

PRINCE WILLIAM SOUND/COPPER RIVER  
REGIONAL PLANNING TEAM

Regular Meeting  
April 13, 2015 @ 10:00 a.m.  
PWSAC Conference Room  
APPROVED MINUTES

**CALL TO ORDER:** Chairman Joyce called the meeting to order at 10:05 a.m.

**ROLL CALL:**

Present: Tim Joyce (Chairman), Mike Thalhauser, Sam Rabung, Jeremy Botz, George Covell, John Platt, and (via telephone) Mark Somerville and Thea Thomas.  
A quorum was established.

**MOTION TO APPROVE/AMEND AGENDA:**

**Motion, Covell; Second, Rabung** to approve the draft agenda of April 13, 2015 regular meeting of the Prince William Sound/Copper River Regional Planning Team (RPT).

**Discussion:**

Move Gulkana Hatchery (GH) Annual Management Plan (AMP) to the first item on list.  
**Motion passed unanimously with additions.**

**MOTION TO APPROVE MINUTES:**

**Motion, Covell; Second, Platt** to approve the minutes from April 7, 2014 regular meeting of the RPT.

**Motion passed unanimously.**

**INTRODUCTIONS: (subject to change)**

*ADF&G Staff:* Commercial Fisheries, Cordova, Tommy Sheridan; Commercial Fisheries, Anchorage, Bert Lewis; Commercial Fisheries, Regional Resource Development Biologist, Homer, Ethan Ford; Commercial Fisheries, Cordova, Amanda Wiese; Commercial Fisheries, Cordova, Elena Fernandez; and Commercial Fisheries Division Director Commercial Fisheries, Jeff Regnart.

*Prince William Sound Aquaculture Corporation (PWSAC) Staff:* General Manager, Dave Reggiani; Executive Secretary, Kate Jager; Administrative Assistant, Teresa DeSimone; Hatchery Support Manager, Christine Mitchell; Remote Programs Manager, Geoff Clark; Gulkana Hatchery (GH) Manager, Gary Martinek; Armin F. Koernig (AFK) Hatchery Manager, Chris Kelly; Wally Noerenberg Hatchery (WNH) Manager, Klint Hirschke; Cannery Creek Hatchery (CCH) Manager, Jon Palmer; and, Main Bay Hatchery (MBH) Manager, Jason Myhrer.

*Other Public Present:* John Renner.

*Recorder:* Kate Jager & Teresa DeSimone.

*Transcriber:* Kate Jager.

**PUBLIC COMMENT:** None.

**AGENCY REPORTS:** None.

**OLD BUSINESS:**

- a) Update by Valdez Fisheries Development Association increased permitted capacity for pink salmon and status of hatchery improvements for utilizing that capacity.

Valdez Fisheries Development Association, Inc. (VFDA) Executive Director, Mike Wells gave an update to the RPT on the progress at their Solomon Gulch Facilities. He thanked the RPT for allowing them to move ahead on these improvement projects. VFDA received their notice of Permit Alteration from the Department in May of 2014. This permit allows VFDA to implement a 20 million green pink salmon egg increase in 2016 and an additional 20 million in 2018 that is contingent upon VFDA providing the necessary infrastructure to utilize the capacity.

VFDA has bid and financed the first step that would increase the primary water supply line for a 24" to a 42" HDPE plastic pipe from the Solomon Gulch tailrace to the Hatchery. Construction began on March 26<sup>th</sup>, a week ahead of schedule. Everything is tracking on schedule and budget. We have installed the main tailrace sump and started laying the first sections of pipe and anticipate that being in the ground and ready to turn the water on by June 1<sup>st</sup>. The primary project to allow VFDA to expand is to get more water to the Hatchery.

The next phase will be to increase the high pressure service which will allow us to take water ahead of the turbines so if a turbine is taken off line there will be sufficient water backup for fish incubation. A portion of the work going into that is happening now by placing a 14" steel casing pipe under Dayville Road that will be stubbed out at both buildings. We anticipate next year's project will include the increased pumping capacity and degassing upgrades tied in with this same project. We anticipate bidding that portion of the project this fall for construction beginning this time next year. This will take care of the two biggest water needs we have.

This year we will be moving forward with floor drains and head box extensions. The incubators for the first 20 million eggs are in inventory and ready to set up. The first step up in production is on track to be implemented next year.

VFDA is anticipating expanding the incubation building between 1,700 to 2,000 feet and will house all of the outmigration activities. The preliminary engineering will begin this summer with construction tentatively scheduled for 2017. We anticipate everything being in place for the next 20 million egg expansion in 2018. We feel we are on track and things are moving in the direction to hit our milestones. With all of these improvements and renovations to the existing structure, such as the incubation building expansion, we

will have a facility that will be able to produce 300 million pink salmon. It will just be a matter of adding additional incubation at that point to get to that level. We will have all water and buildings in place. The VFDA Board is committed to put this in place and hit those production milestones.

John Platt asked if they would be putting in the recirculation line.

Wells answered that in this project to put in the 42" pipe, because the ground is torn up essentially all around the hatchery, we are putting in an 18" recirculation line into the coho facility for long term rearing. All the plumbing will be stubbed in and to move forward with that we will need an additional degassing decking down in the coho building. We have actually just completed a structural analysis of the building and will be sending that to the VFDA Board at the next meeting. They will need to look at the building to decide whether or not it warrants additional improvements or need a different approach. All the main plumbing will be in place for this project.

Bert Lewis said he hadn't thought about the implications of this recirculation line. We talked yesterday about your coho program and how the cold water the last couple of years has limited the growth you can put on them. Will this help with that?

Wells said it will not lend much help as far as water temperature. We have a 6" line that brings warm water in a cooling line that comes off of the turbines and allows us to increase our water temperature there a little. Where this will most benefit the coho program will be through increased flow and being able to keep the raceways flushed to stay ahead of some of the other issues we face.

### **NEW BUSINESS:**

- a) Gulkana Hatchery AMP (Action)

**Motion, Rabung; Second Somerville** to recommend approval of the Gulkana Hatchery I and II 2015 Annual Management Plan (AMP).

### **Discussion:**

Somerville said he had no problem with the AMP and believed it should be approved as written. He did have a couple of discussion points to bring up. On page 5 of the Gulkana AMP, section 3.1 *Probable Hatchery Fish Migration Routes and Timing*, paragraph 2, it states "*The sockeye salmon returns from the three release sites for GH I fry occur throughout the commercial fishery and escapement timing. Returns from the GH II release site occur throughout the early and middle segments of the escapement period.*" The question is since there have been some of the GH I and GH II stocks mixed there, is the GH II still coming in substantially earlier than the GH I return?

Gulkana Hatchery Manager, Gary Martinek answered they are still coming in earlier. There is definitely a distinction between GH I and GH II.

Somerville said the next question was on page 6, paragraph 2, under special harvest area, it says *“There is a negligible salmon spawning habitat at Crosswind Lake and no natural production escapement goal has been established.”* If there is a negligible salmon spawning habitat at Crosswind Lake, do we still have the issue of finding unmarked fish at Crosswind Lake? If we are going to look into the future here for the marking programs, and use the marked fish, it is something that we really need to get a handle on.

Joyce asked if anyone knew how many unmarked fish were showing up there or is it just the fact that there are some.

Somerville said a few years ago there was almost 50% unmarked on some days.

Martinek said there hasn't been that many in a long time. We are still seeing some unmarked fish and that was a concern for us since they are all strontium marked. Three years ago 30,000 adults returned to the lake. He and a group that was there spent a week diving on the lake looking at what those fish were doing. What he did find was schools of fish, anywhere from 3,000 to 5,000 that were balled up all around the lake and none of them were spawning. There were actually carcasses on the lake and none of them had spawned at all. The only other areas we wanted to investigate further where there are two inlet streams to Crosswinds. When those fish come back in there they circle around the lake looking for a spawning area and are pushing up into these creeks. Originally those creeks had a fair amount of mud in them. With significant numbers it is unclear if they have actually found spawning gravel or not.

Somerville said he basically agreed with the statement. He asked what the percentage was of the unmarked fish in the past few years at Crosswinds.

Martinek said it is approximately 8% to 10%. The escapement has been approximately 30,000 to 50,000. Years ago when we had some issues at Crosswinds with returning adults getting in there and the public perception, for 3 years we stopped letting any adult fish into the lake. Then we noticed in our smolt outmigrations during that period, the number of smolt dropped and both size and weight dropped. We started letting the adult fish back in to supply some nutrients back into the lake.

Somerville said he found the 8% to 10% was a lot less concerning than the 50%.

Martinek said he thought it was with the marking process and the reading process with the electron microscope. They have a brand new microscope at the lab that is a far better machine than they had before. It is up to interpretation just reading the marks with the electron microscope because there is an art to it.

Somerville said that was his only comments and he didn't have any problem with the statement after discussing it.

Lewis asked if it was 8% to 10% of returning adults or out migrating smolts.

Martinek said it was returning adults.

Lewis inquired if they monitored otolith from the out migration smolt as well?

Martinek said for years we sampled the smolt to see if they were fully marked but we discontinued with it because it was pretty expensive.

Lewis said we talked about this with Steve Moffitt as he was preparing to talk on the Gulkana white paper. He is not going to be here today because he is out on herring monitoring. When we were discussing it, to provide additional background, he reviewed what was done to evaluate the unmarked fish return that they are having there. We found no evidence that the marks were not being applied and retained by all the fish released. They did some double checking with the old scope and the new scope that double reads in Fairbanks at the lab there and confirmed that all fish that were intended to be marked had marks.

Martinek said strontium marking is very expensive all the way down the line. Not just from buying the salt but for the reading and prepping everything else involved. PWSAC did trials with UAF using both manganese and barium and are waiting for the results on those. This was to see if there was a different way of marking that was viable.

Covel said for the record that we followed up on last year's RPT meeting. We started addressing marking and we had quite an extended discussion at our Production Planning meeting this winter about the whole marking program. We didn't come up with anything definitive other than the information Martinek just talked about. He said he just wanted to get that on the record that we did follow up on discussions with staff and then finally at one of our meetings.

Martinek said PWSAC is currently working with the Food and Drug Administration (FDA) because this strontium follows an Investigational New Animal Drug (INAD) and now there is a lot more interest in using the strontium mark back East. PWSAC is working with the FDA to try to get approval for the strontium.

Somerville asked if the manganese and barium are cheaper or easier for the final detection of the mark.

Martinek explained one of the big things, and Steve Moffitt would attest to, is the coded wire tagging had different codes for both Summit Lake and Crosswind Lake. Once we went to mass marking everything it was just the same mark and you couldn't differentiate between any of the lakes. There are definitely survival issues with much better survival at Crosswind than Summit Lake. If we had a different chemical marker there is a possibility of using for instance barium in one lake and strontium at the other you could differentiate between them. With strontium you would have to mark those fish and then hold and rear

them for two weeks and then bring them back and mark them again. With sockeye that would be way too much of a stressor. If it is just a different salt it could be feasible.

Sam Rabung clarified that during the time PWSAC was checking smolt, there were no unmarked smolt leaving.

Martinek said there was but just at Crosswinds but it was just a one year deal, we just did it one time.

Rabung said this could be just a natural stray rate in, fish follow fish, but if there were unmarked smolt coming out that would be different.

Joyce asked if those unmarked fish were definitely confirmed unmarked. Was it that the electron microscope couldn't tell or was there potential technical issues?

Martinek said there is potential for a lot of different issues there. Prepping and reading strontium marking is very different from reading thermal markings. The polishing is much finer and it is very easy to polish the mark off. They are ground polished and then carbon coded. Martinek said what PWSAC finally did was to took on the job of doing the prep portion and reading with help from Ken Sovran at UAF and that has been a lot more consistant now rather than have a change over in personnel prepping and reading those marks.

Botz asked what the potential is for fry to move into the lake from outside of Crosswind.

Martinek said it is baffling because that run that goes up the west fork the hatchery component is actually the last stock that runs up there. Dog Creek that flows out of Crosswind is 22 miles long to get to the west fork.

Joyce added that Karluk Lake has downstream spawners and fry will actually migrate up into a lake. Is there a possibility for something like that going on?

Martinek said there could be. When the Special Harvest Area was operating at Fish Lake there was a weir set up while we were doing a harvest. The weir was so big Martinek had to dive to set it. There were no King Salmon in the Dog Creek system, but there were hundreds of thousands juvenile Chinook salmon using that as a rearing area so yes it is possible.

Joyce said he did not want to get off of the Gulkana topic because we still need to have a discussion on the white paper. That discussion could be part of the AMP discussion so it is still on the table before we take action to vote to approve. Joyce confirmed that ADF&G Steve Moffitt would not be at the meeting so who would be leading the discussion.

Botz said he would be and Moffit had provided several graphs to reference.

Lewis suggested perhaps having the white paper discussion with the coho discussion at the end of the meeting and continue forward with the AMP's because we haven't had a chance to circulate these figures.

Rabung said the white paper isn't part of this AMP so that would be a good suggestion.

Somerville said it would not be a problem to come back on the meeting when it was time to have the discussion on the white paper.

The decision was made to carry on with the AMP's and come back to the Gulkana with papers at the end of the meeting. A vote was taken on GH I and GH II AMP.

**Motion passed unanimously.**

*Mark Somerville left the meeting.*

b) Solomon Gulch Hatchery AMP (Action)

**Motion, Rabung; Second, Botz** to recommend approval of the Solomon Gulch Hatchery 2015 AMP.

**Motion passed unanimously.**

c) Main Bay Hatchery AMP (Action)

**Motion, Covell, Second, Botz** to recommend approval of the Main Bay Hatchery 2015 AMP.

**Discussion:**

Botz asked Reggiani for a number check on page 6, section 3.3.1 *On-Station Returns*. The total run is 1.56 and the Common Property Harvest is 1.32. Which number is correct? We may need to make an adjustment there.

Reggiani said he had not received track changes back on the AMPs. It should be the 1.56 minus the brood stock. He would make the changes but he was unsure where they were on the drafting process. There may be other edits as well.

Rabung said once we get the recommendations back with all of the edits we will circulate a final draft for signatures. He would make sure that change is included.

Botz added that it is mentioned in the text in a couple of different places.

**Motion passed unanimously.**

d) Cannery Creek Hatchery AMP (Action)

**Motion, Covel; Second, Rabung** to recommend approval of the Cannery Creek Hatchery 2015 AMP.

Rabung said upon review of this AMP and also AFK and WNH, on page 1, under section *1.2 Broodstock*, in the first paragraph that talks about the total hatchery escapement used to be included in section *3.4 Separation of Hatchery Escapement* on page 6. Just for clarity sake it would be better if we could put it back to section 3.4 because it speaks to all portions of the hatchery return where as this section of brood stock is just specifically the brood stock portion. It could create some confusion for individuals who are not aware of the differences. If there were no objections it would fit better on 3.4 where it used to be.

Joyce clarified the paragraph.

Rabung said it is the first paragraph under *1.2 Broodstock* where it talks about the hatchery escapement goal of 1.155. That escarpment goal includes cost recovery and everything else but is listed under broodstock only. In section *3.3 Hatchery Returns to the Special Harvest Area* is the entire return all things combined. There needs to be separation of hatchery escapement under 3.4.

Joyce asked if the hatchery escapement under 3.4 included cost recovery or not.

Rabung said it does include everything.

Joyce asked if the brood stock section of 1.155 also includes broodstock and cost recovery.

Rabung said section 1.2 needs to be dealing with just broodstock. We prefaced it with everything and that causes some confusion amongst reviewers.

Joyce asked if that could be separated out for removal of the cost recovery portion so that when you are talking about brood stock it is strictly the brood stock.

Reggiani said the original title on 1.2 was "*Broodstock Acquisition Schedule*" so it made since to talk about hatchery escapement with the idea of how you are going acquire the broodstock through that escapement goal. Through the edits this year it has been re-titled as just "*Broodstock*". PWSAC does not have any objection to moving it back to section 3.4 as suggested.

Joyce asked with that change, with the rest of the paragraphs below where it goes on to the expected hatchery escapement schedule that includes the cost recovery as well.

Rabung agreed we would have to change hatchery escapement back to broodstock to be consistent.

Reggiani concurred.

Joyce said it is the RPT's prerogative as to how they want to do that. It just needs to be clear that when you are talking about your broodstock you still have the cost recovery escapement that you need and it is somehow covered in here to. We want to make sure that if you have a cost recovery goal inside that, it is somehow addressed so it is clear.

Rabung said in hindsight it might be worthwhile in the future if we want to just reorganize it in a different order. This section and this first paragraph had been traditionally in 3.4 and was moved forward. It made sense at first but then after discussions with other people he could see where some confusion would happen by talking about more than one thing under broodstock. We are not taking it out, we are just reorganizing it back to where it is talking about separation of hatchery escapement. It might be worth considering in the future drafting it with the total hatchery escapement at the beginning and then breaking it down after that instead of starting with broodstock. Then to follow up in the second sentence instead of saying "*The expected hatchery escapement*" be changed to read "*The expected broodstock acquisition schedule*".

Reggiani said that was the original title and it made sense to move it around just to put it into context but as you know these are very old templates. It would be worth taking a look at how the plan is organized.

Joyce said the final copy on all of the pink salmon AMP's is going to show that this first paragraph under section 1.2 will no longer be under section 1.2 but will go under section 3.4.

Rabung said that's what he was proposing.

Joyce continued, and currently the second paragraph in 1.2, first line, third word, would change from "*hatchery*" to "*broodstock*".

Rabung said he would even cross out *hatchery escapement* and change it to *broodstock acquisition* which is what it used to say.

Joyce asked if anyone had an objection to that. Hearing no objections, when we go to approve this, then that would be included in the approval as the recommended change. This will apply through all of the pink salmon AMP's.

Rabung agreed. It is consistent.

**Motion was approved unanimously with corrections.**

e) Armin F. Koernig Hatchery AMP (Action)

**Motion, Rabung; Second, Platt** to recommend approval of the Armin F. Koernig Hatcher 2015 AMP.

Joyce said we already had the discussion on the previous AMP regarding section 1.2 *Broodstock*, first paragraph, being moved to section 3.4 and this would apply to this one as well.

**Motion passed unanimously.**

Joyce said we will move on to the WNH AMP and the discussion item regarding the coho stocking. This may have an impact on the AMP but it may not. We will go through the discussion to see if we need to adjust anything with the AMP.

f) Wally Noerenberg Hatchery AMP (Action)

**Motion, Covell; Second Rabung** to recommend approval of the Wally Noerenberg Hatcher 2015 AMP.

Discussion:

Rabung said the same changes apply to this AMP with the addition of moving the table titled “*SHA Escapement Goals Summary*” in section 1.2 *Broodstock* to section 3.4.

Joyce said there is an item regarding the coho stocking in Whittier. There were some sport fish association concerns over there.

ADF&G Sport Fish, Mike Thalhauser said he would like to have this discussion on the record and any discussion that might go along with it. Generally, the issue is on the Whittier portion of the remote coho releases that have gone on as part of this hatchery plan. The remote hatchery releases that are provided in Whittier, like the ones here in Cordova are provided by PWSAC and serve as a public service and outreach program. The harvest for this Whittier fishery specifically peaked around 2003 to 2005 where there were 3,500 to 4,000 fish harvested every year. This became a real popular fishery getting approximately 3,000 days of fishing from 2003 to 2008 and continued with the effort of the fish being stocked there. In 2006 the returns started declining and by 2010, at least according to our statewide harvest surveys, even though there was significant effort, there was still zero fish harvested. Sport users, mainly through the Whittier Boat Owner’s Association, came to the Department and expressed a lot of their concerns as to why the fish have not been returning. For background on some of the numbers, the goal for a lot of the years was 100,000 fish stocked and for the most part those numbers of fish goals have been met. One notable difference is that the smolt size has declined and has not met the 15 gram size goal listed in the AMP’s. From 1999 to 2007 the smolt size averaged approximately 16 grams. Since 2007 they decreased to approximately 11 grams and in 2009 they were below 10 grams. The states releases try for a goal of 20 grams and have had better luck with the new hatchery in Anchorage coming on line having better hot water the smolt are released at approximately 22 grams. With most of the scientific literature correlating a positive relationship between the returns and the size of the

releases, it would seem that the size of the smolt we are putting into the water may be one of the first things we need to look at if we are going to try to get these fish back. The Whittier Boat Owners Association had a meeting in January where they expressed their concerns to the Department and some PWSAC staff. A lot of their concerns were the observed changes in the seine fleet over the last few years. The Department took the concerns from that meeting and concluded that even though some patterns have changed, the coho harvest hasn't, at least in the seine fleet. The Department doesn't think that is the issue. A better way to look at increasing these returns again is to look at getting some bigger smolt back into the water. There is a meeting scheduled for Wednesday, April 15. The Department is hopefully to have a direction or at least a conversation to bring back to the Whittier's Boat Owners Association about what went on here. Other than that we have spoken to Reggiani about this and have at least brought up the issue of the concerns. The issues are there and we would like to address them as best we can. From the states perspective there is not really much we can do other than to point out what we are seeing is going on.

Joyce said the obvious question is it feasible for PWSAC to produce larger smolt. There is a threshold size for coho smolt and if they are not at that size at release you are probably not going to see a return.

Rabung asked Mike Wells of VFDA if their coho program was having diminished return rates.

Wells said yes they have been having a run failure in the last 3 years. If you go back and look at the return in 2012 we had approximately 1.1% marine survival with the release of approximately 16.5 gram fish going out that year. When you compare that return with what happened around the rest of the state you might say it was just a down year for coho. In 2013 we had a nice return and released approximately 19.5 gram fish. Unfortunately last year we went back to approximately a 1.4% return. Those fish struggled through rearing primarily due to really cold water temperatures and not being able to get feed on them. We actually held those fish with a release date of July 3<sup>rd</sup>. That is the longest we have ever held them and the weight was approximately 13.5 grams at release. The result was not all that good. We are taking a different approach now and we are putting as much feed on them as we can during the summer months so they are going into the winter months with more weight on them. This year we are looking at our coho fingerlings being in the 10 to 11 gram range when they go to salt water. We will hopefully see them get up into the 20 gram range before we release. The release last year was 21.5 gram fish that went out and are hoping that this year will be pretty outstanding. The water in the Port of Valdez is 6 degrees higher already and our pink salmon are going to do well. The biggest challenge is on years where we have cold rearing water. We do have the ability to get some warm water. The source is the cooling water that comes off of the turbines. There is a 6" line that comes over to the hatchery that helps raise the water by approximately 1 degree.

Bosch said they had the same issues at their old hatchery when they lost hot water.

Thalhauser said even if the fish come out of the hatchery a little smaller we could end up holding them for a little longer in Whittier in the warmer sea water and just keep feeding them there. There have been some issues with the net pens. The structure of the pens got pretty messed up in a storm last year and is another issue.

Reggiani said he will be meeting with the City of Whittier within the next couple of weeks to renew their commitment to the program and participation. The City of Cordova is very involved and we need to renew that commitment with the City of Whittier. His hope and anticipation is that the City of Whittier will be responsible.

Thalhauser agreed that was good. The hatchery staff in Anchorage said they would be happy to put on the extra training needed with their hatchery training program and walk them through the steps they need.

Covel added the wild coho production in Prince William Sound last year was almost nonexistent. It coincides with what we saw in the hatchery returns.

Rabung remembered a few years ago, some of the hatchery operators got together with folks from the University in Juneau. There were coho issues in Southeast at the time. This group was comparing notes and one of the things anecdotally that come out of that was that everybody's assumption of larger smolt at release produced better adult returns wasn't holding water. In fact they were having density and survival issues by getting the fish so large in fresh water prior to going into the salt water it was creating additional problems. One of the strategies tested was to keep smolt small through the winter; put them in at a smaller size in the spring and hope that the spring conditions were good enough to catch up. In those years when they tried, it worked. The smolt that went into the salt water at a smaller size, as compared to their cohorts who fed all winter, actually grew and were released at a larger size than the fat ones that went in the spring. He said he did not recall the ocean survival but the smolt release sizes with the density differences were having an effect on adult returns.

Joyce said they have to be at the right densities or it will cause stress problems and the resulting issues that go along with that. At release when they are free from the pens in fresh or salt water there is a size they need to get to and a window of time as well. There have been other issues in Whittier particularly of who is taking care of the fish when they get there. If that is not resolved than you could have the best fish in the world go there and you will get nothing back. This last year Cordova had a pretty good return of coho to Fleming Spit.

Reggiani agreed and added the return was also good at the WNH hatchery itself. The meeting Rabung was referring to was in 2007 in Juneau at the University. All the talk was about the growth. It is not necessarily the size at release but the growth rate at release. That has been the strategy PWSAC has been employing and analyzing the data but can't put a finger on the effect it has had. It has been a good number of years with a

good number of generations and results. It would be good to get everybody back together and see how it is working for everyone.

Joyce said years ago something that worked well was to not feed every day in the winter months. They were fed two or three times a week and fed to repletion at the time when they did get fed. They were very hungry when they did get fed and they ate very well and grew. There are other strategies out there. Joyce said from what he was hearing it sounds like there will be some input from Whittier that needs to happen as to how they are going to proceed. It does not sound like it is the commercial fleet that is having an impact but simply a survival issue.

Thalhauser asked why PWSAC has fallen short of the goal. He asked if PWSAC had looked into how they can get the fish bigger by release.

Reggiani said we can certainly take a look at it. A lot of this has been learning what we can and can't do with this compensatory growth strategy. It is about the size going into the winter dormancy period. If you are going to lose weight in the winter dormancy, you want to wait, typically in the natural environment salmon are off feed through winter months. As the year gets into the spring season they will get on feed and start growing fairly quickly and that is the strategy. Getting them bigger before the winter dormancy would be an ideal. Reggiani said the harvest numbers coming out of Whittier aren't the strongest. It is hard for PWSAC to put a finger on if there is really a problem or what the harvests really are. Are they going down or is it perception.

Thalhauser said the statewide harvest survey doesn't show every single fish but the index of the survey is basically gone to nothing. Is there something you can point to? Obviously the goal has been 15 grams and maybe that should be adjusted.

Reggiani said there is a lot more to it than just size. The release location is also really important and the net pens going up on the beach last year will play into something. There needs to be a comprehensive review rather than focusing in on one of the variables that might be an important variable but might not be the dependent variable. Whittier may just not be a good spot for coho with all the boat traffic in there and the confused seas.

Thalhauser said the only thing as far as the actual AMP we will vote on, is the goal now 11 grams. It sounded like the newer strategy was lower densities, smaller fish, and have them at a higher growth rate at release.

Reggiani said the previous goal was 18 grams; the goal for this year is 15 grams. The next brood cycle will give us more time to do a comprehensive review to see if we want to make any modifications. There was a really good return last year at WNH and in Cordova. Those are also indicators that are putting a question mark over in the Whittier release site, in as far as what is really going on over there.

Covel added this coho program has been around for a long time. One of the problems we have had internally in evaluating is that we have had to rely for a long time on anecdotal information. We didn't have good catch sampling and even though the fish are marked the investment marking wasn't really being realized. There was quite a discussion about this 2 years ago on if we would even continue the program. PWSAC determined that as long as there is some potential to ramping up our catch sampling to give us some idea of what our actual survivals were, we would keep this program going. Hopefully we will get to a time when we have better returns. Everything has been a little complicated because, as many know, the earthquake destroyed a lot of coho rearing habitat around Prince William Sound. It took many, many years for that habitat to start to become more productive, which it is now. We have seen a lot of coho runs reestablish themselves in places like along Montague Island where they were gone for many years. We do have a mix stock fishery out there and catch sampling is going to be very important in helping us understand where our contribution is actually a contribution.

Joyce asked with the release schedule was for this year.

Reggiani said we do not have a full component of production so the stocking is going to be 25,000. There again, you are not going to see a full component of 100,000 which will just add to the complexity.

Rabung said one of the things we have found in other programs is that net size is the same size net. You have a much lower rearing density if you put 25,000 verses 50,000 or 100,000. We saw in many locations those fish grew a lot better being at the lower density. This lower number may actually improve things. We have seen programs where we got more adults back by releasing fewer fish.

Joyce asked who is taking care of those fish once they hit the salt water in Whittier.

Reggiani said that is what he is going to figure out in the next two weeks.

Joyce asked who has been doing it in the past.

Reggiani said it was volunteers and has not necessarily been the Whittier Boat Owners Association.

Bosch said there are a couple of guys who take care of the King salmon for Fish and Game. After they release the coho, Fish and Game stock the Kings. It is the Bed and Butter Charter and David Pinquoch as well as a couple of others who feed the fish regularly, remove the mortality and keep data.

Geoff Clark said they have also been feeding the coho for the past couple of years but prior to that it was totally different.

Thalhauser asked if PWSAC received good records back from them like mortalities and things like that.

Clark said no we have not received any feedback.

Thalhauser said he would work with PWSAC as far as what is covered in training with whoever we do end up with. It seems like that is one thing that would be good to have. If we were pulling 100's of morts out a day and didn't know about it there could have been some kind of rearing thing going on.

Reggiani said PWSAC didn't even know that the pen was up on the beach last year. Obviously there needs to be some kind of strengthening in the whole program over there and that is why he was going to the City of Whittier. PWSAC appreciates the help and look forward to working with Thalhauser.

Joyce said it sounds like there are some pretty basic issues that need to be worked out within Whittier itself in order to make this program a success. It doesn't matter how good the fish are, if they are not being taken care of once they are put in the net pen over there it is not going to work. Maybe that would be a good item for next year to see where you are on Whittier. Look at how this year happened, how well they were taken care of, the size of the release and all of those things. Somebody really does need to sample those fish prior to them being released out of the net pen. If your goal is 15 grams and they are stocked at 11 grams from PWSAC, they easily could put on another 5 grams in a week in warm sea water if they are fed properly and taken care of.

Reggiani said just to be clear it is not a sure thing that it is going to happen this year. The report we got is that the net pen broke loose and crashed up against the beach and is all busted up. We are not even sure we have a net pen to go over there and hang a net in. Again, that is why he is going over there and working with the City of Whittier to try and pull some of the spare parts that we have at other hatcheries and give them something. It was a state grant years ago that purchased net pens for the City of Cordova and the City of Whittier. PWSAC is going to help them as best we can.

Thalhauser said it broke up while the coho were in. The Kings the Department stock show up later. They actually did surprisingly well in a make shift net pen they made with the outside slips.

Covel said following up on what he spoke on earlier, what about the other end of it on our catch sampling. His understanding last year was that it was just barely opportunistic limited amount of catch sampling. In order to evaluate what we are doing whether it is for sports fishing or commercial fishing at some point we have to have a meaningful and long term commitment to the catch sampling.

Rabung asked where the harbor was in relation to Cove Creek and Smitty's Cove.

Bosch said Smitty's Cove is between Cove Creek and the harbor. Smitty's Cove has a commercial dock where the military bring in their stuff. You can see Cove Creek from Smitty's Cove which is approximately a half a mile from the harbor.

Joyce said it sounds like there is a strategy that needs to happen this spring. Does the Department have any plans to do any monitoring of the otolith marked harvest of coho.

Botz said the Department would like to continue monitoring the commercial harvest but we do have budgetary constraints there that limits. We did the opportunistic sampling with the pink salmon. It is the best we can do right now. If we had some more money to direct a systematic sampling it might be a possibility with the crews we have on. Where we are at right now is probably the best we can do. The Department does plan to continue with this next year.

Joyce asked if the coho harvest occurs at the same time as the pink salmon harvest in general speaking for intercept fishery along the west side.

Botz replied there is definite overlap there from mid August until then end of August and then it becomes a more directed coho fishery after the first week of September.

Joyce asked if there are people who are collecting otoliths for pink salmon, if there is a coho in there, is there a way to grab the coho otoliths and put them aside. Then if you do have some time later in the fall, not necessarily for in season management, just do a contribution to the fishery look.

Botz said that is what was basically done this last year.

Elena Fernandez said the recovery crew's season ends on the 31<sup>st</sup> of August. We will get a few coho samples if we can but our primary directive is pinks.

Botz added we would need a couple of extra weeks to keep those samplers on.

Joyce wrapped up the discussion by saying the Department will be working on trying to figure this out this spring. He asked Thalhauser if Whittier Boat Owner's Association will be satisfied.

Thalhauser said this is all we can do right now. At the next meeting both Botz and Sheridan will be on the phone and we are going to address the concerns. We will try to focus on what we can do and work with the PWSAC staff and the City of Whittier.

Joyce brought the discussion back to the AMP and asked if there was any other discussion needed for WNH. Again there are the same changes in this AMP as were in the other pink salmon AMP's.

**Motion passed unanimously.**

Joyce said there would be a short break before we have our discussion on the Gulkana white paper.

*Off the record 11:25a.m.*

*On the record 11:40 a.m.*

Joyce said we would begin the discussion on the Gulkana Hatchery Policy white paper from 1999. Was there a discussion about this in the early 2000's?

Reggiani said it was when the Basic Management Plan (BMP) for Gulkana was approved around 1999 to 2000.

Joyce said there was a discussion on this white paper but did not recall any changes to the paper other than the fact that it was discussed as a range that we worked around on the 300,000 number. There was a target for the average production from the Gulkana system. Obviously there were years when there would be more because of natural survivals and years that there might be less. He did not recall anything more out of that discussion.

Botz said if he remembered correctly, marking was initiated in 1999 and what prompted the discussion on the BMP. The goal was to look at two complete brood years and then reevaluate production. Then we had some issue with early marking and mortality. There were also some assessment issues with Crosswind freezing up in 2007, preventing the evaluation of the smolt so there was not a complete record. The Department did a more thorough review in 2013 and was brought up at the RPT meeting that year. At that review we looked back at the previous 5 years. There were still issues with not having complete brood years to evaluate. The goal was to go another 3 years and then reevaluate the program relative to the BMP target. Right now we are 2 years into those additional 3 years. Botz said he would provide a quick update on what things have looked like over the past couple of years.

Botz passed a handout around the room provided by Steve Moffitt. Botz directed the team to look at what would be figure 3. This figure shows exploitation rate relative to recommended MSY target of 70% exploitation for wild stocks on the Copper River. The paper is referenced from Clark et al. (2007). This also has the total run size relative to the BMP target. We are starting to get a little better idea of run size and soon we will have a couple of complete brood years without any of the previously mentioned issues. The average has been approximately 470,000 total run over the last 5 years. In saying that, we have also had very large Copper River sockeye salmon runs over the last 5 year. One figure that really points that out would be figure 1. This figure shows the Gulkana Hatchery total run is a proportion of the total wild and hatchery runs. In recent years we have been between 18% and 14% of the total runs. Considering the size of the Gulkana runs it indicates we have large runs overall and Gulkana has trended with those large runs with higher productivity. The things to really look at would be relative to the 300,000, it is the target tied to the wild stock exploitation and what we think the wild stocks can withstand. These exploitation rates in figure 3 are 0.90% to 0.85% over the last 4 years. Botz said he was not sure how that translates to wild stock exploitation. It definitely

indicates that we are catching a very large portion of that Gulkana run as the fish migrate up the river. Lastly, figure 4 shows the Copper River Delta wild stock escapement index since 1977, relative to the lower bound of the sustainable escapement goal (SEG) and the upper bound and the long term escapement target. The thing to point out there is that, yes we are definitely making our escapement goals, but we have been trending between the escapement target and the lower end over the last 7 years. In the last 20 years we have been above our escapement target 5 times. In moving forward and looking at this next year, these are all things we need to go over, consider, and look at the target of 300,000 and determine what we want to do moving forward.

Joyce said in looking at the graphs, on the harvest, is that just commercial fishery or does it include the dipnet fishery and subsistence fishery up river. In figure 3 there are exploitation rates and presumably the harvest rate.

Botz said on that figure the bars represent the total run and the exploitation is inclusive of all harvest.

Joyce clarified that the exploitation is all harvest not just commercial.

Botz said that would be his understanding. The goal of the 2013 review is to come back to the table and 2016 and do a more comprehensive evaluation.

Joyce said when we had this discussion in 2000, the issue was that the white paper had a number and we were seeing fluctuations in the total run size. From different survivals the numbers would come up beyond the target number. There was a discussion on issues with coded wire tagging, the numbers being used, and to what the range was. It was difficult because fluctuations in survival occur that would some years put it above and some years put it below. We still have that same problem where there is a percentage of the return between 14% and 18%. The problem is if you took a percentage, and then looked at a percentage, then you try to figure out a number of the return, your harvest might be a very high percentage because you still only have a number going past the sonar. If you have 5 million fish come back and you only need 700,000 to go up the river, you have a very high exploitation rate that you have to have or control that escapement. Whereas if you only have 500,000 fish come back you would need 100% to go up the river. When you start changing from a percentage to a number it gets difficult to try and correlate and control. Joyce said from his perspective that is one of the issues where the white paper needs to expand and figure out how you can deal with varying exploitation rates because of varying run size and survivals.

Botz added tied to that is the larger concern in the white paper of the delta stock that are downstream of the sonar, what kind of exploitation rate they can stand. As that fluctuates we also theoretically exploit our delta stocks that much.

Joyce asked if there was a way to have the dipnet fishery target the later Gulkana returns, so that you could theoretically hold off some. You would probably have more river

escapement if you are trying to protect delta escapement. In order to reduce the number of fish that would be surplus up river; target the dipnet and subsistence fishery on those fish.

Somerville said it is abundance based management and is based on the number of fish that come through the sonar. The management in the Personal Use (PU) fishery and the subsistence fisheries is completely open. As far as timing goes, a large number of people have been targeting later in July for the past several years just because that is when we have had a large influx of fish. The people are going to watch the sonar numbers and come up when there is lots of fish. If it is slow fishing then they won't come up. Even if we did try to increase the consumption rate of those hatchery fish at that time we would be running into the same issue. We could be impacting other late run stocks in the upper portions of the river.

Martinek said from his experience it was a long time ago where we tried to persuade people to go fishing later, especially the Fairbanks users. What we have noticed lately are more people are going later in the season. It is a long haul and they are finding it is much better to go and get their full allotment at one time then to make multiple trips. With some of the closures, for instance, on the Gulkana for Kings, a lot more people are going after the sockeye rather than just going for the Chinook.

Joyce asked if with 50,000 fish a week you increase the limit. Is that still the case in the PU fishery that they will add additional fish to the harvest?

Somerville said the Board of Fisheries changed that. This coming year there will no longer have a supplemental period. The annual limits have changed so that the original permit holder, or head of household, is aloud 25 salmon with 10 additional salmon for each additional family member. There is no additional supplemental harvest aloud after that. It is going to change the whole dynamics of the fishery this year. It will be interesting to see what happens. The total number of people fishing in the fishery now are close to 12,000 permits in a year. A couple of years back we had only 6,000 permits. We are going to see more participation in the next couple of years.

Joyce asked if the Department was looking at changing escapement goals to compensate for that.

Somerville said not at this time. We are going to see how this new limit goes. So far the harvest within the fishery has been within the escapement goals or in river goal. It is up to 150,000 plus any fish in excess of the in river goal. We have exceeded the in river goal so it hasn't been an issue. Once you start hitting the in river goal we will probably see a smaller harvest there.

Joyce said once you start hitting that in river harvest, you will start forcing people to go early so that they don't get cut off later. What is the Department's plan for the delta

stocks? How are you going to adjust for those stocks to bring that escapement back up into that range you were looking at?

Botz said inseason looks pretty decent at times and we adjust accordingly. We have ended up a little lower than what we expected but not drastically. We would like to see a little higher escapement on the delta. It is a pretty complex issue trying to achieve that over that timing window. He would like to move a few more delta fish into the escapement. That just means potentially more fish up river as well. We have already been exceeding the in river goal by a sizeable amount in the last 3 years. Then there is the up river wild stocks which are a small component but still something that needs to be accounted for in that whole mix. We really don't have a good handle on what is going on there as far as midsummer up river wild component.

Joyce asked if the Department is still doing an otolith sampling on the PU fishery for those strontium marked fish.

Botz said yes and the subsistence for the last 2 years.

Covel commented on the whole delta issue. He was always on the understanding that if you are in range it is a good thing. One always has to recognize too over all of those sample years that many of those, particularly the lower ones, are probably reflective of poor conditions or poor regularity of surveys. If he was to want to make a judgment on it he would try to sort through some of that. See which of those years represent quality years, in terms of escapement. Then make those judgments rather than suggesting that we need to start bumping things up when they are already in the range. If you were below the range consistently then you have a good argument for bumping things up.

Botz said considering what the exploitation rate looks like on the Gulkana from what we can calculate we are doing okay being somewhere between the mid range and the lower end. It is unclear what additional can be done inseason. There is a tradeoff and a consequence, lost opportunity for the commercial fleet, and maybe some additional opportunity for the upriver fisheries. They may at that point not be able to handle that additional surplus. It is something to look at as we consider that target of 300,000 fish for Gulkana.

Covel asked to complete the picture, we do up river surveys as well, are you seeing any areas of concern in those years of those high exploitation rates in terms of your escapement up river.

Botz said there is only funding for two surveys. Distribution looks reasonable relative to historical trends. As far as a total run size in some of those systems, we don't really have a good handle on that. The parks system gives the Department weir counts from Long Lake, Tanada Lake, and Tower on the Gulkana. Somerville does a few King salmon aerial surveys on index systems. Botz said he does his two rounds of surveys up there as well. As far as trends, we are in a time period of strong productivity for the whole system.

Everything looks fairly decent up there right now. When you subtract out the Gulkana component to the escapement it is still a very strong number and seems to be reasonably distributed throughout the run. It looks good over this recent period of high productivity. When it gets back to a period of low productivity, if Gulkana trends the same, then management isn't all that complicated. If Gulkana is really strong and we have a weak wild stock then we have a different situation.

Somerville said he agrees. It looks like in the upper river, above the Gulkana; the stocks have been on the strong side in the last few years. We are seeing good productivity from the upper portion of the Copper River drainage.

Covel asked if the point of this exercise was just for information. There is no real argument being made here to look at production levels at this point.

Botz said it was to provide an update. The Department indicated that we would come back to the table in 2016 with a more thorough evaluation review of where we are at. The recent trend in high productivity will play strongly into that.

Joyce said we have a white paper that is 25 years old that has been talked about off and on since then. It might be worthwhile to look at the information you have now to see whether or not there is something that needs changing in whatever the white paper has or is it still acceptable and useable. It is the same areas of concern identified today as were identified back then. In that regard, there has been an improvement in the marking. It is not so much an inseason tool as a post season tool. To see the amount of harvest raid on the hatchery stocks verses the wild stocks and the escapements. This probably are much better numbers now then with coded wire tags. This would be good for a precursor to be prepared for a better discussion next year.

Rabung pointed out the recommendation in the white paper says *"The drafters of this policy recommend that production for the Gulkana Hatchery complex not be increased above current permitted levels until an adequate evaluation program to address management concerns has been completed."* That hasn't happened. We are still at the same production level except this was written before they had the marking programs. Now that the making program is in place is that an adequate evaluation program?

Botz said he would think so. The 100% marking program, for the sampling the Department needs to do for the various fisheries, it is very useful and serves its purpose inseason and post season.

Joyce added that some of the appendix's are out of date a new appendix that adds in the more recent data regarding otolith marks would be something to look at.

Rabung said that would lead to a procedural question. This is an addendum to the BMP of the hatchery permit for Gulkana. If we are going to change this we need a Permit Alteration Request (PAR) to change the Gulkana Hatchery permit to include the change?

Joyce asked if the permitted capacity isn't changing, all you are doing is updating data to reflect more accurate numbers, would you require a change in the PAR.

Rabung said if we are changing anything that is in the hatchery's permits/BMP that would require a PAR. There are two ways to change it; the permit holder can request a PAR or the Commissioner could change it with the RPT's concurrence. If you are changing something in it, you don't just get to change it.

Joyce said the permitted numbers are not going to change, you are just updating data.

Rabung said this is an anomaly in that this has been added onto a BMP. If we are going to update the white paper, that is fine as it is, but it doesn't change the hatchery permit/BMP unless without a PAR or the Commissioner says to update it. There doesn't seem to be any provision in the white paper for updating it but people seem to think it needs updating.

Joyce said the reason is nearly all of the white paper data was based on coded wire tags. PWSAC has been otolith marking since 1999. There is information that is more up to date. The RPT can decide if they want to add it as an update or leave the paper as it is.

Covel said this paper is well seasoned and has stood the test of time. Don't fix what is not broken. A trigger would be the next time PWSAC proposes a production increase. The discussion last time was under the existing white paper and there wasn't going to be an increase. It was left at waiting for a few more years of otolith data before it would be appropriate to submit a request to increase production.

Rabung agreed if there was a PAR to increase production, it would be required by the terms of this to revisit it.

Joyce said what he is hearing from the discussion is that things are on hold for another couple of years until more information is gathered from the otolith studies. At that point there may or may not be a case for changing production levels.

Botz said next year the Department should be able to present some information on two complete brood years as was requested in the early 2000's relative to the strontium marking program.

Jeff Regnart added there was work done in 1999 or 2000. There was a change, not in the permit capacity, but how many fry were stocked. There was some background written into that that we need to have in the white paper also. That was the last time we really looked at this.

Lewis said there are very accurate files kept by Joyce that are still around. They were reviewed because there was a suggestion that the white paper had been updated in 1999-

2000 as the BMP was being adopted. It was never formally adjusted and there is a file on it with some recommendations. There have been the stocking strategies that have been adjusted several times since then. Those files are available and we can include them next year review as we present an update.

**RPT Chair:**

Joyce said last year he had told the RPT he would be willing to stay on as the Chairman. He did for one more year but he is finding it is time to move on. There needs to be someone else to sit in this role. It is good to have new blood sometimes to come in and sit down. Someone who is much more familiar with current day fishing, harvest, escapement, and can stay updated on things to a higher degree than what he could do in the future. Joyce said there are travel plans and things to do so this will be his last meeting as the Chairman. It will be up to the RPT at that point to select a new Chairman. It is something everyone should consider to see who would fit the role.

Covel asked if it would be appropriate to just get on with it and make a nomination to have the discussion on the record.

Rabung said one of the regulations that describe the RPT Chairman's duties is to set up the next meeting. If Joyce is not in that role, someone will have to sub. He would just as well have the RPT Chairman identified.

Joyce said as far as the next meeting, we can surely pick a date. He would make recommendations and send a letter to the Commissioner to finish out this meeting. The organizing of future meetings need to begin organizing in January or February by checking on the AMP's and that sort of thing. The duties slack off for the summer but by late fall things start happening. It would be good to get someone in that role.

Covel said he would like to nominate Tommy Sheridan.

Covel spoke to his nomination. To be a chairman you have to help set a meeting date and run a meeting. In this instance, on the Regional Planning Team, as Joyce has shown us over the many years, it is helpful to have both knowledge of fisheries and experience in management. As evidenced by the Chairman's performance today and the questions he asked that bring us to relevant points in our discussions. Sheridan would bring that to the job.

John Platt concurred with Covel.

Botz would add that Sheridan could also bring some of the enhancement background as Joyce did, and working in the hatchery environments perspective.

Thalhauser said in his limited time, as far as sport fish issues, Sheridan has been willing to work with us on both sides. That brings a lot to it as well.

Joyce said he would be looking for input from the Department as far as time commitment and that sort of thing.

Lewis said in anticipation of this we did have a conversation. It came to our attention that you might be stepping down as Chairman. Sheridan has expressed interest and is well qualified and we support that at the regional level. In other areas of the state the Regional Development Biologists is Chairman. Ethan Ford is the Chairman of Cook Inlet and Flip Prior is the Chairman in Southeast and Yakutat.

Rabung said statewide, Kodiak rotates their Chairman between the Department and a KRAA staff member. He is the Chairman of the Norton Sound RPT. Flip Prior chairs three separate RPTs. The Cook Inlet RPT has always been chaired by the Department. The regulation says it is at the will of the RPT. It does not have to be a member of the Department it could be anyone.

Thea Thomas agreed the Sheridan would do a fine job.

Somerville concurred that Sheridan would make a good Chairman.

Joyce said that everyone on the RPT and even the alternate for Sport Fish seems to concur. There has not been any negative reaction from the Department.

Lewis reiterated the Department was supportive of this nomination

Joyce asked if Sheridan was willing to accept this nomination.

Sheridan said he was willing.

Joyce then asked for all those in favor of Tommy Sheridan to be Chairman of the Prince William Sound/ Copper River Regional Planning Team, signify by saying I. It was unanimous and that will be the case.

**NEXT MEETING DATE:** April of 2016.

Joyce added for the new Chairman that PWSAC has their Board of Directors meeting in March to get their Board approval of the management of their hatcheries. That information goes into the AMP's and should give the Department a month to review them and then set the date accordingly.

**COMMENTS:**

Martinek said he would like to thank Tim Joyce for all his work over the years of doing this and his insights.

Jeff Regnart said from the Department, we want to say thank you. Not just for the time you did this as a Department employee, but when you were a Forest Service employee and then even when you had retired. This was all volunteer time so thank you very much.

Joyce said it was enjoyable doing it. It is fun to stay in touch with not only the people who are involved but also the issues that are out there to.

Wells said the VFDA would echo all of those sentiments and say thank you very much.

Covel said PWSAC as well Tim, it has been fun. Covel said he needed to add something as well while we are on the subject. It occurred to him while looking at the 1999 white paper that it was his first year on the RPT. This will be his last meeting as well.

Joyce said changes are occurring. The fisheries have matured and so have the fishermen. Joyce said he would like to thank Covel for his service on the RPT. Your inputs have been invaluable from fishermen, a historical, and a PWSAC perspective.

**ADJORNMENT:**

**Motion, Covel; Second, Botz** to adjournment. Hearing no objections the Chairman gaveled the meeting closed at 12:38 p.m.