

PRINCE WILLIAM SOUND AQUACULTURE CORPORATION
Prince William Sound/Copper River Regional Planning Team
4/19/17 Regular Meeting
PWSAC Cordova Administrative office
APPROVED MINUTES

1. CALL TO ORDER

Chairman Sheridan called the April 19, 2017 Regular Meeting of the Prince William Sound/Copper River (PWS/CR) Regional Planning Team (RPT) to order at 10:00 am.

2. ROLL CALL

RPT members present (7): Sam Rabung, Jeremy Botz, Jay Baumer, Mike Glasen, Tim Moore, Tracey Nuzzi, (teleconference) Mark Somerville. *A quorum was established.*

Alaska Department of Fish and Game (ADF&G) staff present: Sam Rabung, Aquaculture Section Chief with Commercial Fishery Division (DCF), Juneau; Jay Baumer, Area Management Biologist with Division of Sport Fish (DSF), Prince William Sound (PWS) Management Area, Anchorage; Jeremy Botz, Area Management Biologist with DCF, Cordova; Charles Russell, Area Management Biologist with DCF, Cordova; Ethan Ford, Regional Resource Development Biologist with DCF, Region II, Homer; Stacy Vega, Otolith Laboratory Biologist with DCF, Cordova; Scott Kelley, Director of DCF, Juneau; Steve Moffitt, Area Research Biologist with DCF, Cordova; Stormy Haught, Assistant Area Biologist with, Cordova; (teleconference) Loraine Vercessi, Private Nonprofit (PNP) Hatchery Program Coordinator with DCF, Juneau; Mark Stopha, Assistant PNP Hatchery Program Coordinator with DCF, Juneau.

Prince William Sound Aquaculture Corporation (PWSAC) staff present: Geoff Clark, Production Manager; Dave Reggiani, General Manager; Becky Niles, meeting recorder/transcriber.

Public present: John Whissel, Native Village of Eyak, Director of NVE's Department of Environment and Natural Resources, member of PWSAC Board of Directors; Mike Wells, Executive Director of Valdez Fisheries Development Association, Inc. (VFDA); Eli Johnson, commercial fisherman, member of PWSAC Board of Directors; John Platt, commercial fisherman; Rick Isaacson, PWS Operations Manager for Trident Seafoods, member of PWSAC Board of Directors; Nick Jackson, Ahtna Incorporated, Gulkana; Paul (Timmy) Selanoff, Native Village of Chenega, member of PWSAC Board of Directors; Bruce Cain, Ahtna Incorporated, member of PWSAC Board of Directors; Tim Joyce, former PWS/CR RPT Chair, former PWSAC board member.

Recorder/transcriber: Becky Niles.

3. APPROVE AGENDA

Discussion: Sheridan amended the Main Bay Hatchery (MBH) Annual Management Plan (AMP) to follow Gulkana Hatchery AMP. Second, revisit discussion of ex-officio positions, from the last RPT

meeting, before subitem g (RPT Chairmanship). Rabung suggests correcting date on Agenda Item 3, changing from the 20th to the 19th.

Action: *M/Rabung, S/Nuzzi* to approve the 4/19/17 agenda. **VOTE:** Motion passed unanimously as amended.

4. APPROVE MINUTES

Discussion: *Sheridan* corrected the following: in Introductions, change Steve Moffit's title to read "Area Research Biologist;" change Stormy Haught's title to read "Assistant Area Biologist;" change Jay "Palmer" to read Jay "Baumer;" *Lorraine Vercessi's* name spelling corrected. Second page, other public present: change U.S. "Forrest" Service spelling to "Forest." Page 3, correct "Alodia" to read "Elodea." Page 4/20, change "barring" to "baring." Final paragraph, same page, change "Alodia" to "Elodea." Page 5/20, change to "penstock" at the Solomon Gulch hydro plant. Few lines down from there, same page, "turban" should be corrected to read "turbine." Page 7/20, Annual Report(s) change "make" to "made." Page 8/20, insert 2011 into 2011–2014 range. Page 14/20, third paragraph, clarify "defer" and looked at "it" very closely. Page 15/20, halfway down the page, waters of "Cannery Creek;" also, change "Man Bay" to "Main Bay" (item f). Page 16/20, 3rd paragraph, change troopers can "site" to "cite." Page 19/20, 3rd paragraph, change "an,d" to "and."

Action: *M/Moore, S/Glasen* to approve the 4/20/2016 meeting minutes. **VOTE:** Motion passed unanimously with corrections.

5. PUBLIC COMMENTS

Sheridan acknowledged the support of PWSAC over the years for the PWS RPT. PWSAC has gone above and beyond to provide support with meeting minutes, preparations, and facilitation. He said we have folks in attendance and this will be their last RPT meeting in their current positions. *Sheridan* said Dave Reggiani's first RPT Meeting was in 1997. *Sheridan* has been here for a handful of those years. He admired Dave's ability and skill at managing and supporting meetings. *Sheridan* thanked Dave for all his years of service. There was a round of thank yous from the RPT. **Rabung** said he has served on all the RPTs statewide. The support PWSAC, and particularly Dave's participation, is a tremendous amount of work. It shouldn't go unrecognized. Thanks Dave for his service.

Sheridan said Steve Moffitt will be retiring. He recognized Steve for his years of service to the area's fisheries, the dedication he brought to his work, his professionalism, and the information that he provided at meetings was very helpful over the years. *Sheridan* and the RPT members thanked Steve.

Moore asked how formal/informal this meeting will be for the public to make comments and participate? *Sheridan* preferred it to be as inclusive as possible. There are folks here that are more familiar with formal procedure. He hopes for opportunities for folks to chime in and asks for the RPT's support to allow that flexibility. Public comments are encouraged in the Public Comments section as well as during discussions. *Sheridan* told the audience to take advantage of an opportunity to speak. He's hoping for a fluid process.

6. AGENCY REPORTS

None.

7. OLD BUSINESS

- a. *Update by Mike Wells of VFDA on increased permitted capacity for pink salmon and status of hatchery improvements at Solomon Gulch Hatchery (SGH) for utilizing that capacity.*

Wells referred to a handout that was shared. VFDA's Permit Alteration Request (PAR) was approved in 2014, with a 20 million increase in 2016. That brought the permitted capacity up to 250 million. The PAR also provided for an additional 20 million in 2018, contingent upon VFDA being able to demonstrate the infrastructure to manage that capacity. The Water Use Agreement was successfully renegotiated with Copper River Electric. Now enough water will be provided to increase capacity at the hatchery. A robust period of renovation began for the planned expansion and the aging infrastructure at the hatchery. Most of the piping and pumps were installed in the early 80s when the facility was built. They were showing significant wear and tear and corrosion. In 2015, a 42-inch water main was installed from the hydro plant to the hatchery site. This is providing gravity flow to the facility with about 15,000 gallons per minute. A 14-inch steel high pressure line was torn up and installed. The entire pump deck was replaced as well. There are new pressure valve reducing stations and new penstock taps at the hydro plant. A list of projects was provided at the table. They replaced old steel site pumping. Some sections of pipe were split across the weld and silver dollar sized holes were found. It was timely that this was completed when it was. There is now a pump and high-pressure capacity of about 8,000 gallons per minute. This will be split between the pink salmon building and the coho rearing facility. It will provide backup water in the event that the hydro plant shuts turbines down. It can get water ahead of the turbines. Total cost was under 3 million dollars. One more major project scheduled for May is to add 1,900 square feet to the end of the incubation building. This will allow movement from the out migration building to the new space and extend the head boxes out. When this is done the plan is to raise 300 million pinks, along with the 2 million cohos. There will be room to grow. The 270 million pink production goal is on track, beginning in 2018. Pictures are provided in the back of the handout for the scale of work that went on last year. When the entire water pump and supply was torn up and laying in the parking lot, it created for some stress. There was a lot of phasing between fish, planning brood years, and phasing with the hydroelectric plant. Everything went well. The work is performing above expectations. Next year there will be another PAR to adjust the AMP to an additional 20 million.

8. NEW BUSINESS

- a. *Permit Alteration Requests (PARs)*
 - i. *Armin F. Koernig (AFK) Hatchery PAR*

Discussion: *Sheridan* said there has been a fair amount of materials provided at the table and through email. The intent was to familiarize folks with the documents and issues. There was quite a bit of time

spent on these during the past two winters, particularly at PWSAC committee meetings. **Rabung** asked if the request is to increase the permitted capacity from 162 million pink salmon green eggs, to 217 million pink salmon green eggs? The department members have reviewed this and looked at it in terms of, can we manage for this? The recommended approach is a stepwise increase. This is consistent statewide when anyone wants to make a major increase like this. It will be evaluated in phases. The recommendation from the department is a 190 million increase, and evaluate that increase for at least two returns before considering an additional PAR to go up to 217 million.

Botz provided the department's concerns relating to the stepwise approach. The increase in pink salmon production creates a higher rate of straying into natural spawn populations. There aren't concerns with pathology at this level of increase. **Baumer** covered the sport fish concerns by saying pinks aren't commonly targeted by sports anglers, so it's not a concern. Chenega does need to be considered when fishing for chums. It's not huge, but that information needs to be provided at the table.

Botz has a few commercial fishery management concerns:

1. Having a fishery that, at times, would need to be restricted to the terminal area to ensure the needs were met for wild stock escapement.
2. With more fish, increases lead to more management complexity. AFK is located along the migratory corridors in the Southwestern District. A lot of the fish that move into PWS tend to go through those corridors.
3. There is a potential increase in interception. The broader the area you fish there, the higher your exploitation on other stocks, potentially. That has to be moderated. With more fish, more effort is required. It has a potential to exacerbate some of that.

That leads to the reason for the two-step approach. **Botz** wants to meter the increase and see how well it can be managed. If everything looks like it's working well, we'll go from there.

Sheridan said we have been part of larger hatchery returns in recent odd and even years. Botz was in charge of management in 2010. Sheridan asked Botz to speak from experience with regards to that return in that (2010) season. **Botz** answered that we had strong runs at all three PWSAC hatcheries in August that year. There was not an exceptionally strong wild stock run. Adjustments had to be made to the area. They had to move the fishery around to ensure the fishery wasn't prosecuted too much in any given area to allow fish stocks, moving to the northern part of the Sound, through the fishery. The contribution estimates are regularly being monitored to the northern part of the Sound, Coghill, and the Northern District. Then they evaluate and manage those hatchery components and infer the wild stock contributions there, relative to the escapement in the northern districts.

Sheridan asked if that fishery was managed in such a way that it was restricted to the terminal areas? Or was the area expanded that year? **Botz** answered it was expanded and contracted that year. We did fish in pretty close. **Russell** said in 2010 there was a 17 million total common property fishery harvest in the Southwestern District. The escapement goal in the Southwestern District was missed that year. Besides 2013 and 2015, it was the third largest harvest since 2002. He wasn't sure what the fishing style was. **Botz** said we had a sense for that. The Southwestern District (escapement) wasn't coming on

line. We adjusted accordingly. It was an exceptionally large hatchery stock run that year. Adjustments were in the subdistricts, if he recalled correctly. The fishery was moved to the THA and SHA at times. **Sheridan** said in 2011 at the Board of Fish meeting, escapement goals were modified. The escapement goal was not provided at this time. There's a significant disparity between even and odd-year brood lines in PWS. For late season pink management, 2013 was the best of both worlds. Hatchery and wild stock returns were strong. It was obvious what we had. Cost recovery goals were relatively minimal. That's the best-case scenario for a manager.

Rabung pointed out the AFK permitted capacity was 190 million pinks in the past, for about eight years. It is not unprecedented to be at this level. It's never been above 190. **Haught** referred to the printout showing a series of tables showing total wild sockeye harvest in the districts. It's broken down by the whole season and the three districts: Eshamy, Coghill, and Southwestern. **Russell** said PWSAC was permitted 190 million at AFK and only collected, close to that level, three out of those eight to nine years. That is fairly close to what is current for pink salmon production. **Nuzzi** said that had to do with the market. Humpies were five cents per pound. PWSAC didn't have money to buy incubators or the net pens. **Sheridan** pointed out the table is for the season as a whole. This is regarding the pink salmon fishery. The marked and unmarked sockeye salmon harvest in the Southwestern District is a significantly small proportion of what is showing here. **Rabung** asked if PWSAC would amend the motion to reduce the recommendation to 190? **Moore** agreed that it was discussed and it could be amended. Amendment to the motion is made.

Botz suggested amending the motion to discuss the chum salmon production at AFK. It is part of the department's comments. So far, is the intent is to replace chum with pink salmon in the hatchery, and eliminate chums at the hatchery? **Rabung** said chum is not on this PAR. The only discussion item is to increase the pink capacity, regardless of any other species' capacity. Pink is what's on the table. That said, if someone wanted to make a motion to alter this PAR to recommend to the commissioner, you can make that motion. It will have to be voted on by this table. **Glaser** commented in response to the recommendation. He said, I'm receptive to it because of how I've observed the department has worked with VFDA in their process. It sets precedence to take this type of approach. Then the flavor in which the department presents it gives me great hope that we can proceed over time, and achieve our stated goal as stated in this PAR. **Glaser** said he's very on board with this. **Moore** said we need to make an amendment for the 190. We can discuss that and agree on that. At that point, another amendment can be made. Get that on the table. We don't want to discuss the chum production with that amendment on the table. **Sheridan asked if** anyone wanted to discuss against the motion to amend to 190 million green pink salmon eggs?

Action: Original MOTION by Moore, S/Botz to recommend approval of the 2017 AFK Hatchery PAR. **Amendment to the MOTION by Nuzzi, S/Glaser** to amend the 2017 AFK Hatchery PAR to read 190 million green pink salmon eggs capacity. **VOTE:** Motion passed unanimously.

Discussion for chum amendment: **Botz** said he didn't go into a lot of detail on this in the department's comments. Historically, there have been management challenges with the chum release and the harvest of wild chum and sockeye salmon as part of that fishery. Being a part of discussions at previous PWSAC Production and Planning and Executive committee meetings, the level of survival at AFK was

quite low and driving us to move to increase pink salmon capacity down there. The initial plan was to replace chum salmon capacity with pink salmon. If there is no intent in the future to go back to chum salmon it would be potentially cleaner to do away with that capacity at this point. **Rabung** said this is troubling. Since the PAR was presented for a simple increase in the pink capacity, it had nothing to do with the chum. If PWSAC wanted to reduce the chum, the PAR would say that. There's two different issues, two different fisheries, they are managed differently. It is troubling to bring this up, as nobody is prepared at PWSAC. This is not something that was on the table or publicly noticed. The PAR is publicly noticed and put on the website. That is what people are expecting to talk about. **Botz** thanked Sam. There was definitely discussion about eliminating the chum salmon permitted capacity. It's well documented in previous meetings. Botz said, I can't speak to the final decision on the PAR. The department's perspective is from being at meetings. That's where the discussion was going the last involvement I had. **Moore** explained the process of developing this PAR was a multi-year process with forty-one members of the PWSAC board. There was a lot of discussions and meetings for these decisions. It starts at the Production Planning Committee, then the Executive Committee, then to the general board who has two meetings per year. The premise of the PAR was developed over numerous years because we were looking for ways for alternative projects that would potentially provide more optimum benefit to our users. There were two projects we had that we were not happy with over a long period of time because of performance issues. When the general board developed this PAR, they would look at a replacement for the chum production, potentially. An increase of the pinks was a way going forward. From PWSAC's standpoint, if the PAR came back at not a high enough number to be of benefit to the users, then the board wanted the option to be able to weigh that out. If there isn't enough pink production increase, we do not want to go backwards in our production. That has a lot to do with the fact of why the chum permitted capacity stayed on there, because we could potentially get new information and that could happen. As you know from the PWSAC meetings, that's not the direction our board is going.

Rabung clarified the permit capacity is a maximum, do not exceed number. Organizations around the state often don't work at full permit capacity. Some permits have a sliding capacity shared between species. There is no penalty for producing less than what is permitted for. **Cain** talked about the stepped approach. There is a motion to address the pink salmon capacity. He suggested that the amendment to chums is out of order. He recommended to vote that down and get to the main issue on agenda. **Sheridan** said procedurally we can discuss this from pros and cons. **Rabung** called the question. **Sheridan** said this motion is to remove chum salmon production to make a recommendation to the Commissioner of ADF&G.

Action: *M/Botz, S/Baumer* to amend the 2017 AFK Hatchery PAR to eliminate the 34 million green chum salmon eggs permitted capacity at AFK Hatchery.

<u>Nuzzi</u>	<u>Glasen</u>	<u>Moore</u>	<u>Rabung</u>	<u>Botz</u>	<u>Baumer</u>
Nay	Nay	Nay	Nay	Yea	Yea

VOTE: Motion failed with a roll call vote: 4 nays, 2 yeas.

ii. Wally Noerenberg Hatchery (WNH) PAR

Discussion: *Rabung* said that the permit at WNH is currently 131 million chum salmon green eggs. They are currently permitted to release the progeny of 111 million of those eggs at Lake Bay. Then release the remainder, of up to 42 million, at Port Chalmers. This PAR is to amend their permit to allow them to release the resulting progeny of all 131 million green eggs at Lake Bay. *Botz* explained the department's thoughts. Under current management scenarios and wild stock management conditions there have been difficulties at what the level of release has been. Current release is 75 million fry. Botz was not sure what that equates to in green eggs. It is already lower than the allowed 111 million eggs at WNH. This PAR seeks to increase that release potential of 111 to 131. That would have the potential to increase returns to the hatchery and complexity to the fishery and exacerbate our wild salmon management concerns. Over the last five years the Coghill Lake sockeye escapement goal was missed for three out of those five years. Last year there was less than half the minimum at 8,700 fish. The range is 20,000 to 60,000 fish right now. Management is progressively getting a better handle on the weak Coghill Lake wild sockeye escapement and has been more conservative the past few years. Last year a fishery was prosecuted because they were near shore, off Esther Island. We closed down corridors and progressively moved into the hatcheries, and fished just in the THA at times. The Coghill District wild stock contributions were around 8,000. That ties into management along the corridor in both the Southwestern and the Eshamy districts. There was a contribution of about 31,000 wild sockeye salmon harvest during that run overlap time period. There was potential to make that escapement goal, but it was not achieved through the management approach taken last year. A more conservative approach will be taken should there be another weak return this season and in future years. That definitely would lead to a potential for a lot of congestion in the fishery. There is a conflict of limited time on the outside, fishing once per week for cleanup and fishing in a terminal area situation at WNH or inside at Main Bay. It is complicated. With the 111 million upper end, there is some flexibility should the wild stock management situation change. The release levels could potentially be adjusted, gauging those management implications at that point in time. The department's recommendation from the regional management level is no increase in chum salmon fry at the current level.

Rabung asked if the entire Coghill District unmarked sockeye catch in 2016 was 8,000. *Botz* confirmed. Escapement was missed by 12,000. It was less than half. *Rabung* clarified that 31,000 were harvested in the total common property fishery in that time period. He asked if the other 23,000 were harvested prior to reaching the Coghill District? *Botz* said that was correct. *Moffitt* added there was probably additional Coghill Lake stock that was intercepted in other districts. Those are just the three districts on the main corridor.

Nuzzi said it sounds like the Coghill weir is rumored to be geared up and starting. What is the status on that? *Haught* said they were told to move forward. There is no budget. They are charging forward like it's a go. *Kelley* said as of right now, the House Finance Representative had several amendments. One of those amendments is for a funds swap out of the Commissioner's Office general funds for Coghill Weir. As of this moment in time there is a high probability of continuing that. Coghill has been a part of the division's base budget for years until PWSAC and the Prince William Sound Marketing Association stepped in. *Nuzzi* asks about hiring. *Haught* answered, yes Penny our long-term technician is coming back, and one additional person will be hired.

Nuzzi asks how can Coghill be managed? Specifically, what has been learned from last year? *Botz* answered we harvested more wild sockeye than we should have. Historically, that (2016) was a conservative approach for that fishery. Short duration fishing periods were fished. There were very limited cleanups in the outer portions of the Esther Subdistrict. In Granite Bay and in the general district, we fished very limited amounts of time earlier in the season. As we got feedback from the weir and it looked weak, we progressively moved closer to the hatchery. We have learned from that. We would like to get a sense for what kind of an impact we get from just fishing in THA, but that's pretty muddy because most of that fishing period we are also fishing in other areas of the district. Wild stock salmon are still being caught in the THA. The fishermen are catching sockeye there. We are having some level of impact. *Botz* recommended regular opportunity in the THA in order to keep up with chum salmon. A lot of that is contingent on PWSAC's escapement needs at the hatchery. If we are not fishing as we historically do on the outside, then more fish will end up in the terminal areas. There is the hope to be flexible and to fish regularly in there, less time fishing outside, and short duration cleanups. The same is anticipated for the Eshamy District this coming season. *Rabung* said even if zero unmarked sockeye were caught in the Coghill District, if all 8,000 made it into the escapement, they still didn't meet the goal. So, the other 23,000 are caught before Coghill. *Botz* replied that's why it takes a linked approach. With Eshamy and Southwestern districts we are talking about a unified management approach with shorter duration fishing periods, and less opportunity in the corridors. *Sheridan* said this is a good opportunity to discuss run timing and how that would look throughout western PWS. What was the preseason forecast for Coghill sockeye last year? *Moffitt* said he couldn't remember but it didn't give us pause to think that the escapement goal wasn't going to be met. It looked like a reasonable run with a prosecuted fishery in each one of those corridor districts, and still meet the goal. *Botz* said that part of the strategy last year was thinking there was adequate escapement. Then it didn't accelerate at the peak of the run at the entry of the weir. It dropped off precipitously after that. That's what facilitated the more aggressive approach later in the game. Action should have been taken earlier. *Sheridan* said going forward, now knowing what you have, can you speak to changes and timing that reflects run timing for management strategies at AFK and Eshamy, and when that will take place?

Botz answered Eshamy and Coghill will be linked. The fishery starts up at the beginning of June. There will probably be a couple fishing periods with limited time on outside. We don't have a lot of run entry at that point. It's a low risk situation. At the second and third weeks, we are looking at a single period per week with cleanup on the outside and fishing more of a terminal strategy. For Eshamy that probably means all or portion of the subdistrict. There's more flexibility there with the way that hatchery is positioned, relative to Esther where are a couple of small bays and an open face at the south end of the island. Escapement will be gauged at Coghill. This year it will be an approach from the start. *Botz* said until we know otherwise, should we have a stronger run, then we will relax those restrictions. If it is a weak run, they will have to carry through the season.

Russell said AFK is very similar. For the first two weeks of June it will open continuously. But on the 15th we'll transition, depending on what tea leaves we're reading, to daily monitoring periods. Fishery time and area will be restricted as needed. If Coghill is returning stronger, the restrictions will be relaxed. *Russell* said he would stay online with what Jeremy is doing in Eshamy and Coghill districts so everyone is sharing the burden on trying to get the fish back up to Coghill.

Sheridan asked if they are looking at an approach where they are pulsing on the outside at Eshamy? Are you suggesting 60s and 84s on the inside? **Botz** answered no. We will make sure fish are not building up and losing quality at the hatchery. At Main Bay Subdistrict, 36 and 24-hour openers are anticipated for the outer portion. If more opportunity needs to be provided to keep up with run entry, it will probably be closer to the hatchery. There are still indications that they are catching wild stock, especially in the outer line and Main Bay Subdistrict. There is potential to redraw that line. More will be known inseason.

Sheridan introduced Tim Joyce (teleconference), who is a member of the public, and long-time RPT Chair, and will serve as PWSAC's interim General Manager. He has worn many hats. Sheridan encouraged the public to chime in as well. **Joyce** said he appreciated the discussion. Historically in the 90s there was overescapements that occurred into Coghill Lake that caused similar problems to the problem we are having now. The department's Limnology Section came up with some recommendation of stocking levels into Coghill. They were adamant about not exceeding those levels because of the fact that you can overcrop the plankton and cause reduced returns in future years. In recent years there was an overescapement into Coghill. It was over 100,000 fish, which was probably the start of this issue. Several efforts happened in the past, not saying they should happen in the future. Efforts were made to try to control the Coghill escapement on some years. The weir was closed a couple times. The department sold fish. They basically harvested the fish below the weir because they couldn't stop the run with the commercial fishery. They had to keep fish from passing by. Dynamite was used. The point is, trying to get escapement is a challenge at Coghill. It needs to be monitored. Overescapement needs to be dealt with. Joyce said he didn't know how the department would approach fishing at the Coghill mouth, if that situation arises. It's something to consider. Trying to get through these fisheries is a challenge. Eshamy District is on that corridor. Providing windows of escapement for those fish to get through is important. Botz addressed that. The main objective is to get the fish through. That is the most effective way.

Botz spoke to the large escapement years and what was done for management. Prosecuting a terminal fishery at Coghill River is challenging. There were two back-to-back years with strong returns. One total run, which was the second highest historically, was over 600,000. Because of contributions early on there was a good sense it was coming. It was opened at the terminus. Part of it is getting the effort up there because it is so far removed. Word spreads and interest expands. Eventually folks were up there fishing in the terminal fishery. It took a fair amount of effort to get folks up there and get tender capacity to support that. The challenge is, more often than not it doesn't support a fishery in close to the Coghill River. Most years Coghill can support an orderly enhanced salmon fishery and enough gets through to keep Coghill Lake within its escapement goal range. Every once in a while, there are the years with large escapement, even with a really aggressive approach. Botz said Tim brought up strategies that were used in the past with the department taking action to reduce escapement potential. In those years (2011 and 2012), we thought we had a handle on it. In 2011 the escapement was just at 100,000. Then the next year it was down at about 74,000. The upper end of the escapement goal range is 60,000. There was a good chance the system hadn't been overtaxed, but we are now learning otherwise. If presented with this situation again it's going to be challenging. Aggressive actions will be taken. Part of the challenge to attract effort up there is to do so when there are enhanced salmon

fisheries elsewhere that are more attractive and more productive for the fleet. We can't make people fish certain areas. Closing one fishery down to facilitate another wasn't a strategy that management wanted to consider.

Joyce said he appreciated Jeremy's challenges. The department caught and sold fish when he was there because getting effort up there was the challenge. **Joyce** spoke of fertilizing Coghill Lake when there were depressed zooplankton populations from the overescapements. That seemed to help get the sockeye back. It's another possibility. **Rabung** asked if anybody is monitoring the zooplankton levels now? **Botz** said the department is annually. **Rabung** asked if that 60,000 is the upper end of the range, based on what current capacity looks like with zooplankton? **Haught** thinks that number should be at the lower end. **Rabung** clarified that 60,000 shouldn't be hit. **Moffitt** said the range was 20,000-40,000 for a long time, based on current euphotic volume and zooplankton production. It was updated based on looking at Ricker modelling and current zooplankton data, and it looked like the upper bound could be raised to the 60,000 level. After those two big escapements, we are now on the returns from those 100,000 plus and 70,000. It looks like we may have cropped it down again. **Haught** informed the group that he had presented information about fertilization to the community of Cordova. Further fertilization is not recommended. It created a brief spike. The issue at Coghill is suspended sediment. The silt particle sizes interfere with the feeding of those large zooplankton, both *Bosmina* and *Daphnia*. Regardless of how much fertilizer is dumped in there, with the lake's flushing rates, its bathymetry, and its persistent suspended sediment, it's never going to be a great producer. In other lakes where this was done in Alaska, it's a good way to go if there are abundant *Daphnia* populations to begin with, and a lot of clear water to begin with. Coghill is a challenging site from a lot of perspectives. **Rabung** asked how did it support 600,000? **Moffitt** answered we had a return of 1.2 million in the past. **Rabung** responded, how did it support that? **Haught** answered it is a very dynamic system. Some years glacial runoff and rainfall kind of changes the clarity of Coghill off and on. It's a fascinating system just for that reason. In the past, it has produced a lot of fish. What we see now is the water quality is not worth going down that road from the recommendations of the people who did the fertilization. **Moffitt** said it is also a meromictic lake. It has a persistent saltwater layer. You only have 30 meters of glacial freshwater on top of salt water.

Moore asked how in this scenario does the department plan on managing chums coming back to Esther this year, as far as prosecuting a fishery for them? **Botz** has developed a strategy over recent years. There is feedback from the fleet where folks think we would have the most impact on reducing sockeye wild salmon harvest. Culross Point, the eastern portion of the Esther Subdistrict, and the longitude line west of Esther Pass on the south end was closed off consistently. This is how the Esther Subdistrict was compartmentalized. The fleet fished just off the island to help reduce sockeye salmon harvest. In the past couple years there were high sockeye salmon contributions estimates, even from that restricted fishery. A careful cleanup needs to be facilitated. Chum will build up around the island in the Granite Bay Subdistrict and elsewhere. If a weak sockeye salmon return to Coghill is anticipated, a terminal fishery with a limited cleanup on the outside is recommended.

Moore said PWSAC is also concerned with wild fish problems around the Sound. PWSAC would like to table this PAR. **Nuzzi** said looking at these contributions it looks like the wild sockeye proportion was the lowest it's been in ten years last year. It seems like every fish counts right now. **Moore** asked

to look at this PAR is subsequent years, keep it on the table for next year. **Rabung** points out that tabling it keeps it on the table for the next meeting as old business. **Sheridan** asked for a motion to table the vote.

Action: *M/Moore, S/Nuzzi* to recommend approval to the Commissioner of ADF&G for the 2017 WNH PAR. **Amendment to the MOTION by Moore, S/Nuzzi** to table the 2017 WNH PAR. **VOTE:** Motion passed with a roll call vote: 6 yeas, and 0 nays.

Discussion after motion was made to table the 2017 WNH PAR: **Rabung**, in trying to understand management for Coghill Lake sockeye in western PWS, said it would start with AFK chum and you would evaluate unmarked sockeye in that fishery's harvest. If there were too many harvested, then that fishery would be reined in. **Russell** indicated that it would just be time restrictions. In mid-June, they move into the Eshamy District. Time and area would be used as necessary to reduce the take of unmarked sockeye. **Rabung** clarifies that these are all sampled inseason, in real time. They are getting fairly quick turnaround. **Botz** said the peak at the weir is around the first week of July. They are coming through the southwest portion of Coghill in late June. **Rabung** asked if the chum salmon harvested at WNH ramps up in late June? **Botz** confirms it is the same timing. **Rabung** asks Botz if he will use time and area and continue to evaluate fish tickets and sample sockeye? The weir is the real-time evaluation. **Botz** confirms. **Rabung** said it seems WNH isn't the only issue, it's the last in line. But like Tracey said, every fish counts on these low years. It's important. Looking at 2016 there were 2,000 unmarked fish harvested in the AFK fishery, and 20,000 plus unmarked fish harvested in Eshamy, which is Coghill timing. There was another 8,000 in the Coghill District. Escapement was 12,000 short of the goal. It wasn't just the WNH fishery that needed action in 2016. **Botz** agrees. Action was taken in all three districts. **Rabung** understands that hindsight is always better than inseason. To see it as a package, to work on getting that escapement in to Coghill. Nobody sees benefit in Coghill Lake sockeye becoming a stock of concern. **Botz** said it's already at three years out of five for missing its goal. When there are proposed increases in hatchery production, the potential for the future of Coghill Lake sockeye salmon has to be looked into. That is a strong consideration for the department as far as revisiting this PAR to increase from a 111 million to a 131 million release. The position with Coghill may turn around quickly. Updates will be provided annually. It could be a few years before there is more management flexibility in the fishery. The current release is consistently 75 million fry. Releasing the progeny of 111 million eggs equates to between 90 and 98 million fry. At the current levels of release there's potential for a lot of negotiations in the AMP, for increasing production, to see how that impacts the fishery. From a management perspective, we're a ways out from getting into a position where the department is comfortable with this situation. There is a fair amount of latitude with the current annual level of allowed release.

Rabung suggested tabling until the PWSAC board can discuss and proceed with an action. **Moore** agreed. As a representative from PWSAC on the RPT, tabling the PAR provides opportunity for the general board to weigh in this fall and decide what direction we want to go. The board would have to vote against removing it. Otherwise it would have to be pushed forward. **Nuzzi** doesn't want to vote on it because the focus needs to be put on Coghill to help manage escapement for next year. Tabling is the preferred way.

b. Annual Management Plans (AMPs)

i. WNH, Cannery Creek Hatchery, Gulkana Hatchery, MBH, and SGH AMPs

Discussion: *Rabung* recommended lumping all of the AMPs together (original Agenda Items 8.b.ii-v), with the exception of AFK Hatchery (original Agenda Item 8.b.i). *Moore* said the department offered some edits, such as the “WHN” AMP title needs to be edited to read “WNH.” *Baumer* said there’s two sportsfish people. That needs to be kept separate for a vote, or all could be voted on unanimously for purposes of efficiency. *Somerville* said there are no actions to be taken. All the edits are agreed upon prior to the meeting.

Action: *M/Rabung, S/Somerville* to approve the 2017 AMPs for WNH, Cannery Creek Hatchery (CCH), Gulkana Hatchery, MBH, and SGH as reviewed and submitted. **VOTE:** Motion passed unanimously.

ii. AFK Hatchery AMP

Discussion: *Rabung* said the AFK goals by species is shown in track changes as edited to show 217 million eggs. He recommends not accepting any track changes and leave it as written. Pending approval of the PAR, as submitted, an AMP amendment would be done at a later date if the commissioner’s delegate approves the PAR at 190 million. Then we have a one page AMP amendment that can state changes of anything associated with that 190. That would be submitted and signed by the commissioner’s delegate. There is nothing to be done if it is denied.

Sheridan has a question on procedure because it seems like that recommendation is going to hold, depending on the discussion. In the document, section 1.4 there is some wording that has been changed. *Sheridan* asks Sam if he would have the same recommendation and approach for that? Or is additional discussion required? *Rabung* said there weren’t any changes made in chum. Reject any changes regarding adding chum. The commissioner will not be asked to decide that. The recommendation for that failed here. *Botz* said this is in the AMP right now. If the PAR is approved and amended, it would have to be adjusted to reflect this edit because there is no intention of the 34 million chum salmon eggs being transported. *Reggiani* said that section 1.4 was tied back to the PAR. It would be pending PAR approval. *Reggiani* agrees that rejecting all changes associated with the PAR is appropriate. If the permit is altered then come back and do an amendment to the AMP. *Rabung* said there is cost recovery in here. *Reggiani* asked if those were accepted or not accepted? *Rabung* clarified that they were accepted and referred to section 3.3, a progeny of 414,000 broodstock goal, and approximately 678,000 sold for cost recovery. The broodstock goal would revert to the 309,000. *Reggiani* said the broodstock goal would be pending PAR approval. Cost recovery would remain the same at 678,000. *Rabung* said that remains accepted at 678,000. He recommended any track changes associated with the PAR to be rejected. Anything not associated with the PAR should have been accepted. The cost recovery one is the only one that should have been accepted and it still shows as a track change. This can be amended in the motion if *Nuzzi*, who seconded it, approves. And the motion will have to read, as discussed or as amended in the discussion.

Baumer asked to clarify if anything involving pink would go back to the original? The track changes would have to be discussed with any other species? The PAR only addresses pinks. **Sheridan** said this is correct. **Rabung** clarified that if the PAR is approved at 190 million and PWSAC is going to make associated chum salmon changes along with that, this doesn't change the permitted capacity. We are just talking about the AMP. That would all be encompassed in an AMP amendment. If PWSAC chooses to do something different with their chum production because the PAR gets approved, then that would all be captured in there. It can all go back to status quo if the PAR didn't get approved. **Nuzzi** asked when does the commissioner look at this and make a determination? **Rabung** answered within a month. **Botz** said it was his understanding that the chum salmon and pink salmon are linked, as far as the AMP is concerned. Should PWSAC go up to a capacity of 190 million pink salmon eggs, there would be no transport of chum salmon eggs to AFK. **Nuzzi** said we haven't had a board meeting to discuss that. If we said that, it would change the PAR. Keeping it as is gives us a chance to speak to the board on what their direction is. **Botz** said a big part of the department's concern is if PWSAC is going to approve the pink salmon increase and run the 34 million egg chum salmon program as well. **Rabung** said there is no change on the PAR for chums. **Botz** said it needs to be reflected in the AMP that the 190 million pink eggs are in place of the chum salmon program. **Rabung** said it's not tied together at all. They are completely separate fisheries and issues. The eggs that are collected at WNH under this permit are then transported. **Botz** said the department is trying to come to an agreement on this by having an increase in pink production and the elimination of the chum salmon release. **Glaser** said the 2017 AMP said they are going to AFK this year. What we are talking about is how we collect eggs in the fall, brood year 2017. **Russell** said that from discussions at meetings over the winter he was informed there would be an increased pink salmon egg production and the chums salmon program would be eliminated at AFK. There is only capacity for 217 million pink salmon eggs at AFK. If 190 million pink eggs are approved, will the chum salmon program continue? **Nuzzi** can't speak for the board. A PAR was put in for the 217 million. Now that it is amended to 190 million pink salmon eggs, we would have to go back to the PWSAC Board of Directors to have this discussion. We cannot give you answers right now. We can talk about it at the Executive Committee meeting tomorrow, as far as what to do from this point. **Moore** said it's not until we get the PAR back from the commissioner that we have the tools for the Executive Committee and board to know what to do. The Executive Committee is limited in altering the production plan, which is also in our bylaws. **Reggiani** said if the PAR is passed, assuming we hear from the Commissioner's Office and it's approved, which should be typically by the end of May, first of June. That would give us enough time to understand what was approved. We would gear up for a 190 million pink salmon egg take at AFK. The question would be going back to the board and understanding what the board's direction would be. The board's direction was for 217 million pinks, and that would be exchanged for the chum salmon program for this AMP. Tim and Tracey are right about the bylaws. There is not a mechanism for the Executive Committee to change production goals inseason. This would need to go to the full board. The egg take at Esther starts July 1. That needs to be geared up for. At some point the board needs to weigh in and give direction. The Executive Committee needs time to reach out to the board and/or schedule a board meeting. There's lots to do. It's dynamic. **Botz** said this current AMP is only tied to the potential upcoming egg take this season, as far as making the adjustment. **Botz** asked if there would be additional discussion before the September transport of these eggs for subsequent release at AFK? **Sheridan** said that's before the general board meets to discuss this. **Rabung** advised to keep it status quo. If there's ambiguity on whether or not those eggs are going to be transported, in the AMP you can put either/or

language in an amendment. Management will probably not change by September. The fish that you would need for broodstock to meet this 34 million egg goal would either be used for cost recovery or common property instead of egg take. Management is for a number, and that number may change. **Reggiani** said PWSAC would send an amendment to the AMP as soon as they knew. **Botz** said if there is no amendment, we collect the eggs, transport, and next year at the table discuss whether these fish eggs are being released or not. The feedback is the department would be opposed to releasing the progeny of the 34 million chum eggs. **Rabung** said this discussion is not on the PAR. **Botz** said it's part of the AMP discussion. **Rabung** responded if the capacity stays on the permit, they can still do it. **Botz** said that doesn't imply the eggs are taken. It needs to be known if the eggs are going to be taken. **Rabung** said this would be an inseason decision. If the board doesn't want to take all the eggs they might recommend opening it up to common property. **Reggiani** said it's gone both ways for the green eggs permitted at AFK. It was linked at one time to the Esther permit and then it was moved it back up to AFK. **Rabung** said there's 34 million chum eggs on AFK's permit right now. WNH is conditioned to allow it to collect those eggs, then transport to AFK. The 34 million egg-take goal is flexible. PWSAC will have to provide inseason management for whether or not the eggs are needed. The status quo at WNH manages for them as broodstock. It is recommended to approve WNH to manage the eggs as broodstock. An adjustment can be made inseason if the broodstock isn't needed. **Reggiani** agreed. **Sheridan** asked when the PAR is approved or not, and there is the opportunity for amending the AMP, does the process include review by area or regional ADF&G staff? **Rabung** said there is no criteria for that. AMP review is discretionary anyways. This is going to get circulated to be open and transparent. What's unique is most AMPs don't describe this level of management of returns. It's much higher levels. It's not down to the fish the way these ones are. It makes it more cumbersome if we don't have a solid answer going into the season. PWSAC gives managers recommendations based on performance of the returns at the hatchery. If broodstock goals are made or ahead of schedule they'll say liberalize. If behind they'll say be more conservative. Responses will be adjusted as and if eggs are needed. **Botz** agrees. He said if the PAR passes, the track changes would be accepted, then the AMP would be amended to reflect the PAR changes. Then PWSAC would have to request any adjustments to the chum salmon language, whether or not the eggs be taken or transported. The release will be talked about next year. **Moore** said the track changes can't be linked to the AMP because the PAR is not yet signed. **Rabung** felt it would be approved if there was a unanimous vote consistent with the department's recommendation with that number. Assuming the PAR is approved, PWSAC will make a decision as soon as possible with the chum program. **Rabung** prefers to do one AMP amendment and get it all cleanly captured in there so another one doesn't need to be done. **Botz** asked if PWSAC decided to move forward with the chum salmon egg transport, what other opportunity besides today would the department have to provide input and give direction to that? Is this the opportunity here? **Rabung** There is no condition to remove the chums on this PAR. This PAR is to raise the pink salmon up to 190 million eggs. **Botz** maintains that section 1.4 should retain the track changes so as to reflect discussions that he's had within the department. From the department's perspective, they weren't comfortable continuing both the pink and chum salmon programs at AFK. **Sheridan** said we have reached impasse, and recommended that we break for lunch and continue after lunch.

Off the record for lunch at 12:10 pm.

On the record at 1:35 pm.

Phone: Tim Joyce, Loraine Vercessi, Mark Stopha, Michelle Morris, Mark Somerville.

Botz asked for clarification on what the potential is for chum salmon eggs at AFK given 190 million green pink salmon eggs? **Reggiani** responded that it's the full 34 million. **Russell** said they have the same concerns at Eshamy and Coghill districts with wild stock fishery interception. He foresees the same time restrictions at AFK as are seen elsewhere, based on the same concerns. **Botz** thought there would have to be a level of reduction of chum salmon egg capacity. There is a concern that there would be extra eggs to deal with after the egg take this coming year. It sounds like we have full capacity so it's not a concern. The department's concerns are for management of wild stocks moving through that corridor. There have been issues with early timed wild chum salmon. **Russell** said since the increase of 17 to 34 million chums in 2010, there have been increases in the interception of other stocks destined for other areas of PWS. Management has not been nearly as restrictive in time and area down there in the past. That's led to some of those banner years of sockeye catches in that area. Going forward it would be the department's management to restrict that fishery to stop the interception of unintended stocks. Especially stocks of concern for other areas of PWS. **Sheridan** asks for clarification about harvest of unintended fish increasing over time? **Russell** replied since the chum salmon increase, increases of interception of wild stock fish have been seen in that fishery. **Botz** said a lot of this depends on run strength.

Rabung said everyone is clear and agrees management will have to be conservative in the Coghill corridor. That's the first priority. As far as the AMP language goes, the 34 million chum salmon eggs are collected at WNH/Esther. If they are going to be collected there, the manager needs to know to let the broodstock through. That decision needs to be communicated somehow. If it is possible, put it in the AMP amendment to indicate that management will need that extra number of broodstock at WNH. If the board can't make a decision, the board should put placeholder language in there that states, PWSAC will have to communicate with managers inseason, or as soon as possible, to let them know what to manage for. Eggs might fall short if they don't communicate soon enough. They are managing for SHA escapement which includes broodstock and cost recovery. **Botz** asked how soon will PWSAC determine what they intend to do with egg take at Esther? **Moore** answered PWSAC does not have direction from their board to go 190 million and 34 million. **Reggiani** said the Executive Committee would need to have a discussion. Nobody has an answer for when the board will weigh in. **Botz** asked of the possibility of that happening before the general board meeting in the fall, to make that determination before egg take came around? **Reggiani** said they would have to hear from Executive Committee. The AMP is the direction the board has right now. They were looking at 217 million pinks and no chums. They need time to consider and weigh the 190 and a question on the chums. They might want the Production Planning Committee to look and weigh in on it. It could go in a lot of different directions. **Botz** points out there is the potential to be at the full capacity of 34 million chums and 190 million pinks. **Reggiani** said it's hard to say, each board member has their own opinions. There are forty-five board members. It's hard for anyone to guess when there would be a meeting. **Rabung** suggests leaving it status quo for chums, writing the amendment to deal with just the pinks. That's the maximum number needed to manage for the SHA. Then it can be communicated during the season if less than that is going to be done. Then it's not on Jeremy, it's because PWSAC had to make that decision. It's all about the timing. **Sheridan** asked if that was to be captured in today's motion? **Rabung** suggested to approve the motion for the status quo, and writing an amendment with a PAR. PWSAC might choose to not do 190. They might choose to hold off for one year to evaluate what the mix may

be. There may not be an amendment. Any considerations will have to wait until after PWSAC comes and suggests amending the AMP to change the circumstances. **Moore** said we have other permits we are not fully utilizing. **Rabung** suggests approving this motion with the track changes rejected, so it becomes a status quo AMP. If there is a request to change that after the PAR decision is made, then that gets addressed in an amendment.

Baumer asked for additional clarification. **Rabung** said if the PAR is approved it will change the permit. It won't change how they work this annual year. They may postpone acting on this PAR until next year or they may say we are taking those eggs this year. If they make another change to chum that would be a part of an amendment. **Nuzzi** said changes cannot be made until the board says what they want to do for production. The decision is being pushed off until it is discussed with the board. **Botz** asked about tabling the motion so this could be addressed at a later point when there was more information to make a decision as to what the PWSAC Board of Directors wants to do. **Rabung** answered the current AMP is from last year. If tabled, last year's will remain in place, which is the same as approving this as status quo. It achieves the same thing. If the PAR is approved and the PWSAC board acts on the PAR, we will need to amend that. We adopt this as 162 pink and 34 chum, or status quo. **Rabung** said there only has to be action if changes are made. If we table it, further action is required. The regulations say there will be an AMP each year. This language is put in place because it doesn't get approved until April or May, so we don't have to have meetings to approve the AMP in December.

Ford requested explaining the amendment process. **Rabung** said we wouldn't initiate an amendment unless the department deems it necessary and the commissioner approved it. The change of language would be drafted. That would be given to the department reviewers who review the AMPs. PWSAC would be the ones requesting it, so they would have already seen it. There are not full signatures required of everyone to go on it so it goes to the final line of the commissioner or commissioner's delegate. The issue of chum at AFK is not going to change, even if the egg numbers change. We will have to manage those for four more years regardless of whether this change happens or not. It has been made clear that it's going to look like onerous management by some of the fleet in order to make sure Coghill sockeye aren't overharvested. It's easy to argue that's preferable to a stock of concern. **Kelley** asked why vote on this AMP if the old one is already in place until the new one is adopted? **Rabung** answered it's a formality. They are not voted on anywhere else, it is discretionary. The clause is in there. The existing one is in effect until it needs to be changed. **Rabung** said we are on shaky ground saying last year's is in effect until we approve a new one, because the regulation doesn't say that. The regulation says there will be a new one each year. We are trying to cover that gap. **Moore** calls the question.

Action: *M/Moore, S/Nuzzi* to recommend approval to the Commissioner of ADF&G of the 2017 AFK Hatchery AMP, with track changes rejected reflecting status quo, and an amendment to follow based on the results of the PAR and board decision.

<u>Nuzzi</u>	<u>Glasen</u>	<u>Moore</u>	<u>Rabung</u>	<u>Botz</u>	<u>Baumer</u>
Yea	Yea	Yea	Yea	Nay	Nay

VOTE: Motion passed with a roll call vote: 4 yeas, 2 nays.

c. ***Copper River Chinook Salmon Enhancement***

Sheridan said this item is related to hatchery production of Chinook salmon on the Copper River, which was brought to RPT members' attention. Folks in the public are interested in that. Sheridan asks Rabung for a summary and his perspective. **Rabung** said this is from the Chinook symposium years of 2010 and 2011. There were requests for Chinook enhancement projects. Most of them were not a good fit to what the program goals and missions are for the PNP programs in the state. A group was assembled to co-draft, what could we do within the limitations we saw? In a system such as the Copper or the Yukon, a large river system with mixed stocks, it's challenging to do Chinook enhancement. One possible small-scale scenario was identified. If there was a 100% external mark on the fish that potentially you could have a selective fishery with non-lethal gear, such as dip net or fish wheel gear. On years of low wild stock abundance, you could release unmarked fish and keep the marked fish. It would be very high cost, low return. Rabung said they didn't see a lot of options for projects for mixed stock river systems for Chinook. It's almost impossible to manage for that wild stock need, especially for years in low abundance. You can't get a clearly separated harvest area. It has very limited potential. The feedback from PNP operators was, this is not what we do in Alaska. That's the Columbia River, we don't do that here.

Sheridan said that document was far more involved and he encouraged people to read it. **Glaser** said, from conversations with peers in the commercial fishery, there's a high level of interest in that area. This is said without having exposure to what Sam has just stated. **Rabung** said a lot of people want to do Yukon Chinook salmon enhancement. It's a struggle to find a way to make that work. **Botz** asked Rabung if he was entertaining an approach that is similar to the Columbia River? **Rabung** answered we don't see a possibility to do anything yet. We will see if stakeholders can identify an acceptable location to do that. The Yukon has treaty implications as well. It's more cumbersome than the Copper River.

Whissel said there is a lot of interest in doing this. It would present a lot of issues for enumerating the wild stock. One scenario is using the existing hatchery infrastructure like Gulkana. That would make for a challenge. Another is if we switched to sonar, which is what's underway and will probably happen in the next few years. Sonar would be a major cost savings and we have a lot of trouble funding the fish wheel project every year. Sonar escapement is likely to be impeded. One location near Miles Lake might work OK. It should be considered. **Nuzzi** suggested egg boxes to help the streams in general. **Botz** asked if that was done in the upper Copper River? **Rabung** answered yes. Monsoon Lake was one of the locations people were interested in. **Somerville** replied that didn't work out so well.

d. ***Upper Copper river Ahtna/ADF&G sockeye salmon investigation plan***

Sheridan introduced a study plan that was brought to the attention of PWSAC's Executive Committee on the Gulkana River Sockeye Salmon Harvest Investigation Plan. He asked Mark Somerville to provide a summary.

Somerville reported that this is the same sampling project that has been done for the last thirty plus years in the Chitina area. The sockeye are sampled, looking for hatchery contributions. It's changed a little bit here and there over the years. There was a three-year period where a grant was written. This included the sampling in the subsistence fish wheels. This was the first time that was done to break out contributions for the Glennallen Subdistrict versus the Chitina Subdistrict. Most years it was assumed what was going on in the Chitina Subdistrict is what was going on in the Glennallen Subdistrict for use in the inriver goal. It was broken down for three years and it worked out pretty well. We had some data, though more is needed. Funding has been a challenge for the project over the last several years. We did not get funding the last time we tried, after the three-year period. Sportfish is now funding two people to do the monitoring in the Chitina area where this has traditionally been done. The new project is what it has been for the three previous years. This includes sampling in fish wheels and dip netting above the bridge in the Glennallen Subdistrict. The difference this time is there have been collaborative efforts with Ahtna for personnel to do sampling in the fish wheels. *Cain* said it is a proposal that the department and the Ahtna Intertribal Resource Commission are collaborating on together. We are cooperating together to get samples out of the fish wheels with the subsistence users. That's Ahtna's role. The funding announcements will be between now and September 30th. *Somerville* said they won't know about funding until next fall. The funding is for 2018. Job offers for the 2017 season have just been put out for a college intern and a seasonal technician to continue the sampling in the Chitina area. It will not include the subsistence fishery except trying to grab king samples out of fish wheels and dip nets above the bridge and by the Chitina Airport.

e. Hidden Bay cost recovery fishing options

Sheridan said that cost recovery fishing options at Hidden Bay have been considered in the past and was considered this past year as well. *Moore* reported that he had discussed this issue with Bert Lewis, and PWSAC had considered cost recovery in Hidden Bay but didn't get it. *Reggiani* said an emergency order (EO) was requested last year after receiving feedback that there was a build-up of fish at Hidden Bay. *Moore* said the department's response was that they were concerned about wild fish composition. *Russell* said Dave had called for an EO, but the portion of hatchery fish to wild fish was unknown. A sample is needed before initiating a cost recovery fishery over there. A flight couldn't get up in the air due to weather. Trident was asked to get a boat over there to see if it was worthwhile. The report was that there were not any fish in there. We didn't move forward with getting a sample. A few weeks later there were about 120,000 fish in there. That's when a fishery was executed over there. *Moffitt* said they were able to get a clean otolith sample. It was the largest the department has ever taken from any fishery in that area. It was over 13% unmarked. Out of 102,000 fish harvested, 13% were unmarked, non-hatchery fish. *Russell* informed the group that there are four salmon streams in Hidden Bay. *Moore* said the area is small and the majority are hatchery fish. If cost recovery is done, do otolith samples on the fish that were harvested. Separate out the wild stock component to potentially go towards the Fish and Game budget. When it does open at times, there's a large buildup. It causes a lot of conflict and congestion. This was evident last summer. *Moore* wanted a discussion started because of concerns seen coming into this season. A repeat of what happened last summer is not wanted. PWSAC is neutral on whether or not this is done. *Sheridan* clarified that this was during the WNH pink salmon run. There was a build-up of pinks up there. The department is asked to look at both chum and pink salmon buildups, and to provide opportunity there. *Sheridan* asked if we have

gotten chum salmon samples from there in the past? **Moffitt** replied at least once or twice when there was some cost recovery in there. The first one was a small sample size but it was 100% hatchery fish. Only 12 otoliths were all that we got. This last year it was 84. That was the largest sample we had gotten from there. **Sheridan** said that it's something the fleet looks at a lot and will call with requests to open up the area for both chum salmon and pink salmon.

Moore described what happened in Hidden Bay last summer. There was a significant volume of fish, about 100,000 fish, in an area where three boats can fish, and there were fifty boats in there. This problem isn't going to go away. It is not in the best interest of the fishery to be operated like last summer. **Nuzzi** asked Charlie, in hindsight, if we assumed you had this 13% wild component, is that acceptable to you or would you have to see where wild escapement is at that point? If now we had a request for an EO, what are your feelings now? **Russell** answered traditionally with cost recovery it's expected to be fairly clean. Without that wild stock component. With that high of numbers, I would have still done a common property fishery in there because there was a higher wild component. **Moffitt** said our consistent sampling with the cost recovery fisheries in 1997, 1998, and 1999 the general average is 2% unmarked. **Rabung** said it sounds like your question is about an orderly fishery. **Moore** said the department has some of the responsibility to conduct an orderly fishery. This area is potentially the worst in PWS. It's occurred a number of times over the last fifteen years. Events were the most serious last year. Looking forward, the boats are getting bigger and they're faster. Moore said he doesn't see any way to improve the situation.

Botz asked Russell what sort of frequency could be sustained based on the wild stock in there? What if it was opened more regularly so build up was not as much of an issue as it was last year? Last year fish built up for weeks and weeks and weeks and all of the sudden there was 100,000 fish in there. What if boats went in there and cleaned up once a week? **Russell** answered there still might be the concern of boats competing in that small space. With last year's number of fish and size of the total run, we had that situation arise. Russell said his concern going forward is to make sure, if we do cost recovery over there, there's plenty of fish returning to WNH. He suggested not focusing cost recovery on Hidden Bay. If there's a buildup, clean it up as soon as possible. **Moore** said one problem in PWS is that most of the time PWSAC's pink cost recovery goal is finished when these buildups occur at the level we are talking about at Hidden Bay. The cost recovery fleet has already gone on to common property fishing. This is a really tough situation that warranted a discussion. PWSAC doesn't have the ability, once their goal has been reached, to take cost recovery. PWSAC would have to work on this over the winter if there was some impetus that the department wanted to move this way and thought it was something that was valuable to create a more orderly fishery. **Russell** agreed we don't want to have another situation like last year. Going forward we'd like to figure out a way where you could cost recovery fish in there, or get somebody back to our cost recovery, or test fishing budget as well. **Moore** said it's difficult to manage for wild stocks in that area. A lot of times the opportunity to keep that area opened consistently enough to keep it cleaned up to prevent a build-up doesn't happen, just like last year. There were very few wild fish areas opened to the fleet and then it got out of control. It was open when there were buildups around the Sound and it was a bad situation. Anything that can be done to alleviate that type of potential situation would be beneficial to everyone.

f. Gulkana Hatchery sockeye salmon production and zooplankton review

Sheridan said there has been a significant amount of discussion about Gulkana Hatchery production at the previous two RPT meetings. Steve Moffitt gave a presentation at the last meeting. Jeremy Botz asked if this item could be added. *Moffitt* referred to a worksheet provided at the meeting. He said we talked about this topic in 2013 and again last year. This is mainly in relation to the program goal, the Basic Management Plan (BMP), which is to provide an annual average return of 300,000 adult sockeye salmon without jeopardizing delta and upriver wild stock escapements. Included is the language where that number came from. *Moffitt* discussed where we are at in relation to the 300,000 fish goal. Looking in the notes from the unapproved minutes from last year, 2013 and 2016 is reviewed. The BMP said the production level would be reviewed after two life cycles with a return of the strontium chloride mark. However, due to the mortality from the first marking event, that led to lower returns in 2003 and 2004. Those contributed to lower returns in 2008 and 2009. The review was put off until 2013. The first table is the Gulkana Hatchery contributions by fishery element since 1977. The second column from the far right is the total hatchery contribution estimate. The BMP said it will consider the recent five-year average. Compare that to the 300,000 goal. On the second page, in the second column from the right, the top value is the five-year average. This value is at 344,000 fish, compared to the BMP's goal of 300,000 fish. Table two is our estimated returns from the years of return with the strontium chloride mark. The comments include information from different events that caused lower returns than anticipated. Figures 1 and 2 were provided last year. They remain on here to evaluate whether or not there is any impact on coexisting upper river wild stocks or delta stocks. In figure 3, the estimated total run of Gulkana fish is the blue bars. The line is the estimated exploitation rate of Gulkana fish. The yellow bar is the 70% percent line. That is based on the 2007 (Clark et al.) estimate for what optimal harvest rate for wild stocks would be at maximum sustained yield (MSY). Looking at the last five years line of the exploitation rate of Gulkana fish, in relation to the optimal exploitation rate at MSY for wild fish, they are significantly higher than the 70%. Assuming that the coexisting upper river wild stocks are exploited at that same level, then it is not necessarily a concern for the stocks, but it does mean that you can have a reduced yield from those stocks. Please note that we are not managing for exploitation rates, we are managing for escapement goals. Figure 4, is the Copper River Delta aerial escapement indices. The Y-axis vertical is the escapement index by run year. The yellow dotted lines are the sustainable escapement goal (SEG) ranges for escapement on the delta. The yellow line is our average escapement that we are shooting for. Note here that there's the same SEG of 55,000 to 130,000 since 2003. In our escapement goal report, we indicated we wanted to manage such that the long-term average would be 84,500 fish. We've only been at or above that in two of fourteen years since that goal was implemented. We are not going to be close to that 84,500 fish average. The three main points are:

1. Where we are at in relation to the five-year average? We are slightly above 300,000. We are at 344,000 fish.
2. Exploitation rates for the hatchery stocks the last five years appear to be high, between 82 and 90%. Assuming that coexisting wild stocks are harvested at that rate, that's going to reduce yield.
3. If the stronger returns of Gulkana fish that overlap with the delta stocks are causing an increased harvest, that may contribute to not achieving our long-term average of 84,500 fish.

Moffitt went over Stormy's presentation. The mean plankton biomass in Figure 1 doesn't appear to be declining. Figure 2 indicates that the Bosmina biomass sample increased, and then recently decreased for all three nursery lakes. An obvious pattern is not seen that would indicate the stocking levels are having an impact on the zooplankton. In 2013 no samples were collected. That was after the flood and they were busy dealing with other issues. **Baumer** asks if samples are taken at the same time of year? **Moffitt** answered yes. Samples are taken by PWSAC staff.

g. Amended Agenda Item: Ex-Officio Seats

Discussion: **Sheridan** said a fair amount of time last year talking about this. It was decided to invite VFDA and USFS to serve in ex-officio seats. There was an expression from the team to reach out to subsistence users for their potential involvement. It was discussed whether we would ask for folks to serve in individual seats representing their organization, or if we would have a general subsistence seat. Invited to discuss these seats were Timmy Selanoff with Chenega Corporation, Bruce Cain with Ahtna Incorporated who has brought Mr. Jackson with Ahtna Incorporated, and John Whissel is here representing Native Village of Eyak. **Sheridan** said that there has been an interest in having more people in the room and being part of the process.

Moore said the only reason he is not ready to make a motion to recommend this to the commissioner to create these seats is because he doesn't know if we want to have one of the Native corporation seats, or all three? He wants to hear what the other RPT members think. It seems like we should make an ex-officio seat for Mike Wells at VFDA, and whoever else on the Native associations who want to participate. Then make that recommendation to the commissioner and make it official at next year's meeting if the commissioner were to approve it. **Rabung** said the way it works is for the RPT to make a motion for the commissioner to add a seat for whoever, the commissioner makes a decision and sends a letter back with a yes or a no. It's also possible to revoke ex-officio seats. It's all at the will of the commissioner. The 1985 RPT charter says that the team has ex-officio members, as considered necessary by the individual RPTs. The statute is 16.10.375, or 5 AAC 40.300. **Rabung** said if the RPT feels it's beneficial to have these ex-officio seats, they would not be voting members. If this body feels it would be beneficial to have ex-officio members as representatives of fishery stakeholders outside of the regional aquaculture associations, then the commissioner would probably agree to it. **Moore** asks if there were any members in the audience being asked to represent that would choose to not be included in the ex-officio seats. They all agreed to be ex-officio. It was recommended to reach out to the Native Village of Tatitlek.

Somerville asked why make certain groups official and not others? **Rabung** it's for formal representation. They are still not voting members. They have no more rights or input than any other members of the public. They will be included on all correspondence, agendas, and outreach information. It's more formal involvement. **Sheridan** asked attending prospective ex-officio members what value this membership could bring? Would ex-officio membership bring more organizational support for participation in the meetings than just being a member of the general public? **Whissel** said that he believed it would. We came because we were invited to this meeting. There is a lot of interest at NVE for involvement in the hatchery process. The Tribe reached out and wanted a member seated on the PWSAC board. The more engagement the better in terms of NVE's perspective. **Sheridan** said the

minutes from last April (2016) suggested interest on the part of the RPT.

Action: *M/Moore, S/Glasen* to recommend to the ADF&G Commissioner to create ex-officio seats on the PWS/Copper River Planning Regional Team for the representatives of VFDA, U.S. Forest Service, Chenega Corporation, Ahtna Incorporated, Native Village of Tatitlek, and Native Village of Eyak. **VOTE:** Motion passed unanimously.

h. RPT Chairmanship

Discussion: *Sheridan* said he is happy to serve this process. He said he believes in the RPT process. This past year his various commitments cut into how well he was able to do some things, as reflected in the quality of the agenda, and mistakes in the agenda and minutes. *Sheridan* is interested in continuing. He recognized he is a nontraditional chair. There are plenty of folks that would be great chairs as well. *Rabung* makes motion that if he's willing to continue, he moves to keep Tommy Sheridan in the chair. *Sheridan* said he is happy to do that. He appreciates the opportunity to serve, to learn, and to be of service to the process. *Rabung* suggested asking if there is anyone else that would like to volunteer in case Sheridan is unavailable. *Cain* commented that he appreciates being invited. He complimented Sheridan on being a good facilitator on giving the public a call. He enjoyed being here. *Cain* suggested being a more forceful chairman. *Sheridan* agreed. *Rabung* said that is a great point, but the regulations state the RPT can establish any rules on which to abide by. Robert's Rules don't have to be followed. It's what is accepted. There's lots of flexibility. Some are formal, some are very informal. It's what people are comfortable with. Sheridan is not a voting member of the RPT. He's who we selected to be Chairman. It can be anybody the RPT picks on. *Sheridan* said this last year he took a lot on with a change in job and full-time graduate school. He can't guarantee it will get any easier. We can discuss developing a bench. *Rabung* said I think it's a good idea to have people in mind in case Sheridan can't continue. *Ford* said that he could step up in case Tommy is absent.

Action: *M/Rabung, S/Glasen* to keep Tommy Sheridan as the PWS/CR RPT Chair. **VOTE:** Motion passed unanimously.

9. NEXT MEETING DATE: Thursday, April 19th, 2018 (tentative date).

10. ADJOURNMENT

Action: *M/Rabung, S/Moore* moved to adjourn. **VOTE:** Motion passed unanimously, and the meeting was adjourned at 2:56 pm.