it. ?: Do you know how far along they will be in the work load? BM: I am guessing we will still be working on 2017. There are many heads out at Minter Creek and Lakewood. We, unfortunately, do not have a good inventory on what is out at other hatchery facilities. I am working on that to get a good idea so we can do a
better job at estimate proposals and as to when they might see some data from the CWTs at their facilities. That is part of the challenge as they keep blowing in. ?: I have a loaded question. How many more staff could you fit in there, what is your capacity for processing heads in there? BM: I think it is seven, and I think we are pretty darn close. We would have a tough time fitting eight in there. DK: How far behind in processing heads are you? BM: I wish I had a good answer. I do not even want to try to answer that. DK: How long have you been in charge? BM: Two weeks. DK: I was pleased and surprised to hear you say that this is in your wheelhouse now. BM: Yes, I would love to keep staff in there, but funding determines that. The longer we can keep them in there, the more heads we can get done. I do not know that we can ever get to the current year, but I think we are not working on 2016. ?: Do you have a goal moving forward to be more real-time in collecting that CWT data? BM: That is always a challenge. We actually do some real-time data out at White River for the spring Chinook program; sending a crew there 1-day a week for about three weeks, to go through those fish and real-time read those. More so, trying to do that would take several staff to do it because there are so many CWTs to read. Correct me if I am wrong, but I think that internally we have some other prioritization processing ocean tags, processing Puget Sound sport and commercial, before a certain point... With that kind of mix, we do have certain priorities test fisheries - high priority, ocean fisheries - high priority. We have a list of priorities of what we have to read and we may get a week's notice stating, "Hey, we have this Columbia River contest fishery that we need read right away," and in fact, this is a real scenario. They are coming in right now, so we have to stop whatever else we are doing, and get those read to get them the fastest data they can get to evaluate that fishery. DK: I am glad you brought that up because there is a lot more than just hatchery rack returns. Most of them are going to be the exact same code. They are sub-sampling now at hatcheries so they have fewer tags to read as well. My immediate thought on that is, is if this program wanted to help out the head lab there would be some benefit to it, but I would encourage this program to try to make it more efficient and improve the system and not worry about trying to get to the backlog. That will always be there. It will never get better until they make efficiencies within the program. BM: We are actually trying to work with our IT developers on the $6^{\text {th }}$ floor to develop some apps so that we are not having to handwrite it, but just to scan the CWTs. It would be much quicker and much more accurate in the end. There are some efficiencies out there. We have two of them developing the hunting app for the public. Unfortunately, our CWT priorities were bumped down a ways. We would love to have own IT person developing that software to do that. Their AI, artificial intelligence (I think is what they call it) - I gave them a whole bunch of tags to read, and it starts reading the tags and identifying the numbers. Eventually it will read the CWT numbers, know exactly what it is, and give us a readout on wherever it came from and when it was entered into the computer system from the trailer. That would be great to have that done soon. DK: Thirty years ago, I worked at the Deschutes hatchery (here he describes the process for collecting tags having multiple staff repeating the same tasks, and states that it is the same process used today). What I am taking a long way of saying is one reading is
definitely an efficiency, but the bigger one would be at all the hatcheries, if you can do like the port samplers do: scan a bar code and beep, instantly it is on the computer. It auto populates this hatchery, this date, species...you type in male and the size and you send it on its way. In the head lab, they would go beep and it instantly populates the database and removes multiple interactions. That would really work, and it would get the Department into the modern edge. MB: We are currently doing that in ocean and Puget Sound recreational fisheries. We have little yellow barcoded tag labels, and they are able to type it right into their iPads and it uploads nightly. DK: We should be doing that at Marblemount and Deschutes, and on and on. MB: I think we, basically, would use the same application in commercial fisheries sampling; the same thing we would use for hatchery sampling. Actually, for the co-managers, that is actually something they are very interested in as well. They are doing electronic fish tickets. BM: That is our main goal. DK: It is my understanding that this program already pays for the tagging at Icy Creek. BM: David pointed out that your group hasn't paid it for two years. PSRFE paid some of it, and we were paying for the other $\$ 100 \mathrm{~K}$. We are just saying that PSRFE is not interested in that group, so we may drop that $\$ 100 \mathrm{~K}$ and put that money to other use somewhere else. DK: And then the same thing at Tumwater, maybe not. I know we do not have a program there, but I thought we were paying for the tags. MB: I do not know about paying for some Chinook tags. I know we have been doing some coho stuff in south Sound, but I do not think we pay for Chinook tags at Tumwater. DK: I guess I am not sure what we pay for. MB: Well, David has been kind of drilling down on that to see how this budget line item matches up with what we expected to spend and that kind of stuff. DK: I thought, we as a group, we had a tagging budget and it was to a certain degree up to the discretion of the Department on where there are data gaps. Deschutes is one where it is nice that we are getting tag groups out of there. It has been so long that we are not certain where those 25,000 surplus... MB: They are not sure if some of those fish are straying into the Nisqually, so we want to get to some of that data. DK: So if we get rid of Icy, are you saying drop Icy altogether as a tag group? BM: Um-hmm. DP: That is our yearling program. DK: That is like the only yearling program in southern Puget Sound. How would we ever know if the world changed and yearlings performed better than zeros? MB: It is just a suggestion, Dave. DK: Well, this is a question. DP: Good water, good hatchery, yearling program. MB: Maybe we just have not done it the past couple years because it is on the cycle of we are taking a couple years off and then re-implementing that. BM: We are taking a $\$ 100 \mathrm{~K}$ out right now, the state is not, but this group is. DK: I think it get backs to the Department. You all know better than we would on where we should be tagging, but yes, I would be a little bit concerned about not tagging a yearling group in Puget Sound. MB: For more than a couple of years. ?: You're just talking about dropping the tagging, not releasing the fish? BM: Yes. MB: Do you have that sheet, David, on those tag groups and when... DS: I can bring it up. I do not have it to hand out. MB: David put something together about how the tagging groups that we found in the most recent years, like 5 or 8 years. We tagged them this year; we took a couple years off; tagged them this year... DS: I can send it out. DK: Then I guess we are going through all
the various proposals before we figure out what is going on. ?: Can you speak to the Hoodsport 100 K ? BM: I am sorry, this is something that my colleague came up with, and he is not here. However, I think we already are tagging 100K yearling out of Hoodsport, and we want to keep that program. This is more to remind me that we want to keep that. DK: So Mark, when you think about tagging (in general) do you think about our fisheries and limiting stocks? We all know the stocks are going to bite us in the butt down the road. Are there areas where more data would help in those regards whether it is a mid-Hood Canal, Lake Washington, the Stillly? MB: Like where are we having data gaps? Well this may feed more into the Pacific Salmon Treaty discussion later on, too. We had an internal staff meeting about implementation, and it certainly seems to me, we are going to have many challenges ahead of us with that. Apparently, there are going to be some Canadian Chinook stocks that we are now going to have to manage pre-season, for either exploitation rate or an escapement goal, so I am thinking, obviously in areas $3,4,5,6$, and 7 could be limiting there too. I do not know. I think the problem with Hood Canal is because we know where we get all those tags, and that is what bites us in the butt. The only two places we find those tags caught are in the Treaty troll fishery and Puget Sound sport fisheries. I do not know if having additional tag information about where to find those fish is going to be helpful. I have not really wrapped my head around that one too much. I am foreseeing some bigger challenges coming forward just trying to figure out what the new normal is going to be. What will the landscape of the new Chinook plan, having the new Pacific Salmon Treaty in place, and reducing northern fisheries - that is part of the PST plan, too? There is going to have be agreed-to reductions in the Alaska, the AABM, and the ISBM fisheries in place - kind of off Vancouver Island. There is going to be reductions in the north, both from Alaska and Canada. What is that going to mean for us after exploitation rates and for increased fish down here? It is going to change the landscape of what to expect other than expecting our fisheries to continue to get pinched. DK: That is why I was wondering about those data gaps. If it makes more sense to try to ramp up or it gets back to the MAP. MB: I think the biggest data gaps, and probably not the focus of this group, I see it being in the freshwater fisheries. We do not really have any creel or sampling programs to speak of in many of these freshwater rivers where we use them as indicator stocks for treaty implementation as well as management. Thinking specifically to, like some of those northern streams. I was thinking about like out on the coast: Queets and Quillayute - those do not have any freshwater fisheries sampling. We do have some sampling like at northern rivers such as Skagit. We do not regularly fish recreationally in the Stillaguamish. We do for game fish, and that is one of the other ones we get hammered on. The question is what are the impacts on salmon when you are fishing for game fish? To me, the big data gaps that we are facing right now are more the freshwater than marine. DK: I have two comments: 1) if that is what is hamstringing our fisheries, then maybe it makes sense for us to help them out, make sure there is less of a data gap, and therefore we do not get hamstringed with our being in the salt water fishery; and 2) when you say Quillayute, Quinault... MB: that was just what came to the top of my head. One of the things, that is in the treaty is essentially we are not having to account
for both the marine and freshwater mortality on many of these stocks where we had not necessarily had the information to do that in the past. That is where I see us having to ramp-up sampling programs, especially in the freshwater. Even for marine, I am thinking about there are times like right now when we do not do an in-season estimate in Area 6 in the summertime. That is probably going to have to back to where we were doing an in-season estimate so we can have a better handle on mortality and even through the coho fishery to be able to account for those incidental mortalities while we are targeting coho too. We may have to re-ramp up or refocus some of our sampling area efforts in those 5,6 , and 7 area boundaries more so than we have in the past. I know Snohomish was one we were looking along with the Skagit and Nooksack. We need to get some freshwater information from those that we do not have. ?: What kind of freshwater information are you... MB: Essentially we can get a catch through the catch record card system. We can get total catch, but we do not have any idea what effort is like. We do not have any effort matrix at all. We can get a catch number, but if we do not have effort we cannot really; it gets harder to calculate incidental mortality if you do not know how many people are participating. If we are not creeling, we do not really get freshwater tag recoveries from those recreational fisheries. We do get hatchery rack returns, but we do not get what our anglers caught in the freshwater. DK: So, according to this table, where we pay for Deschutes coho tagging, is that...? We have been doing that for nine years now and it is only a tag group of 4,000 ? DS: I can double-check. DK: It is only $\$ 400$, but I have a hard time believing that is making or breaking our fishery in Area 13 for coho. That almost seems like the wild stock tagging. MB: That is what I think it is. DK: Why are we paying for the wild stock tagging program? MB: I will ask Ryan.
AT's proposal-DK: what I remember in the email is that Art has been talking to various people (Metropolitan Parks which is probably the City of Tacoma...DP: No, they are different entities) DK: ...a local school there, the Puyallup Tribe and of course his marina. The proposal is to put a net pen at the marina. Through his various conversations, the Puyallup tribe has suggested to fill the net pen with White River spring Chinook (WRSC). He said that he has been talking to on the hatchery end of things, but talking about 50 K in the net pen. Although he has funding, he would like to know if: 1) do we want to have some skin in the game and make it a little bit of our project? He did not talk about a dollar figure, but when I talked to him I asked him what he amount he was talking about. What would make him happy is $\sim \$ 5 \mathrm{~K}$. DP: Were they going to delay release those or what is the plan? DK: He was talking zero-age release, and actually I told him if we were to do it, I think it would be really informative to do larger zero-age release and then backfill that pen with some number, whatever that number is. Let us just say it is $5-10 \mathrm{~K}$ yearling release as well, which complicates the program with the yearling releases from the standpoint of now you have a little higher degree of fish culture, right? To raise a yearling in the net pen and then throw something in for sixty days or whatever it would be? JJ?: You are not going to summer something, so you need freshwater. DK: Yeah, I guess it depends on when those zero-age... JJ: You are not going to put zero-age any bodies out there in the spring. DK: Educate me. When would you put zero-
age Chinook in and when would you release them? SS: June to June. JJ: Yeah, from what I remember them going out early, they do not do very well. They do not eat. It is too much of a shock. They are not like coho. You take a coho out in winter. They can go from fresh to salt in an hour. When we did it, it was a June plant, and just put them out there for a short time, and we let them go. I do not know what the benefit of a June-to-June release, but a June to September or October, maybe there is some benefit. There are many experiments going on right now where they are looking to that September or October planting. DK: Since Art is not here, but if you went from a June to September/October, and you kick them out the door so you are getting more of a jumbo release... JJ: We are talking Days Island, is that where we are? DK: No, Point Defiance. JJ: You would have better luck there. DP: Would need a little more practice because all the water coming out of the Puyallup, but still delayed - June in and September out, would work better in there? JJ: Do you work with Chinook in net pens now? SS?: The stuff we have done in the past was an October planting to the net pen; October or November, and then releasing some of them in February, April, or May. DK: So it is a little closer to being yearlings? SS: Yeah, and that ones that we are releasing early...the only reason I can recall that they were being released early is so we could backfill the net pen with coho. DK: This is WRSC? No, these are actually South Sound spring Chinook from Hupp Springs. JJ?: You would have much better opportunities from falls than you will with springs. DP: I think there are some timing flaws in their plan for survival. DK: Well, we do not know what their plan is. DF: With that kind of logistics, what would the regulatory hurdles be? BM: It would have to go through the HGMP or the Minter/WRSC, whatever you want to call it would require revision to reflect that. Currently as a courtesy, we do send some of the new HGMPs to the HSRG. There would be some of that process to go through. Some regulatory with NOAA fisheries since they would be reviewing. ?: Who would be doing that? The Puyallup [Tribe], the Metropolitan Park, or... BM: That is a good question as to who would be doing that. I am not sure if maybe the Muckleshoot, Puyallup...it would probably be the Muckleshoot, the Puyallup, and WDFW as co-managers would be part of that. DK: That would have to take place regardless of the stock you use. To raise fish in a net pen you are going to have to go through that process. Period. MR: Yeah, and that is kind of on that group that was organizing it. That is their task to get all the approvals. He is asking if we want to have some skin in the game. From my personal perspective, Art has been after a little project like this for a long time, and I think that finally he has some traction here. I, personally, think that to give him $\$ 4 \mathrm{~K}-5 \mathrm{~K}$ to feed those fish, I support it just because he has been after this for such a long time. Whatever data sets or whatever we want to collect, whether it is educational purposes for the schools or all those things down there. I do not think that it is necessarily a bad thing. DP: Will those fish be marked? Several: Yeah. Marked and tagged. DP: Marked and tagged? MR: Yes, it would provide recreational opportunity in some form. DK: I know that Norm is on the call, but I can tell you Norm's concern is this. Norm has dropped off [the speakerphone]. His concern is WRSC would typically be showing up in April-May. His concern is that we spend some money, we get skin in the game, and the NoF process knocks us
out of opportunity to harvest these fish. I told him that could happen with any fish. If we are talking about a small amount of money - in that $\$ 5 \mathrm{~K}$ range, I would rather have some skin in the game so then we, as a committee, can look Mr. Baltzell in the eye and say, "Hey, we had skin in the game, why are we not getting opportunity on these fish?" Two, we do not know perhaps they would end up showing up in other fisheries. MR?: What would be the cost to mark 50,000 fish? DK: Fin clip them or to Ad + CWT? The latter would be about $\$ 8150$. BM: So, I am sensitive about the WRSC program that we are currently discussing with our comanagers, and I want to leave it at that. This is a very delicate program. Keep that in mind if you want to go forward, it may not turn out the way you would like it. Just a precautionary, there, but I want to be upfront with the group. Correct me if I am wrong, Jim. JJ: I think it was worth mentioning something. There is interest in altering the program among the comanagers. The historical look at it, the ' 87 and ' 97 agreements on how it should be operated there is presently discussion should that be altered? Should there be another way to look at that? Brian is correct that it is a very delicate topic because there are so many entities who are interested in that. What has happened now, is a discussion is started which is the right direction to make a change. MB: There has been a history with this group trying to... so I think they are quite aware of the sensitivities. GW: - I sent a response back to Kirt, without seeing a write-up on what the goals and designs are, I would have a hard time giving it either a thumbs up or thumbs down. There is not enough information to base anything. I was a little perplexed by the statement of these fish are of good nutritional value for killer whales. How do you determine that from releasing the handful of fish down there? Conversely, what is a bad nutritional value? What is your threshold? I, personally, do not know where to go with this. DP: Will there also be a chance on those return fish in some sort of a terminal fishery down around Point Defiance? MB: That depends on survival. You may get 300 to 500 back if you are doing a 50,000 program $-1 \%$ survival. It is hard to know what you might get back on a program like that. DF: It would provide good PR if we could work with the tribes and the schools and the Metropolitan and stuff. That might get some awareness, at least something beside a couple hundred fish coming back. MB: I think that is all the official proposals that we have seen come our way. The floor is open for ideas. I know David and I talked about that we have goal development and some outreach too. I think we are about out of descending devices. We could probably stock up on those again and restock on some of our other outreach materials to spend down some money. Again, it is not going to take a big chunk out of what we need to spend. DS: I do not think we are hearing any rejections of these proposals out of hand, correct? Maybe it would be a good exercise to have all the details fleshed out. MB: I think we need to be clear on what marking programs are going to take place out of this 111 for FY2, so we have that dialed in to specifically what we are spending on that. From there we can consider what Brian put forward here. I definitely heard from Dave and others that we want to make sure that we are still keeping that Icy Creek, even if we are taking a hiatus. DK: What kind of dollar figure are we talking about? MB: We are probably in that 140+/- range. DK: When does a decision need to occur? Other than the possibility of the tag lab, no one is going
to do anything for a chunk of time. I am not sure we need to make a budget decision today. BM: I know that the Muckleshoot Tribe is reviewing WDFW's portion of the WRSC HGMP now, and NOAA is anxiously waiting for them to clear up. Art's proposal may need to get in front of the tribes for review sooner than later so we are not back to square one to review that HGMP because it has been six years, and we are still working on it. DK: I think he is moving forward on it with or without us. MB: I was just thinking that I could probably reach out to one of my technical counterparts to see if they have actually had any discussions on it. DF: Can we tell Art that based on review hatchery staff, we can pay for tagging if it is a viable program, approved, and they have everything else in line? DK: Let him know we are considering doing this as long as the proposal has merit. More curious if MA Program is something the Department is considering. MB: I am kind of coupling (and they do not have to be coupled), but thinking to have identification of where this group can potentially help on the MA and the data gaps and needs. Whatever that may look like because, essentially, it is what we can do to work on those data gaps for recreational fisheries. DK: I am not speaking for the group, but there is benefit to the PSRFE whether it is data or sampling, whatever if there are ways to shore it up and increase or stabilize our opportunity. MR: I think if you are looking to spend money now, but can we get descending devices and allocate some money to clear the backlog? MB: I worry that trying to put money toward developing that system. It seems to me that we may have a hard time spending that in this FY. As Brian said, we just lost half of the Fish Program IT development team. Everything is going to take time and get up to speed. Brian's project may not come up in the queue until next biennium. DK: Unless we use the money outside the Department, then you do not worry about the Department. I think it is obvious. However, I do not know if it will ever come up with the IT team because the list is so long, and you are still working on the hunting and fish app. It has just never reached enough to get to the top. JJ: On the optimistic side of that, the agency audit on how we are organized, determined we needed a Chief Information Officer. That person was hired, and they recognize these problems. They are developing solutions to bring this team together as opposed to every program having their tech folk creating apps on this and that. I am not a tech person, but it could look different in the future - the way we address our technology problems. MB: That is encouraging. In some of my interactions the first (and usually their last) answer is no. Fish Program got tired of that, so that was the impetus of creating our own. Okay, so I think we have some products to get to you before we meet again. BM: Would you like me to put together a quick budget proposal for additional staff in the lab just to get set up for you? We are hoping for an answer by the end of December just to roll over into the other budget. DK: I think the quick answer is yes. DP: How much will we be spending on that? BM: Roughly \$34 K per month. DP: So roughly about $\$ 48 \mathrm{~K}-50 \mathrm{~K}$ a year per head? Please add trying to get into the bar code environment to avoid transcribing the data multiple times. DK: That not only helps Head Lab, but it actually helps the hatcheries. Relieves staff of doing mundane jobs and let them do more important duties. SS: Brandy Campbell provided me with a note to tell you that on the variances in the budget, there is none of this took into account for pay raises and the
other thing she wanted passed along is that we probably spent down any positive variances by June 30.
Unfortunately, LLTK got only two salmon back due to algae bloom. Eggs are Samish. They would rather get their eggs closer to home. They did have it worked out to where they were going to get them from George Adams but based on whether Samish got the adults back, we would go to Samish. Samish came out after the sport fishery closed, and the tribes cut back a little bit, we ended up getting their eggs. Samish gets full complement, and we will have 500K going to Bellingham Bay.
Treaty update on PST: MB: we did have an internal meeting with our salmon Commissioner talking mostly on the Chinook Chapter - everything that we are looking at, as with everything, hinges on funding. Right now, I think we are getting $\$ 1.7 \mathrm{M}$ annually for treaty implementation for the PST funds, spread on several different spots in the Department. A budget exercise indicated that we probably spend $\$ 8-9 \mathrm{M}$ per year to implement the treaty. We presented a bunch of different numbers, but I believe we asked for $\$ 8 \mathrm{M}$ to implement the new treaty. Realistically we would be foolish to think we will get full amount, but you never know. It is all in the hands of Congress. Commissioner Anderson stated that if we get $\$ 5-6 \mathrm{M}$, it will be a significant increase from what we had been getting, which may allow us to key in on specific things we need to do to collect more data, etc. The last page on this packet, a one pager in the back, is basically the sheet they will be taking with them when they go to DC in a week or two to meet with all the Congressional delegation, and push forward toward getting that funding. I do not have a timeline for when we will learn anything about this request. I think, overall it is going to be a very different treaty than it was the previous ten years. There are some big increases in there for Alaska, marking and implementing marking and tagging programs to allow them to implement mark selective fisheries. We did talk about fishery reductions; there are some significant fishery reductions to the north, and a lot of them are in that tiered (low, medium, moderate, or high) abundance with specific rates of fishing within the chapter about what harvest levels are triggered; what abundance levels. I think this is going to provide some positives for us getting fish back to Washington, but part of this agreement, too, is that they are reducing to the north. We also agreed to through our own domestic process that we are going to be holding to some of these lower levels that had been added to the last two for a lot of those indicator stocks. I think they are trying to marry our Chinook plan, and align that with the Treaty so they are almost similar, and we trying to manage for several different levels depending on what you are trying to manage. Even though we have not finalized the Chinook plan, many of these management figures in the treaty will probably be close to what we are dealing with as far as the Puget Sound Plan, Chinook plan. ?: Those triggers all revolve around current harvest rates, correct? MB: Correct. There is a whole lot of technical work going on behind the scenes, which is one the items on the Chinook plan that is holding things up. We have this Chinook Technical Committee (CTC) through the Pacific Salmon Commission that has their own model. It is the CTC FRAM model, and we have the FRAM model that we do for pre-season planning and they essentially come out with different
exploitation rates. Essentially the technical staff have come together both, on the co-manager and the feds level, and say, "Okay, we are identifying these differences. What causes those? Is there a translation we can do so we are talking apples to apples in a pre-season, post-season process to align things?" I think we are making good headway although there are some disagreements between the co-managers and NOAA about how they should translate these. We are more [of the thought that] things should be translated on a pre-season basis, NOAA believes things should be translated on a post-season basis. Working through issues. Also, as you can guess, going through this we are looking at what is causing this, what is causing that, we are finding errors and discrepancies, and updating data so that causes a ripple effect. The modelers, today, have already done two calibration exercises since we got through our agreements in the spring. The tribal modelers are here today and they are going through a third calibration to get to NOAA, so NOAA can start their work of evaluation and translating. I think we are hopeful to get to a resolution on the Chinook plan in November or December. Most of the Puget Sound watershed plans are in place, I would say those northern rivers; the Skagit, Stillaguamish, Snohomish - where we still have some disagreements to resolve. The good thing is, we are talking and good dialogue is occurring. Those are mainly the outstanding ones at this point. There is some different stuff for chum fisheries. The one thing on coho that tends to keep us down is that Thompson coho, the upper Fraser coho where we are held to a $10 \%$ exploitation rate is now a tiered system where $10 \%$ is the low, and when you reach certain abundance levels then you can go from moderate up to high. This could allow for additional coho opportunity in Straits, Area 7 and Area 9. DP: Is this in-season management adjustment they will be doing based on abundance? MB: I think it is all pre-season. DP: How can they be accurate about their predictions? MB: That is where we do that pre-season, post-season translation. DP: I know. There is a big difference between pre-season and post-season. It has been more so profound lately with the climate issues also rearing their ugly head. It happens not only for us, but in BC and Alaska as well. MB: I guess, from my point of view Dave, it can only get better because with coho we have been managing on that pre-season $10 \%$ low status ever since I can remember us doing this stuff. We have never really gone above $10 \%$. We can probably only go up from there. Maybe the one caution on the Chinook side, and I hope I am not giving away secrets here, one of the things we are likely to have to manage to in the new Chinook chapter is meeting some objectives for Canadian stocks on a pre-season basis. I do not remember if those are exploitation driven or if they are escapement driven, such as predicting escapement, but it could...I know there is an early-timed Fraser, which Jim Scott pointed out, could be our problem child. I am sorry, but I do not have that one in front of me. It could be that that Chinook portion, especially in that 5, 6, 7 boundary area where we would have the potential for encountering those, we may have an additional squeeze up there as well to deal with those Canadian stocks. I am sure the details of all this will be out within the next month or two, I am guessing, as far as the actual publication of the chapters and such. I do not think it is complete, but I think it is in the hands of each government to ratify the Treaty. The Commissioners agree it on, in principle, and they have forwarded it to state department staff
and the Secretary of Commerce, I guess. I am not sure if you know it, but Phil Anderson is our Salmon Commissioner, and he stated that they spent a lot of time rewriting the language here to make both sides more accountable, and to make it more of a working treaty. He said the previous treaty kind of felt like we going through the motions. There are more specific deliverables in this, where they were more ambiguous in the past. They worked hard to make the language to hold each country to what we agreed to, whereas that might not have been so much the impetus in the past. He also talked about that in the past we did not even talk about a 5 -year review until the fifth year and did not even get that until the seventh year. There are things built in the process where you start the review after year 3 so that in year 5 you are actually looking at the 5 -year review rather than spending two years putting it together. I think they have made a many positive changes that, again I think it is going to be a wait and see how it is going to work out. One thing for those of you, who work with NoF - often we are waiting on those indices at the end of March or the beginning of April on the final abundance levels, what are those northern fisheries, what are the harvest rates they will be using? We built in specific dates and deadlines that need to meet each year so that we get those on a specific day or week so we do not have to delay our process even further. We ran into a situation a couple years ago on Coho were we had agreed-to a certain level, and they basically changed their abundance that allowed them to go fish a lot harder than we had planned pre-season, so there is a certain trigger in there so they cannot make changes after April 30 to their abundance indicators. DP: Rather than this being a general guideline, which may be interpreted different ways by different entities, this provides hard targets and dates they have to meet? MB: Yes. RMP Update: MB: I gave you a little bit of that already. We can get you the information as we go down the road of finalization, whatever that may look like. We have many of the management unit profiles we used for the Chinook plan which are somewhat agreed to. We just shared those with the recreational advisory group and want to share that with you too. We can put on that on our website or provide you an email.
SRKW update: MB: Today is the deadline for commenting on the task force proposals.
Hatchery document table (orange header): MB: Speaks to all the extra production that we took for preview 2018 to put toward extra production for southern residents. This has tribal and NOAA agreement. DP: NOAA agreed to the, it is actually 11.5 M total... of that the 8.6 M , some of these it looks like the numbers changed. Are they just going to release them in the river or different rivers? The big one to me, is there going to be a release of 2 M in the Palmer? Is the Muckleshoot [Tribe] not using that facility? BM: I am working with them right now on that release at Palmer. That is the plan. SS: Ours, I do not know what it is - what you have heard, but I have not put in a pitch for change for the 400 K yearlings for Marblemount yet because what [the tribes] want is an Ad/CWT group and a CWT-only of 100 K each, then they want the rest CWT-only. DK: It is not for their fishery either. SS: Their fishery is terminal and they can harvest, and that is the problem because not only that, they are agreeing to a terminal fishery for those fish within the Skagit River and that makes it hard for us to monitor or do anything with a fishery. We are protecting wild fish and you have marked hatchery fish
coming back. They want to do the double-index, and that we have agreed to as we have not done that for a couple years and they want the data off the yearlings. With that, we are alos reducing the double-index group on the zeroes that we do. Right now, we have two groups with one $\mathrm{AD} / \mathrm{CWT}$ and the other CWT-only of 200 K each, and we are dropping those to 100 K each. We will save a little bit of money on tagging. The rest are to be ad-clipped. The questions is on these 400 K - and they kind of get where we are coming from and they are saying if the fish are all for orca, can we not have them clipped? The biggest thing then is they did not want to see increased fisheries out in the Straits on these fish. We are saying it will not increase anything. You will catch more fish, but it will not increase the fisheries. That is what they are pushing. I get where the Skagit is coming from - they fish in-river. So, if they are having a fishery out there and it is a more selective fishery they may not see as many fish come back whereas if they are all tagged and not clipped, they could end up with more fish back. The problem is when we have a fishery in the river we cannot monitor that fishery as easily. Our take on it is no, we are going to ad-clip anything that is not part of the double-index. Samish is $100 \%$ ad-clipped plus the CWT group, the only change is no otolith mark. The Whatcom Creek BTC, those are the 500 K they were raising and shipping to the Lummi seed pond (which is not on here); we have changed that and it is going to be north fork Chinook this year with the caveat that we can switch that to north fork or south fork, depending on which one has the best returns. That is actually a good change, and we should have done it years ago to get those Samish stocks off the mouth of the Nooksack. They also agreed on that we have enough data and do not need to otolith mark those. The Samish fish are going to either Glennwood or the Samish plant, and none of those will be otolith marked. The 500 K at Skookumchuck are supposed to be marked and they will take them up the river way above the hatchery. They will not tag them this year. The still have a good coho return, which well exceeds their intake. They are still starting with 1.5 M coho and shipping 1 M to Kendall and we are raising them up and shipping out to Lummi seed ponds. DK: In years past, Palmer has not been ad-clipped. MB: Right, because it is what the designation has been rebuilding program, something like that, so we are trying to get more unclipped fish back on spawning grounds - that kind of thing. BM: I think they will be otolith marked and some ad-clipped. I need to double-check that. I believe they are talking about that now. From a management point of view, when the Muckleshoots are able to fish, and fish for Chinook, they are a happier and more agreeable. I did see a marked turnaround this year at NoF, and their willingness to engage in the process and work through some issues before we got to the big table. We have acknowledged that, and we are trying to stand aside, encourage this, and we want to be partners - when you are fishing, we are fishing, so we can all be happy.

HRSG: DK: Unfortunately, they have not finalized the report, but I expect it very soon. The bottom-line is that they are working on the executive summary because there is something like 54 pages before they get to any meat. The jest of the report, and although I have seen the report, I have not really looked at it. The good point is that all programs we are funding meet their guidelines and blessings. They did not criticize our existing program. The bad part is that
when I asked where we should be putting money, they did not do the best job at answering that. That is what I have heard, as I said I have not read the report. At this point, I do not know where we stand on providing funding; hoping that they would provide an $\mathrm{X}, \mathrm{Y}$, or Z . At this point, they have not provided that, but we will wait for their final. Not providing input on the production increases for SRKW.
Outreach - DS: Issaquah Salmon Days - this was the first representation by DFW's Fish Program. We were there both days and did some outreach. Great experience with thousands of people - positive. Overall, it was great especially particularly with the kids. They are not the people we are going to see at the Sportsmen Show. We plan to continue.
Coho - It was a little late in the year, but we worked hard to get it going. This was with new recruits at JBLM. We capped it at 20 people. We had a full group and provided gear. We instructed them on putting together rules and regulations, and putting together the coho spinners. They appreciated that. We had a couple hooks, but no one landed a fish. It was at least fun while it lasted. This took place at Solo Point in mid-October. We will have to make sure to do it earlier next year.
Chum - We are doing much the same as we did for the coho at Hoodsport November 10. I would appreciate any input or advice you might have. Again, working with folks downstairs, here, the Outreach and Marketing staff were going to go fish for chum. It is a public event. I am open to thoughts and suggestions, particularly on gear type or location. DP: Anything purple. Suggestions? Muck Creek.
Sportsman Show is coming up - Would like a meeting prior to the show. Maybe we can put together a schedule of availability for you to participate in that at the winter meeting. Will send a sign-up sheet. I think it occurs in mid-January.
PSRFE members: The last thing is the call for the committee applications. That expires on midNovember $\left(16^{\text {th }}\right)$. I have heard from a couple folks that they are interested in serving again. If you think about it, just shoot me an email or message letting me know. New membership service starts at the first of the year, biennially. DK: Art has to do some homework, and you have some homework. My thought is to do the meeting in early January and the new members start; have a joint old and new type of thing. DP: One of the things because the balls are going to start rolling around here regarding Legislative action for fisheries and such. We have the Governor's ear and anything that comes up on the radar that is something we should be looking into. Norm, Greg, and I sit on the Legislative subcommittee and it is time to start preparing for January. As things come up in November and December to submit to the subcommittee we need to get started on that and be better prepared for January.
Sportsmen's Show - January 23-27, 2019. Assign a theme: "Chinook Recovery." Task Force report on orcas for topics. If you can put together some videos before then. We have the machines we can plug those into to play. Ryan had surveys on iPads for people to provide input. Provide group questions for any updates or ideas. Giveaways - we had a couple gift certificates and a rod, something like that. That might be something that we can decide on now, as there will be costs associated with those purchases. I think it was about $\$ 200-300$. We
awarded one main prize after opportunity to fill out survey. Perhaps have the fishing application available for viewing and learning about it. Also having a pink year coming up. Dungeness crab: know the story behind Area 11 closure of crabs - biological information. Halibut Catch Record Card. The booth is reserved. Purchase descenders, salmon ID, rockfish placards, salmon placards (the latter last a long time, so many of the people already have them). DP: Our booth is not usually in the best area to have access to anglers; can you see if we can have them locate us in the fisheries area?

## Wrap-Up

Will send Doodle Poll for next meeting to occur early to mid-January.

