

NSRAA Board of Director's Meeting Minutes ~ FALL 2016

November 9 & 10th, 2016

1308 SMC Rd., Sitka, Alaska

Call to Order: 9:00 AM November 9, 2016

Roll Call

Gillnetters present: Dalton Bergman, Kevin McDougall, Dan Pardee, William Prisciandaro and Lars Stangeland. Seiners present: Jeremy Jensen (for Mitch Eide – resigned), Charles McCullough (late), Justin Peeler and Sven Stroosma. Trollers present: Bert Bergman, Eric Jordan, James Moore and Zachary Olson. Other Board members present: William Bergmann – Conservation, John Blankenship-Subsistence, Mike Forbush-Processor, Carl Johnson-Interested Person, Henrich Kadake-Native Organization, Deborah Lyons-Crew Member, Brian Massey-Recreational, Dave Moore-Interested Person, and Carl Wolfe –Interested Person. Absent and excused: John Barry-Seine, Kurt Wohlhueter-Municipality, and George Eliason-Troll.

Establish Quorum - 22 of 25 Board members are present at 9:00 AM.

Approve Agenda

Motion 11/9/16(a) M/S Eric/Brian To approve the agenda with the suggested amendments.

MCWOO. Change Agenda item Chinook Futures Coalition update to Pacific Salmon Treaty Coalition report, add Chinook marking proposal, and add allocation percentage update.

Appointed Seats

Kevin explained the NSRAA process of the Board members casting ballots to endorse appointments made by the President.

Action 11/9/16(b) The Board cast ballots and endorsed the appointments of John Blankenship to the Subsistence seat for another two-year term, Dave Moore to the Interested Person for another term, and Henrich Kadake to the Native Organization seat. Henrich was a Seiner, now retired, and retired Mayor of Kake. All three appointees had expressed interest in being appointed or reappointed through written communication to the General Manager that was forwarded to the Board President. Further discussion on Board composition: Mitch Eide-Seine has resigned; Jeremy Jensen has been recommended as his replacement.

Action 11/9/16(c) The President thought it was appropriate to appoint Jeremy to fill the Seine seat and there was no opposition to his appointment.

There was a question on a proxy for George Eliason, is it appropriate to find someone to fill in for George after the Board meeting has started? Kevin explained that a proxy can fill any absent Board member's seat and it would be fine for someone to join the meeting for George by this afternoon. Caleb Robbins from Yakutat/Sitka sat in for George. Deborah explained that because the Gear Group and Crew Member seats are all elected from ballots cast by permit holders, a proxy sitting in for one of those seats is not allowed to vote. Steve added that this was a clarification made to the Board by an attorney some years ago. Further Board discussion indicated a clarification of the bylaws might be in order. A person appointed to fill the remaining unexpired term of elected Board members might, most properly, be included on the next election ballot cast by permit holders. The intent of the Board is to endorse the practice of maintaining five voting gear group representatives on the Board, so Jeremy will be allowed to vote at this meeting. Steve will look into the ideas discussed further and if necessary recommend a change to the bylaws.

Introductions

The Board members introduced themselves and declared their appointed positions. The NSRAA staff members and members of the public also introduced themselves and signed in. NSRAA staff included Scott Wagner, Duncan Coltharp, Chip Blair, Adam and Rebecca Olson, Jon Pearce, Ben Adams and Mike Pountney. Fishermen present included Jay Erie, John Skeele and John Murray.

Elect new Vice President

Motion 11/9/16 (d) M/S William Bergmann/Eric Jordan. To elect Justin Peeler – Seine, to the seat of Vice President. M/S Wolfe/Jordan - To close nominations. The motion to elect Justin Peeler to replace John Barry carried without objection. The resignations of both long-time seine reps. Eide and Barry was noted. Board comments mentioned that the new practice of allowing a gear group member to leave the Board mid-term and allowing the President to immediately appoint a replacement with voting privileges, could increase Board turnover. However some Board members thought people all have their reasons for what they do and generally try to be responsible about serving on the Board.

Announcements

Lunch is being delivered. Ballot nominations need to be turned in by 5 PM today. The new Board members need to fill out and turn in the conflict of interest statements on page 40. Board reimbursement requests should be made to Ilona before tomorrow morning.

Approve Minutes

11/9/16(e) M/S Jordan/Moore To Approve the minutes of March 2 and 3rd, 2016 meeting. MCWOO

Budget Committee Appointment

Action 11/9/16(f) Justin Peeler was appointed without objection as Seine representative to the Budget Committee.

General Manager's Report - Steve Reifenstuhl

Steve opened his report on the "State of NSRAA" and gave a warm welcome to Henrich and Jeremy. He has worked with both men over the years. Steve spoke to Deborah's comments about losing institutional memory and made the comments that transitions need to be planned for, rather than having them thrust upon you. Steve is also planning on leaving at a point in the future and has given the Board several years advance notice so that plans can be laid.

The Boardroom has been completely made over for less than \$2,000. New paint, framed charts and other improvements have made the room look the best it ever has. The Board gave a round of applause and compliments for Ilona, Rachel and Shirley. Steve gave credit to the entire staff. They have functioned well in a trying year and have maintained facilities and met the production goals. Steve pointed out the new additions to the Board book. Page 32 was an example of new summary page with condensed information about the aquaculture projects. He reviewed the organization-staffing chart. Steve was pleased that the very deserving scholarship recipients represented all three gear groups.

Steve said this was the hardest year of his career. The Hidden Falls run failure affected him greatly. Fishermen were suffering and so was he. Steve takes things seriously and tried to work through the difficulties in his usual workmanlike manner. In his letter to the Board Steve gave the essence of what occurred this past year. "We met broodstock goals at all facilities and eventually met the income needs. The fish year, beginning in May, was less than half of the volume of Chinook expected. The Hidden Falls chum return was very, very poor. The 4 gram chum program fizzled." Steve realized that NSRAA was not going to meet income requirements and he had to put out \$800,000 in cost recovery bids from Deep Inlet. Fortunately the chum price was good. The Mist Cove Coho return was slightly helpful. Marine survivals were 1.5% or less and this was a trend over all of Chatham Straits. Fortunately Medvejie and Deep Inlet came in as forecast. The NSRAA budget was subsidized by a \$700,000 contribution from DIPAC and \$500,000 from the Hidden Falls

contingency account. It was also unusual that there was no revenue from Chinook. Steve said, "Is NSRAA in a crisis? No, but it is prudent to look at what we think is going to happen. We have to accept the biological constraints. Plan for run failure at HF in the coming year and anticipate revenue from Deep Inlet and Southeast Cove. We were buffered from disaster last year by the program diversity... but thinly."

Steve's recommendation is that in order to increase marine survivals for Chum salmon we need to move fish away from HF for release... but need them to return to HF for broodstock. He recommends that we move ½ of the production at Takatz and HF at grow-out sizes of 2 or 4 grams, 40M chums, to be transported to East Chatham by towing 20M in net pens and the other half in large a tender with nets and have them transported away and released. We are trying to avoid the predation of West Chatham corridor. Port Armstrong releases pinks in this fashion and survival doubled at the release site furthest from PA last year.

There was a brief discussion about Chatham currents. Steve said from troll and seine catches in North Chatham where fish are picked up in NMFS Southeast Coastal Monitoring (SECM) program that samples fry, we know the fish go out both to the north and the south. We don't know if currents or biology affect the choice of direction. We do know the fish are looking for near shore environments and protection from predators. Steve said additional studies cost money and we know we can't control the predators so the best option appears to be changing the release site. A board member asked a question about how the Thomas Bay program will be developed. Steve recalled the Board direction, several meetings ago, which specified to get the permits and do three net pens (8M) and "Let's see if Thomas Bay will work." But there is not much opportunity for a fishery at Thomas Bay at that level of release. Steve is now suggesting 20M should go to Thomas Bay and that will allow opportunity for a fishery and cost recovery... but that is five years away. When the fish start coming back the Board will have to decide the best use of the fish. There was a question about the top predators that have been identified. Individual whales have been identified. Pollock and cod have been identified in the pens and in the area. The Armstrong example of towing was brought up. A Board member asked, "If NSRAA uses towing and doubles marine survival, will we get to where we need to be for the broodstock returns? Steve said marine survivals at Hidden Falls have been .5%. If we double survival up to 1%, that still is not adequate.

A Board member asked, "Maybe we should not release at HF? Can we break the predator cycle? We are all very concerned. Is NSRAA perpetuating a predator cycle?" Steve said, "Yes, but that is what Gunnuk Creek is about, in part. We have to have a broodstock site. If we could avoid releasing at HF for 5 years we could change the equilibrium. Sites are unique but I think fallow years could help if we were set up to do that."

Board discussion continued. A Board member agrees the HF predator problem is threatening our programs. "Can we get broodstock in a different way?" NSRAA staff is researching this. They may try an egg take on the barge at Medvejie. The place to do this for HF would be at SE Cove. The President said that he knew there was interest in continuing a discussion of options but suggested that Steve finish his report and, if time permitted, we could come back to a general discussion. NSRAA is still waiting for the State with respect to Gunnuk Creek, after having made a bid. It has been a very frustrating process.

NSRAA staffing is stable. Assistant Managers Baxter and Cain have left. They were both good, but Steve found good replacements. Steve was pleased to report that NSRAA did get completely clean (unqualified) audit. Audit books are available for review.

Operations Manager Report - Scott Wagner

Scott said it was a very tough year but was not going to dwell on the negatives.

Highlights included 233.8M total salmon released, a record. 200K 0-check Chinook went to Crawfish Inlet and 129,000 were released. The largest SMC Coho eggtake was done. All chum eggtake goals were met, but we were short on Chinook and Coho. The HF stock chum eggtake at Medvejie was done and test fishing occurred in Thomas Bay. Concerning Thomas Bay; ADFG has written report about the results of the test fishery, but NSRAA has not yet seen it. Justin described where he had made test sets. No King salmon or Sockeye were encountered. Scott talked about the concept of vessel transfers as a way to remote release salmon fry and warned it is a strategy full of dangers to small fish but it needs to be tried because we are out of other options.

Scott went over 4 items on the agenda for Nov 30th Regional Plan Team meeting:

Thomas Bay release up to 40 M chum, SMC Hatchery Management Plan remove 2% stray rate, Med-HF chum stock 20 M release (asking to add Med as release site for HF chum) and SMC hatchery MCH fall chum stock 20 M increase. If the permits are approved they become options for the Board to consider. The final decision is left to the Board.

ADFG is asking NSRAA to be prepared to assess troll Coho harvest of fish returning to SMC hatchery for impacts on the Salmon Lake Coho escapement and that this be done for three continuous years when the SMC project is at full production. A Board member asked, "Could HF Coho be released elsewhere?" (To reduce predation) Scott said "No, The Department is not as concerned about moving Chinook, but they are very sensitive about moving Coho. A local stock might need to be developed."

Scott has been dealing with the "Attack of the Bureaucrats." The Med-Bear Cove storage site lease is making progress, Thomas Bay net pens locations have been applied for. The new draft DEC permit for HF and DI hatcheries has gone from 87 to 280 pages in length and has morphed into more of a fish-processing permit. A Board member commented that the DEC obsession with regulating fish carcasses at the hatcheries is the equivalent of requiring that each naturally spawning river system be regulated, too. The FERC permit history for HF hatchery hydro was described. FERC was told in writing by USF&W in 1992 that they needed to make a determination on whether the HF hydro needed to be permitted. Scott is working through this and hoping to get an exemption. The hydro is part of the State of Alaska property associated with the HF facility; NSRAA has a twenty year operating contract with the State.

Scott described some of the grant-funded capital and maintenance projects at Hidden Falls hatchery and the Haines/Skagway spawning channels. A lot of excellent pictures helped the Board understand the work being done. The Herman Creek spawning channels all experienced an excellent return of chum last year. The best Scott has ever seen.

Scott spent some time reviewing the Short and Long Term Capital Estimates and Expenditures FY08-FY17 Spreadsheet on page 133 of the Boardbook. Asset categories, like buildings, equipment, vehicles, etc. were also reviewed.

Scott described the concept of the egg take barge and estimated the cost for a 20M eggtake from the barge at \$243,320. We already own the barge. The cost estimates are for the crane, generator, spawning tables, stun box, towing, labor and broodstock collection.

2016 Salmon Season & 2017 Forecast – Chip Blair NSRAA Data Analyst

The NSRAA 2016 forecast of 3.86 million all-species salmon fell short and came in at 2.22 M.

"The HF chum run failure accounted for most of the shortfall and the fact that we used an historical average of data rather than adjusting for the recent trend of decreased survivals, which we believe, are due to predation, contributed to the forecast error." The 2017 forecast has been calculated differently and takes the trend into account. Chinook were also under forecast. For most years the three ocean fish return at roughly double the two-ocean fish amount. This past year the threes just

about equaled the number of twos and that drove the Chinook numbers lower. The Coho returns were also quite poor with Medvejie at 6% for the hatchery return and then 1 to 2.5% for the other programs. Bright spots were the Deep Inlet Chum that returned at 92% of forecast and SE Cove Chums with 150,000 4 year-old fish returning. We are hoping we are at rock bottom for marine survivals.

Chip said, "Although it seemed like a horrible year, the higher Chum prices helped ease the pain to the fleets. \$3M to Seine, \$970,000 to Troll, and \$2M to Gillnet." Chip showed a set of slides that had a more detailed breakout by species, by program, and more information on how cost recovery was derived. It will be posted on the NSRAA website. 3M HF eggs for broodstock were taken at Medvejie from fish that were captured at Deep Inlet during the closure. Our cost recovery for 2016 was 2.3 times greater than the 5-year average. Chip reviewed historical marine survival by species with the best years falling between 1988 and 1997. The general trend is releases are going up and survivals are going down. The harvest of Alaska hatchery Chinook was lower too. Some of the spring troll fisheries were not open at all due to low % of AK hatchery fish. Coho were larger this year but we experienced a record low return to HF. The return was late and delayed to Mist Cove and males seemed to be missing. The Troll harvest rate seems low perhaps due to a CWT expansion factor being off. Chip is looking into it.

The Forecast for 2017 is on Page 121 of the Boardbook and the total projected 2017 returns are for 2.1M Chum, 21,000 Chinook and 400,000 Coho. HF is projected at about 500,000 chum and we are just using the last 5-6 year marine survival averages. About 200,000 Chum should return to SE Cove and 33,000 to Crawfish Inlet. Those numbers should increase over the next several years. Med-DI is forecast at 1.3 M Chum returning. The Board discussed whether a pattern like Pacific Decadal Oscillation is applicable to our survival trends. Steve explained something about this and that individual stocks are all over the map through different regions of the State's fisheries. The pink salmon run failure and poor returns to SE Chinook systems indicate that something is going on. Trollers have noted an unusually high number of out migrating Coho. The winter king salmon fishery is very slow. A question was asked about the SET tax proportion paid by gear group and benefits received and the staff said they could work on getting the detail requested.

BREAK for LUNCH

Otolith Reading Program - Duncan Coltharp, Evaluation Program Assistant

Steve introduced Duncan to the Board. The otolith-sampling program may be new to some Board members and the purpose of the report is to understand the procedures, the data produced, and why it is important that NSRAA conduct this work. The otolith lab is located in the rear of the NSRAA building and he invited them to visit it when they have a moment while they are here for the Board meeting.

Duncan said he began reading otoliths three and a half years ago when he first came to NSRAA and it is a process that takes time to learn to do efficiently. The otoliths (ear bones) are delicate and must be ground properly in preparation to be read. At first it took him several weeks to process a sample. Now he does two per day. This year 22 samples were collected from Deep Inlet and a good number from the other sites. Ben Adams and Rachel Miller helped prep slides for reading.

Reading the otoliths identifies the fish. The marked otolith reveals the release year and release site. Comparing the data informs us about which groups of fish are more successful or less successful and which sites are doing better. This provides feedback on rearing strategies. Sitka Sound, Hidden

Falls and Southeast Cove are all assessed. The release site, stock, brood year and size at release are associated with the mark and also if any special release technique, like towing is noted. The Sitka Sound Chum Return was assessed. There are 20 marked groups and they cover the Hidden Falls stock released at Deep Inlet and the Medvejie stock released at Deep Inlet and also at Bear Cove, adjacent to the Medvejie Central Incubation Facility. For Sitka Sound the 4 and 5 year olds released from Deep Inlet made up 73% of what was caught in the fishery. From that group 25% were BY11 and BY12 Deep Inlet Medvejie Late Large, also called the 4.0 programs. They performed four times better than the regulars.

Comparing the Medvejie stock and Hidden Falls stock released at Deep Inlet. Medvejie chums were 51% of the return (845,000) and HF were 32% (522,000)(no LL component). While all three year-old returns were small, the Medvejie Deep Inlet three year-olds did best. Medvejie chums released at Bear Cove accounted for 14% (239,000) of the return with the Bear Cove BY 12 (4 year-olds) LL release accounting for about 110,000, outperforming both the regulars and LL 3,4 and 5 year-olds. There was a concern that releasing the chums at the larger size in the 4 gram LL program prompted more of them to return as three year-olds but the 2015/2016 data did not support that idea. It was evident that the 4 gram fish for age threes released at BC and Deep Inlet were returning at 9:1 and 8:1 marine survival, compared to the regulars. For the age 4's released at Deep Inlet the ratio was much closer at 2:1 marine survival.

The Board was very interested in the ratios comparing the regulars to LL Sitka Sound cumulative return rate to date.

	Age 5 (BY11) BC 2:1
Age 4 (BY12) DI 6:1	Age 4 (BY12) BC 11:1
Age 3 (BY13) DI 1:1	Age 3 (BY13) BC 3:1

A question was asked about the size and sex of the fish. That data is not presently collected and would require more staff. NSRAA hasn't seen anything of concern that would justify additional scale and sex sampling. Duncan explained a sample size is 96 pairs and one otolith from each; about 200 per day are being processed. Ben Adams is also gaining experience.

Duncan spent time looking at the catch locations. Otolith marking is done for Chum and Coho. The Chinook are coded wire tagged (CWT). Naturally, because the fishery occurs at Deep Inlet, most of the Chums are harvested there, whether they are released from Bear Cove or Deep Inlet. Only 5% of DI chums released at DI return to the rack at Bear Cove. 58% of the BC release is taken at DI and 42% returned to BC.

Duncan presented the otolith data on the 2016 HF return. It included info collected from the commercial fishery, cost recovery and the rack. 16 groups were represented with regulars/LL from HF-Kasnyku and Takatz. SE Cove LL for BY 11 and 12. Very low returns occurred for three year olds and in general overall. The 2016 LL return rate for HF outperformed regulars at both sites in most cases but Takatz show the greatest success with LL. Marine survivals for all groups are very poor at both sites for all year classes and no group is surviving above 0.7%. We only have two years of data to work with but LL seems to be doing better. The 4.0 make up 20-25% of the release.

Kevin and Steve talked about the break-even level needed in marine survival (MS) to pay for the HF LL program. Generally we think of increasing MS by 1/3 of 1% justifies the cost of the programs. But the overall marine survival is so poor does the ratio still apply? Steve said, that ratio is used more with the bigger returns but the added cost for late large is still producing a better result even with the small return. Steve explained it costs twice as much to raise the 2 gram fish to 4 gram size primarily based on the cost of fish food. "Should we produce half as many fish for an equal cost to get better marine survival?" There was a discussion about warm water and how it affects growth rates in salt water and the time of release.

Duncan explained how 22 pens at SE Cove rear all the chum to 2 gram size, half are released and the remaining are distributed into the empty pens and are raised to the 4 gram size. The first 4 year olds returned to SE Cove this year. The SE Cove releases were all LL and they outperformed Gunnuk Creek by a wide margin. Only a single three-year-old otolith was found in the SE Cove samples. One sample was collected from each cost recovery delivery. The SE Cove release number jumps from 10M for BY 2013 to 17M for BY 2014, then to 43M for BY 2015.

Some other conclusions from the program were: When the age data derived from the scale sample were compared to the otolith data they tracked very closely. Takatz fish are finding their way back to the hatchery 43% of the fish at the rack were from TKTZ. A few SE Cove fish found their way back into the HF fishery and the rack ~2,500. Better communication with ADFG will help avoid mark confusion in the future. Duncan ended his presentation.

Steve mentioned Duncan is also running the SE Cove program. NSRAA is cross training personnel so they are experienced in hands-on fish culture work as well as the analysis of data. Ben Adams was introduced. He grew up in Sitka and is in charge of special projects and tagging. These two employees have doubled our efficiency at tagging and he is able and interested to help with the lab and other things. Rachel Adams is also cross training at the hatcheries and helping in the lab. Eric Jordan contributed other complimentary information about Ben's swimming and coaching activities.

Maintenance Report - Mike Pountney, NSRAA Maintenance Manager

Mike discussed the progress on projects since the last Board meeting. The deferred maintenance grant allowed for improvements to the HF hydro and those have made it more efficient and reliable. There is a new electronic governor and we now have a spare.

- There is a new 80kw hydro purchased and on the way to HF. The foundation has been poured. Preparing for installation involved cutting the new supply connection into both penstock lines last spring. This involved shutting them off and was the source of some sleepless nights hoping things went as planned...which they did. A contractor has been selected to design the new electrical controls.
- New electrical distribution panels were installed and wired up to service the homes and duplexes. It provides individual circuits for the houses and duplex, formerly they were all on the same circuit. Deficiencies were corrected with shorts and vault flooding.
- At SMC hatchery 5,000 sq. feet of spray foam was applied with the old rhino liner machine and then painted. Staff did all the work. It added a great deal of warmth (R-19) and value to the building and created a much better environment for the rearing fish and protects valves from freezing. It was a big job.
- Hatchery staff designed and installed two new 90,000 BTU water-to-air heat pumps designed for aquaculture use. The system is auto-adjusting to maintain constant flow and was fast-tracked to get it on line for the new chums incubating there.
- Mike showed a picture of the temperature and alarm panel that automatically calls staff cell phones to alert them when limits are exceeded.
- The Bear Cove storage site for the two barges has been improved. The steel piles have been installed with some added effort, and the barges are securely held in their place during the off-season. Even during 50-knot winds.
- The chum room at Medvejie underwent electrical upgrades and a new U/V unit was installed. The old 100-amp panel has been replaced with a larger capacity panel.

- More raceways have been coated with rhino lining. Staff has been doing the work with a machine purchased five years ago and gradually been upgrading all the raceways.
- The NSRAA building in Haines was repaired. There was some bug damage affecting the roof but the staff took care of it. Additional work still needs to be done on the roof rafters.
- Mike concluded his presentation with a great picture of a huge custom barbeque that he welded up from old tanks, etc. Each year NSRAA hosts a 4th of July BBQ for the community.

Medvejie Hatchery report – Adam Olson, Manager Tab 4

Adam began his talk saying he was hoping Board members had been able to read his eight-page report on Medvejie Hatchery. His presentation was the beginning of the reports published in the Boardbook. “Overall,” he said, “it was a challenging year. Adult returns are suffering and there are rearing challenges as well.”

Chum incubation issues produced smaller-than-normal fry at ponding but they caught up with very high growth rate in salt water with low mortality. The broodstock releases at Bear Cove were good just under 19M and were supplemented by the shift of Deep Inlet Chum to make up for the losses in the incubators from fungus. The size goals were met, and the 4.0 release ended up 150% of goal. The Deep Inlet release numbers were down, 43 M were released at DI, the size goals met and the 4.0 release timing was a little later than they wanted. Staff has made changes to water flow to the chum incubators and added on to the raceways so outmigration is much smoother

The Chinook saltwater overwinter group of Medvejie yearlings did better than average; all size goals were met and spread releases over 6 weeks. At Bear Cove over 2.3 M were released. 400,000 fish were released at Halibut Point Marine. That seems to be working out as an excellent release site. The first transfer of Chinook zeros were released at Crawfish Inlet.

Prior to putting the Bear Cove zero-check Chinook from freshwater into saltwater, the staff does saltwater challenges on small batches to see if they are ready to adapt to the new environment. The test batch did fine, but after all the fish were introduced into the salt water they started experiencing higher-than-anticipated mortality and lower growth. If that weren't bad enough, staff was dismayed to note the presence of a new predator in the form of very abundant young black cod. They found 500 in a single pen, and more in the other pens. Realizing the penned fish were vulnerable and not able to protect them from the predators, the decision was made to count them, tow them out of the Cove and release them so they would stand a better chance of survival. So many black cod were present the NOAA research vessel that had been tagging sablefish at St. John the Baptist Bay came down and tagged at Bear Cove. The black cod seem have migrated out of the Medvejie area. It is the lifecycle of the cod to move off shore at that size and age.

With the addition of 100,000 Coho brought to Medvejie from SMC we released 200,000 Coho, the largest to date for that program. A number of Coho jacks have been returning to the hatchery and we are hopeful that there will be a large enough Coho return to Medvejie in the coming year to enable us to take the entire broodstock goal, something we have not yet been able to achieve. BY16 Chinook egg-takes had some problems. Generally the fish are slow to come into the facility and slow to ripen. Staff has to sort through the fish taking only about 20% of the eggs at a time. The handling causes mortalities and coupled with low fecundities it put us a little short on the Chinook egg take goal.

The Chum egg-take began one day early and started OK but as the season went on the low water because of the very dry weather caused complications. We were able to take eggs at a steady rate and did get the goal of 92M.

For Coho we did something different this fall and captured the fish with a seine and then moved them into raceways for holding until ripe. It kept them safe from sea lions. We will be short on the production goal but it is still the largest Coho egg take that we have been able to get so far. In addition to the rhino-lined raceways described by Mike P., changes to the crowders and head boxes, with a whole array of winches installed overhead, now allow us do the entire sorting with two people instead of three. Safety access has been improved.

The last chum returned to Medvejie on October 31. Very late in the season.

Adam continued his report. "For 2016, NSRAA had the warmest water temps ever seen at Medvejie. Although this means good growth rates, it also creates a favorable environment for bacteria, fungus and disease, too." Adam showed some pictures of the Nopad incubators and trays and discussed stacking them, what eggs look like at the hatch and how they look immediately after. The incubators should be full of nice healthy fry at the end of incubation, but when the staff began to pull the trays, fungus and dead fry were discovered. Treating with formalin was not as successful as hoped. Things happened fast due to temperature. To combat these sorts of mortalities Medvejie now has an in-line UV filter servicing 19 stacks of 22 million chums. It is supposed to kill bacteria, algae and fungus. Staff have been testing the effluent side and it appears to be working. Weirdly these issues are popping up in the new chum incubation room that had formerly been clean. Adam showed a video of pulling the stacks and checking them. The top stacks, where the water flows in, are usually quite clean, but if problems develop they tend to be seen in the lower stacks. This same problem happened last year and in a stack they had 60,000 dead fry out of 220,000. This year they are working with a crew of three or four people, pulling the stacks out, breaking them apart and checking on the eggs. If they do find algae, fungus or bacteria they remove the fry to a sterile environment and sterilize and pressure wash the boxes before reassembling and restocking.

Board members asked about the cost and feasibility of chilling water (not), rearranging the stacks, etc. UV unit seems to provide the most hope. It would cost \$50,000 for all the UV units needed. The water is still very warm and staff will continue to fight this through the winter. A Board member asked a question about the four different rearing strategies for Chinook. Perhaps a definition page could be added to the Board book for all the rearing strategies and abbreviations for all species. A board member commented that young blackcod are prevalent throughout SE and may remain that way for the next couple years.

Sawmill Creek Hatchery - Rebecca Olson, Hatchery Manager Tab 5

Rebecca showed the temperature-tracking graph comparing last year's data with this year and the water temps are very similar. It helps her anticipate growth rates. BY14 Coho rearing: over 673,000 were released. 100,000 additional went to Medvejie. They were released at a great size, just less than 27 grams, at Deep Inlet. The BY15 are doing well, just less than 927,000 Coho. They are at 16 grams right now, putting on slow and steady growth and we expect them to get to a good size, just like last year. BY15 Crawfish Inlet Chum, in our second rearing season, saw 15M 2.0 chum and 14M 4.0 gram chum released in Crawfish Inlet. The first transfer of 0 check Chinook experienced slow growth rate of 3.75 %. The Medvejie zeros did not do that well either, but the mortality of these small Chinook at Crawfish was triple that of Medvejie. The higher dropout rate/mortality once we began feeding them in the pens may have been due to the additional stress of transfer. About 129,000 were finally released at a little over 19 grams in size.

The new event was the egg take of HF stock chums at Medvejie in anticipation of run failure at HF hatchery. At the end of the summer season, broodstock chums finally showed up at HF/Takatz. The staff is still working with the chum eggs taken at Deep Inlet to get experience with that as an alternate process if needed in the future. 3M HF chum stock eggs were reared in two R-48

incubators and the fast-tracked recirculating system kept the water cooler to pace the growth rate of these fry with the HF chums being reared at Medvejie. SMC staff also did a first-time otolith mark of these fish with the new chiller/heater system and it worked really well for them. They currently have BY16 chum incubating for 2.0 and 4.0 Crawfish Inlet programs. Hatch trays are being pulled and the final number of fry to be ponded will be a little lower than the egg take numbers. The hatch is just beginning for these chums. The BY16 Coho eggtake is currently in process and winding up. Sampling for BKD will be foregone this year and Rebecca described several factors leading to the decision. As it turns out, there are rainbow trout in the water source to SMC. The fish seem to be doing fine. If issues occur it may be reinstated. Rebecca closed with a brief discussion of fecundity rates. If staff has been underestimating them, and the rates are re-calculated, then NSRAA has actually taken at just under 2M Coho eggs.

Salmon Lake Coho - Ben Adams, Special Projects Coordinator Tab 8

Ben discussed an on-going program involving the Coho returns to Salmon Lake. The project estimates the adult return to the lake through the use of coded wire tags, a weir and mark-recapture estimates. Staff also looks for the presence of NSRAA hatchery fish in the return. NSRAA is required to do this work as a condition of the permit or the SMC Hatchery. A four-page report with photos is in the Boardbook and Ben summarized that report and showed additional slides. In the past the staff has gone up the stream to Salmon Lake and run the weir. They also did in-lake beach seining and mark-recapture to estimate for the escapement. The permit was revised and this year was different. No weir is in place but an incline plane trap and live box are being used. A larger mark recapture effort was done. Staff collected the fish by beach seining in salt water and the lake and then looked for the mark fraction up at the lake. Wild Coho are also ventral fin-clipped. The staff felt they were able to collect enough data and obtain a sample size great enough to make adequate estimate without the use of the weir. "Data is being entered into the model and we will soon have escapement estimate." The estimate for escapement results is preliminary with 525 captured in saltwater, 623 in the lake for just under 2M.

Hidden Falls Hatchery - Jonathan Pearce, Hatchery Manager Tab 6

Jon had just come in from HF and said his report covers the status of projects and describes some of the new strategies that he is looking forward to employing in order to change the pattern of poor returns to Hidden Falls. Some of the techniques are aimed towards avoiding the whales. There are also lots of other predators like rockfish and seals and sea lions. Chum, Chinook and Coho are reared at HF. He showed a slide illustrating some of the different strategies to avoid whales: trickle releases, tow releases and holding fish for the periods when whales are present. This year the Chum and Coho are otolith-marked to differentiate between those that are towed so staff can evaluate whether the efforts of the technique are justified by a positive change in marine survival. "For Chum this is the earliest (April 26th) that we have ever been able to release the fish. They were big and 60-70% of the fish were out the door before the whales showed up later in May." Rearing mortality at Kasnyku declined from 28% in 2015 to 7.4% in 2016 and Takatz mortalities also declined from 15% to 8.1%. 177M chum eggs were taken. The second largest amount ever. Because Medvejie had obtained some HF broodstock on that side of the island it allowed the HF staff to strip roe for cost recovery and sell the carcasses too when a late group of Chum returned to Takatz. A graph showed the very consistent eggtake over time. This current brood year are otolith-marked. 50% will be released East Chatham and 50% inside the bay.

For Chinook, 588K 59-gram smolts were released in May. A discrepancy in the release number was detected (calculated to actual number is off). High otter and seal predation is occurring. More

frequent dive inspections will be done. This affects the Chinook and Coho saltwater overwinter programs. Currently 800K Chinook are being reared in saltwater. 872,000 Chinook eggs were collected in August with very low BKD rate (4%). Family tracking is paying off. For Coho 3.3M SWOW were released with very low mortality. 23 grams were released into saltwater and 24-26 grams for the freshwater. Currently 3.6M Coho are on hand total. Very low freshwater overwinter mortality .5%. NSRAA does early-entry, mid-entry and late-entry releases. 833,000 in each release. This year they are marked to differentiate between tow and no-tow culture methods. A surplus of fry from Deer Lake project went to Cliff Lake. 7.7 M green eggs are on hand through the HF rack. The weir improvements and lagoon improvements at HF will maximize and streamline work to attain broodstock goals.

Deer Lake Coho Rearing Project – Woody Cyr, Project Leader Tab 7

Scott Wagner gave the report for Woody. Poor weather has kept him in camp. Right after the March Board meeting Woody opened camp and it was snow-free which made things go faster and easier. Supplies were flown in by helicopter.

Scott was happy to report that production from this project has finally stabilized. 2,427,271 Coho smolts were released with a very low 2.8% overwinter mortality. NSRAA has developed a working set of culture options and techniques for Coho at Deer Lake, after years of trial and error. Very few whales were in the area at the time of release. He showed an overhead view of the lake and the areas where the pens are kept.

Fry transfers were done and 2.8 M Coho were flown to the lake in a small plane over the course of 2 days. He showed a slide of the logjam and of the float house now on site. The crew very much appreciates the float house. The water line has been upgraded and fused together. It is more dependable. Work has also been done on the suspension system for the emigration pipeline. A question was asked about why it was necessary to hold the emigrated fry in saltwater pens before letting them go. The answer was partly to enumerate them for mortality and also to let them adjust/acclimate.

When Scott had finished the reported Steve made some comments. Steve said Woody Cyr is a great fit for the project. He is a good biologist and thinker with a great work ethic. Where some people don't care for the isolation of the sites he appears to thrive in that environment.

A Board member asked for a retrospective prior to the Program Options discussion on the agenda, on how the NSRAA Chinook Coho and Chums total production levels have gone up and down over the years for the past ten years or so.

Letter to the Board from Mitch Eide

Justin read Mitch's resignation letter to the Board. Mitch placed a lot of value on his Board experience and complimented the Board officers. He referred to the General Manager as the white-maned lion. Mitch was especially appreciative of Steve as an advocate for NSRAA and Mitch pointed out Steve's composure, competency and professionalism. He reminded the Board to recognize and reward the staff, whose workload seems to be ever-increasing. The Board President said he had communicated back to Mitch thanking him for the effort he put into the Board process and for the letter.

NSRAA Financial Position 2016 – Steve Reifenhohl, General Manager

Steve reviewed the page "NSRAA Financials & Investment Allocation as of October 31, 2016 and projected to the end of the fiscal year."

Funds needed for the remainder of the FY17 budget are set aside, as is the \$656,093 loan repayment. There are no funds left in the HF Contingency (HF Assessment Tax) account. The Capital and Operations Reserves remain fully funded at a total of \$7.5M and there is \$1,200,000 from programs that contribute to forward-funding the FY '18 Budget. \$200,000 is in the contingency account. Over and above these amounts NSRAA has \$1.3 M in undesignated reserves. Steve is recommending that a portion of those undesignated reserves be applied to help balance next year's budget. This will be discussed later in more detail.

Steve moved to a different slide that illustrated how NSRAA'S Financials and Portfolio are distributed. The Liquid Short Term money market (59%), the Fixed Income (25%) and Equities (17%) all fall within the ranges designated by the Board Investment Policy. Steve answered questions from the Board clarifying that the undesignated reserves were not under the direction of a Board policy or budget and that the Operating and Capital reserve combined to equal at least one year of NSRAA's budget.

Steve reviewed the loans. Capital loans outstanding are 656K for NSRAA buildings and Medvejie due in 2017. The SE Cove loan is \$1.1 M and due in 2020, the Crawfish Inlet loan is \$1.9M and also due in 2020. An operational loan for Crawfish Inlet FY 2015 and 2016 is \$525,000 and due in 2021. Total loan debt is \$4,406,000. If we don't meet the pay off dates, we will start incurring interest on these loans. They are interest free for six years. Steve suggested the board begin setting aside funds for repayment. A board member asked if the undesignated reserve could go to loan repayment. Steve said yes that was an option.

The Board took a careful look at the projected income figures. \$1.3M in enhancement tax will be received. NSRAA will need to do chum cost recovery at the \$3.3 M level in 2017 to balance the budget. Using the 2016 numbers that are known and the enhancement tax amount NSRAA will still need \$1.656M from unrestricted reserves to pay off the loan and balance the FY18 budget of \$7,671,523. The FY 18 Ops budget is \$6,915,523. Capital is \$100,000 and loan repayment for FY17 of \$656,000 with all programs at status quo. If \$500,000 is cut from the budget by reducing Chinook or Coho programs then the Chum cost recovery drops to \$2,791,708. Steve said there is some potential for a contribution from DIPAC. His advice is to plan the budget without the contribution. Then, when we find out in December we can plug the number in. Board members asked questions to clarify their understanding of the term "We haven't done this in thirty years" referred to NSRAA has always paid loans off before interest is due but the world would not end if we had to pay interest.

The Board looked at the slide detailing different options for cutting programs to decrease the budget. Option #1 is status quo and Option #2 is reduce program expenses for Coho and some Chinook projects. Additional copies of the table were passed out so everyone could see them. Med Chinook would drop from 3M to 1.8M. SMC Coho are status quo. Deer Lake Coho dropped from 2.5M to 1M. At HF Coho smolt would drop from 3.5M to 1M and Chinook would drop from 650,000 to 600,000. The HF move puts Chinook up into the freshwater raceways used for Coho and should increase marine survivals for Chinook.

Deborah summarized the Executive Committee meeting about possible cuts to programs, where Justin, a seiner, had said he is very hesitant to cut any Chum because he thought production needed to stay where it was just to stay even. The Trollers in the room really did not want to cut Chinook salmon because they are so important to the spring fisheries. That left Coho as the only option...but then as they were leaving the room, the trollers were talking about the very large number of small Coho that they were seeing this spring. Kevin said he thought the Trollers were very

gracious in their participation where cuts were toward their programs but that it was a crisis situation and this was not to be a cut forever but the projects should be brought back as soon as possible. With the survival rates where they are it just does not make sense, was his opinion. Jim said, "What we are getting at HF for Chinook is nothing. I see this as an experiment to increase Chinook production and survival at Hidden Falls. Armstrong is increasing Coho production to offset the HF decrease, but I was not on board with the suggested reduction to Deer Lake Coho." A member of the public said he had heard a presentation from Phil Robertson and Ed Jones (ADFG) that something odd happened in the ocean. "We are seeing 2-ocean chinook jacks missing everywhere from the Copper River to the Skeena. This is unprecedented. The five year olds returning next year are missing. It might relate to what is happening at the hatcheries." A Board member took exception to the term "gracious acceptance of cuts." He thought the initial question was whether or not to give a little at HF but the troll group that he met with did not approve of what was now in front of the Board. Steve said these are options for discussion and he is not a proponent of any one. He said that Deer Lake, even though underperforming, is outperforming HF by a large measure. William Bergmann also questioned the Deer Lake program adjustments. The President said he thought the program did not pay for itself. Eric said the trollers took the job of evaluating the program reductions seriously and more importantly that their benefit was to the health of the organization. There seem to be serious environmental ramifications. The prevailing sense was "Let's not panic, but that doesn't mean we don't make adjustments. We need to preserve the king salmon at Hidden Falls. It is less harmful to cut Coho production at HF than King salmon because of the access provided in spring fisheries and the price/value to the fleet." He also was not supporting a change at Deer Lake. "The king salmon at Medvejie has a magnifier effect on the troll fishery. It gives people opportunity to fish in May and June, keeps fish on the market, etc. Every Medvejie Chinook produced has a big multiplier effect throughout the troll fleet." Justin said no one was suggesting, "Let's cut these programs. We are still working together. Maybe less is more in the Coho program. The general thought of the Executive Committee meeting was if we had to cut the budget by \$500,000 how could we get there?" Jim thought one thing to consider is HF is a bit different than lower Chatham. It (poor return) could be a one-year deal. At Armstrong they had a phenomenal return prior to this year and they are ramping up Coho. "We should consider maintaining Deer Lake at current level." President spoke again about his recollection of the Executive Committee meeting whether a specific number (\$500,000) had been mentioned. He told the Board if Deer Lake remained unchanged it represented \$130,000 of the budget. Deborah asked the Board, "What would you do if we had several bad financial years in a row? What are the reserves for? It sounds like the change proposed at HF is not controversial and could be beneficial. But why are we looking at cutting programs. It is always good to look at greater efficiencies, etc. Why are we thinking this way? When do we spend the reserves?" Steve said, "We are not in a crisis. My mission is to get fish into the holds of boats. Our common property contribution dropped this year because there is more of a burden on the fishermen to pay for the budget from cost recovery." Kevin thought the reserves were for an emergency. If we borrow from ourselves we have to pay ourselves back. If the fabled HF failure occurs we will still pay it back. In answer to what happens with several bad years in a row? His thought is the fishermen will get less opportunity to fish so the budget income goal can be made. He did not advocate going to the reserves unless a catastrophe occurs, "But cost recovery generation comes first." Sven said option #2 seemed OK and asked what that would that save? About \$200,000. Zach asked if there were options to get the Med Chinook into fresh water because the saltwater program is not doing so well. Steve said there actually is an option to keep pens in Green Lake through the winter. "There would be additional expense. Occasionally it freezes over. We probably could manage around it." He thought we might try this on an experimental basis.

Board members continued to debate about how the term “less-is-more” is being applied. A Board member asked, “Where does the \$500,000 savings from program reductions go? It takes from the Coho programs and goes into the holds of the net boats who then have less cost recovery limiting their time. Maybe if we take a cut to generate revenue it should go back into the reserves.” “We are putting a Band-Aid on the real problem. We have to get good returns to the programs.”

Steve said, “The Green Lake Chinook program used to be the star of Alaska. It has gone down. That is why we do more at Medvejie raceways and we have begun putting fish out at Bear Cove and Halibut Point Marine. We will soon see the adult returns from that change.” “If we chose the Green Lake experiment now at the current level it would lower the density by putting fish up into the lake. At least we would learn something.” “Moving 20M to Thomas Bay and towing to East Chatham will reduce the Chum densities and return to HF.” Bert said, “We know regionally the SE King Salmon systems are really struggling to meet escapements. We can’t abandon HF, we have too much invested there. But it is obviously the problem.”

Kevin said there are three things being discussed, HF Coho, Med Chinook and Deer Lake Coho. “What do you like?” Bert answered that he liked the 100,000 Coho that the Klawock Lake program produces. “They put Coho into the hold of the boats, what are they doing right?” He said trollers gave up king salmon production to create the Coho programs that are at HF now, and now we are cutting them too. He didn’t like any of the choices but he knows his fiduciary responsibility to NSRAA. He added, “But if you are proposing saving \$200,000 at HF so they can fish an extra two days at Deep Inlet I would say, you know, that is not a very good trade off.” Bert said, “Let’s find alternate Coho release sites. All three gear groups at SSRAA benefit from Coho so they all work together to defend the Coho programs.” A seiner said, “We are all giving up time at Deep Inlet, so we are taking cuts, but at the same time we are supporting the creation of new troll programs at Crawfish... but we all need to take cuts.” Eric said he thought the discussion previously would cut back Coho at HF and move Kings into the raceways. He had not previously heard the idea of keeping SMC Coho production at 1,000,000. “Every King salmon we get back is going to be incredibly valuable. It is critical to make the SMC hatchery work for Cohoes. We are spending a whole lot of money on getting chum fry to 4.0. That is a really good investment and it comes out of the common property fishery too. If we need to take something out of the reserves we should do that, but not indefinitely. We shouldn’t expect Deep Inlet fleets to pay for programs that are not working.” A seiner said, “Chinook and Coho take up a lot of the budget but that’s OK. They are important to the troll fleet. We get that. If we move chum from HF to Thomas Bay and SE Cove and Crawfish Inlet that is an adjustment that should make the broodstock taken there survive better.” A Board member, Jeremy, suggested we keep going status quo and continue to assess the trend. “The DIPAC return was horrendous maybe it improved later. Maybe we should stay the course a little longer.”

Deb said, “We should look at what our future income might be from SE Cove and Crawfish Inlet. Maybe all we need is a three-year plan to supplement our income, until we get the returns from the new programs.” Chip said, “The answer to this is: The fish are already in the water at SE Cove and Crawfish. I just did a quick calculation. We have been increasing the release numbers at SE Cove. 17M chum released last year and this year 43M. At Crawfish the 13M fry release is bumped up to 28M. So the 4 year-olds returning in 2018 will be from 20M more fry and then in 2019 from 60M more fry. Even at 1% marine survival, you are talking about \$2.5M dollars in income above what we are realizing now. At 2% marine survival that is \$5 million dollars more in income.” Deb said, “We need a stop gap plan.” Chip said, “You need a half million dollars this year and next year. To bridge that you could take a loan, etc., but in a couple years there is going to be a lot more revenue, if there is any survival at all.” Deborah said, “I consider the run failure at HF to be a catastrophe and totally

unexpected, like the penstock blowing out. It justifies using the reserves. Maybe we should plan to take a half a million this year, and a half a million next year from the reserves. We have \$7.5 million dollars sitting there doing what? We all worked hard to save the money. We should think about a two or a three year plan to float our boat to supplement the budget, do the changes that seem obvious that people have agreed upon, and that involves the reserves.”

Kevin said, “It is probably time to break for the evening and talk more about this. It doesn’t have to be option 1 or status quo. There could be middle ground. If cutting Deer Lake is upsetting maybe that doesn’t need to be done. I did hear the changes at HF for Chinook and Coho might be OK but I agree with what Bert said, that he wants the program to work and if there were a change we could make to make HF work better, we would all want that option on the table. “Do we still want to put money into programs that are not working?” Kevin thought instead of using all the undesignated reserves this year we might want to use half this year and half next year. “We do have other options for income in a couple years and how do we bridge that in income, but also in changes to programs? So just talk and decide what you want to do. I don’t want to fight you about it.” Will asked to see data on what the next five years production and possible income could look like. Kevin agreed that was a good suggestion. Steve said Chip has some information that he can use.

****Break for the evening****

Roll was called and the meeting resumed November 10th at 9:00 AM

Sitka Sound Science Center – Lisa Busch, Director with SSSC staff Angie Bowers and SSSC Board Members Steve Clayton and Trish White

Lisa greeted the Board and apologized for not making regular presentations over the past few years. She shared a brief history of the intertwined relationship between NSRAA, covering the aquaculture programs of Sheldon Jackson College begun in 1974, and now, the Science Center. In 1977 Dexter Kyle, Eric Jordan and others met in the Sage building (now the home of the SSSC). That was the beginning of NSRAA. Then known as the Chichagof-Baranof Regional Aquaculture Association. Eric J was a student, one of NSRAA’s first employees, and instrumental in promoting the aquaculture tax among fishermen. The Sheldon Jackson College shut down in 2007 and the SSSC was formed to take over management of the hatchery. The Sage building was built in 1929 as a trade school. Trolliers were built there to fish in Sitka Sound. The SSSC has repaired the building and the SSSC mission is scientific education and research. Many employees of NSRAA came from the SJ programs and NSRAA employees now work at the science center. The SSSC now hosts over 14,000 visitors each year and everyone that leaves knows the difference between a hatchery and an aquaculture association. SSSC also conducts scientists-in-the-schools program. They are involved in an online fisheries technology program and they offer hands-on training at the SJ hatchery and internships. They have an aquaculture class for high school students, after school programs and residency programs to learn aquaculture techniques. Students come from Stanford, Duke and other prestigious school and learn about SE aquaculture. They brought a jellyfish expert in, coastal zone management and toxicology experts. In addition to the teaching programs they conduct and host researchers and research projects. As a result, they are doing dive research on kelp and abalone with US Santa Cruz, Ocean Acidification with the Coast Guard, Alaska Longline fishermen sperm whales and commercial fishing interaction, seaweed research, and were the first to alert about sea star wasting disease. After the Sitka landslide the Science Center gathered experts to study and inform the community. SSSC studies the Fairweather fault with Canada and sub lethal doses on

salmon. They are also involved with the hatchery wild interactions study. (A Board member jokingly asked...Is that all?)

Looking towards the future SSSC are conducting a survey of data to identify gaps. They are looking into creating fish food. They have received a Saltonstall-Kennedy grant to begin this work and they are raising black flies to the larval stage. (This was illustrated with a very buggy and sort of gross video clip of the flies).

The SSSC hatchery is permitted at 3M pink, 3M chum, and 250,000 Coho. They are primarily a teaching facility; some fish are caught in the commercial fisheries. In closing, Lisa said they really rely on the partnership with NSRAA. The SSSC does cost recovery that only partially funds their activities. They have individual members and grants to supplement their budget.

Because half the NSRAA budget goes to fish food, Board members were interested in that project. Lisa described a grant they have applied to. The process of applying brought them into contact with many researchers and SSSC uses these contacts to educate professionals about the high standards of the fisheries and programs. Deborah said she had she attended the Whale Festival Symposium attended by a huge cross section of researchers from all over the world. "NSRAA and our programs were presented in a very positive light. The scientists had a final panel discussion examining future problems and past successes. John Straley spoke up and said "One of the successes is the Aquaculture program run by commercial fishermen who hired professional scientists to inform their work." This was said by the poet laureate of the State of Alaska and was excellent representation to a wide range of people. Dave Moore an NSRAA Board member was chairman of the Whale Festival Board of Directors. Eric described the interns that he has taken out trolling on his boat and said they begun lifelong ambassadors for the commercial fisheries. The Board applauded the presentation.

Overview of Chinook and Coho production and future chum returns and revenues – Chip Blair

Chip had prepared some information requested by Board members during yesterday's discussion. An overview of the Chinook and Coho salmon production programs that NSRAA has conducted and a look at the next five years chum returns and value.

First the releases: Chip showed a bar chart from 1978 to 2016 of Chum releases. He said NSRAA had consistently achieved 150M in Chum releases for about 10 years prior to SE Cove and Crawfish Inlet coming into production. For Chinook, NSRAA is hovering around a 3M smolt release, and for Coho we are close to 7M smolts per year now.

What's to come in the next 5 years for Chum? Chip provided information was presented in Petersburg several years ago when we were talking evaluating the SE Cove and Crawfish pro forma. The SE Cove and Crawfish operating budgets were estimated at \$1.8M and the capital needed for net pens was estimated. The barges and net pens were purchased, and some of that expense was covered by loans and is to be spread out over time. The expected value of the returning chums for the two new programs approached 13 to 14 million dollars over a few years. This has inflation and cost of living added in. Board members tried to understand the chart presented. Projections were based on 2.5% marine survival and cost estimate of 60 cents per pound. The 2012 release of BY11 chum was 150 M fry, most have come back. For 2013 we have only seen the three year olds. Green bars represent the fish at sea; blue bars are the projected releases over the next four years. So going from 2012 to what we will be seeing is a 90 million fry increase (240 total chum fry release). Chip did a few projections on numbers of adults coming back. The 2016 actual return total of 2 M fish coming back. Catch was 1.2 to 1.3 M. If MS is 2% that makes about 4.8 M adults coming back from the new total release number. So assuming 7 lbs. average size and 50 cents per pound. The CR dollar requirement fluctuates each year depending on

the amount of the DIPAC and enhancement tax contributions. Chip estimated 4 to 4.5 M there and then subtracted needed brood stock. He pointed to what could be caught in the commercial fisheries. He held the HF projection low and had average return to DI. "What we were starting to talk about was whether to cut \$500-600K from the budget. If you hold the line at current levels, in a couple years a lot more adults will be coming back and a lot more value. Our budget is currently about \$7M and could go to 8." "The President says, "This doesn't paint the picture that I would like to see. We need to discount HF completely. The DI number is realistic and the SE Cove and Crawfish programs might give a bump up. This doesn't show how we have ramped up the release at SE Cove. We won't get all the fish till 2019." (Because of contract with State of AK and Trident) "At Crawfish our initial permit is for 30M we might be able to increase that to 50-60M when we answer questions about straying. At this point we need to think Crawfish will go to CR. Instead of two sites for cost recovery we will have four." (Crawfish, Medvejie, SE Cove and Thomas Bay) William asked for HF info to be put back up. Chip said he had set HF to zero, just enough for brood stock. He showed the projections. So that will generate this much cost recovery and commercial value from \$2.8M next year to \$8.8M in 2021. Chip made a rough estimate of what might be needed for CR by estimating enhancement tax, DIPAC, and other revenue. These all could be lower and higher depending on circumstance. The President said he was not concerned with commercial value but NSRAA needs to cover costs. The loan payments are also not in the picture. Steve said they are about \$700,000 per year and he will build that into next year's budget. A Board member asked to look at graph of all chum releases again. He said, "What I'm seeing and we are in a period of expansion with this new production we haven't yet seen the full benefit. The fish are in the pipeline. This additional production is directed as opportunity for troll fishery, which I appreciate. We are in the business of producing fish and a door was blown open and we will see the benefits soon." The President spoke again, "Seeing we wouldn't have the issue if it wasn't for the HF run failure which had put a lot of pressure on Deep Inlet." William asked Steve, "It looks like we would be out of the woods by 2019?" Steve said, "Yes, and two years of information there indicates that program is working. So do we want to cut the budget now, or wait another year?" The President said, "We have already taken a gamble. If we don't reduce the budget, the scenario in option one is not complete. Taking \$1M out of undesignated reserves I'd rather take half of that per year to bridge the gap. Our need for cost recovery will be a million greater when you add in the loan payment." A board member asked if a motion was in order. President asked him to wait and wanted to focus on the unrestricted reserves question. Another member suggested a motion would help focus the discussion and asked the other Board member to describe what he is thinking. The Board member said HF chums is not working but we need the brood stock for SE Cove and we need the revenue to save us. The Chinook and Coho programs make up 48% of the budget. If Trollers were willing to give up fish, what would they want to see? He thought the change to put Chinook in the raceways and deduct some Cohoes made sense. He would like to see the Chinook programs work. Maybe they all should be out of saltwater and into the raceways. Because Chinook and Coho are half the budget they should be looked at now they can be ramped back up later. What are the trollers willing to do?" Zach, a Troller, said he agreed with the chum aspect of the comment and also on the Coho but not on the Chinook. He did agree the Chinook should be up into the freshwater for the rearing. The Chinook program does benefit the Seine fleet as well as the trollers. They do add dollar value to their fleet. He agreed that the HF programs need to get better, too. Maybe the Chinook could be remotely released on the other side of Chatham, too? We are willing to come to the table especially on the Coho portion." Another troller said, "If we are going to give up fish I'd rather give up the ones that don't come back, the Coho. We are under so much pressure in the troll fishery. We may decide to increase the infrastructure at HF some day to rear more Chinook. Anything that reduces Chinook

production in Sitka Sound I can't accept and I do not support a reduction to the Deer Lake program." A Board member asked if some of the Troll leaders in the audience could speak. Representatives of the SPC Board, the Advisory Committee chair, and the Chum Trollers Association were present. The advisory committee chair said, "If it was proposed to cut the chum salmon programs, the seiners would be going nuts." The President said the HF Coho are now on the table because they are not returning. The Chums aren't performing there either, but we are going to try moving them and we need the Chum broodstock at Hidden Falls. He said he had spoken to Bert, who had brought up a similar point yesterday that if there were a way to remote release the HF Coho at a different location that they would, but it is not an option with ADFG policies. A seiner said the chum programs pay for every thing and need to be supported. He heard a comment about losing two days of fishing time. Last year the two days was 10% of his season. The advisory committee chair said, "If you were going to cut 65% of the Chinook and Coho production (total of all options presented) then something should have been suggested for Chum. Coho in Chatham are supplying \$1 M in cost recovery and up until last year, the Coho provided a good amount to the troll fishery." Deb said she thought there is a valid perception issue here. At the legislature, for example, they leverage a 10% reduction on every program across the board. She asked, "Do we have to do the cuts that people aren't supporting? The Hidden Falls Coho/Chinook swap seems to be acceptable. Does Deer Lake need to be reduced by half... or at all? We now have the anecdotal reports about the abundance of young Coho and Leon Shaul's (ADFG) work that Coho abundance tracks with squid abundance and there were squid in the belly of every king salmon earlier this year. So maybe we should hang tough and see what happens with the Coho return?" Deborah asked, "Don't Coho vary in the way they return? They aren't always consistent in their returns." Steve said, "There is a lot of up and down. The presentation that will be given to the Board later compares lake Coho, wild Coho and enhanced Coho there are some decadal trends." Deb asked, "Well why aren't we looking at some of that before we decided to cut programs?" Steve asked, "Are you saying table the discussion and have another presentation?" President said, "No."

A seiner asked again to the trollers, "What do you guys want?" Zach said, "No change on Med Chinook and that he would defer Deep Inlet to Eric and James for their opinions. The HF change could be acceptable." The President said, "What I am getting is, "Don't change anything except HF Coho. We are beating this to death." Eric asked for a break to meet in Steve's office and said the Trollers will come back with a recommendation. Another Board member observed, "We are assuming nothing will come back to HF and no contribution will come from DIPAC. Things can change. We can wait a bit and see if things pick up. A little more cost recovery and a little more from the reserves. A little here and there could work out." Bert said, "If we cut HF Coho it is only 3% of the budget. A couple hundred thousand does not solve the problem. "What disturbs me is the thought that there is a budget problem and the first thing to come after is the Troll programs. The money saved doesn't go into the retained earnings; it gives the nets more fishing time. That is where I am at." "If we get into a gear war, the nets have more votes than the trollers, but what do some of the other Board members think?" Matt Donahue spoke again about missing two year-old jacks and 5 years olds could also track with what is going on with chums. A gillnetter from Sitka said doing cost recovery all summer made a big impact on local gillnetters. There are now almost 40. The Troll is looked at because they are the more expensive fish to produce. We could lose a whole year of fishing." Sven said, "The seiners have no opportunity now at HF so brood stock and cost recovery could be done. They lost days here with DI closed to fishing for cost recovery. They are taking a hit but don't take this as, "we are looking at you guys to bleed for us." These are just suggestions. Just so you know we are all "taking a hit." The President said, "Other programs have been cut because they didn't make sense financially." He recalled the Haines chum salmon programs that have been

eliminated because there was no good return. "This isn't a gear war." Lars said, "Put this where it falls. Net grounds are shut down in Deep Inlet and the Trollers still had Eastern Channel seven days a week. Just remember that."

****The Board took a break****

NSRAA Program Options (continued)

After the break the President gave the floor to Eric Jordan

M/S 11/9/16(g) Eric Jordan/ Zack Olson

Allow NSRAA to displace 600,000 Hidden Falls Coho from the freshwater raceways and to replace them with 600,000 Chinook moved from saltwater into freshwater production. It is estimated to save \$100,000 on Coho feed. The Hidden Falls Coho release goal will decrease from 3.5M to 2.9 M Coho smolts.

Eric spoke to the motion. It will decrease the budget and hopefully increase the marine survival of the Chinook. Steve clarified that the Chinook will be raised to 25 grams in fresh water instead of 50-60 grams in saltwater so there is a savings in fish food there as well. **The motion carried on a roll call vote with 20 in favor and 2 against.**

The President asked the Board if they wanted to clarify two more elements of the budget discussion. What to do about loan repayment, and how much of the unrestricted reserves should be used. The Secretary/Treasurer spoke in support of the half and half idea, Use half of the undesignated reserves this year \$600,000 and save the rest to be applied next year. A Board member asked about the earnings of the reserves. Most of it earns only 1 to 1.5 %. The loan interest is 5% due 2020. Other Board members spoke in favor of half and half. The president clarified that this funding is coming from the undesignated reserves and designated reserves of \$7.5 M and a \$200,000 contingency fund remain untouched. There was no objection from the Board to using half of the undesignated reserves.

The Board had a discussion about the loans. NSRAA will pay off loan number 1 now with the money that is already in the bank. Steve will bring a spreadsheet to show how the loan due in 2020 would have to be paid off in three years instead of four if we defer that loan payment from this year. If the \$600,000 goes into the budget and reduce the budget by \$100,000 if we keep the additional loan payment of \$750,000 that will put the cost recovery at deep inlet and \$4.15M The President said if we get any extra money anywhere we should apply it to the loan. So not paying it now lowers CR to \$3.8M, which is more in line with what folks seem to be able to bear. A question was asked if unrestricted reserves are generated where do they go? The Board policy says unanticipated revenue goes half to reduce the budget and half to reduce Cost Recovery. Steve said CR would go to \$3.3 by adding the \$600,000.

Deborah described the development of how NSRAA sets cost recovery goals. NSRAA sets cost recovery specifically to balance the budget, not just to generate "extra" money. There was a lot of sensitivity about this in the fleet, and there still is. Where NSRAA leapt ahead in being able to match income to expenses was when we moved to forward-funding part of the budget, and that really helped us develop a very accurate estimate of how much cost recovery is needed to balance the budget. Steve added the important point that most associations go to bid on an estimate of pounds of fish needed based on an estimated price. NSRAA used to use that method and one year the price per pound was higher than expected, and an extra load was delivered. The result was we ended up with hundreds of thousands of dollars more than what was needed to balance the budget. To correct this, Steve now goes out to bid based on the actual dollar value that the Association needs. We have come a long way building certainty into the budget process.

RPT Report/Allocation MOU - Kevin McDougall

The President talked about the history of the allocation criteria discussion at the Regional Plan Team meetings and that a memorandum of understanding is being circulated among gear groups and processors. A draft version of the MOU was passed out to the Board members.

Gunnuk Creek Hatchery Update - Steve

Steve said State of Alaska Division of Commerce has “extended the window and something is coming.” The main message is, “Whether NSRAA will be able to acquire Gunnuk Creek hatchery and operate it for the benefit of the common property users, is still in play.” Commerce and the community of Kake wants to have a hydro plant on the land that the State wants to sell NSRAA and would put the power house in the old Coho building. Steve said, “We think we can work with that. Work has been done with SEALTRUST to change the easement language to allow this. Commerce wants the Inside Passage Electric Cooperative (IPEC) project to get the green light.” The division within Commerce has a committee of loan officers and they have been not easy to work with. Committee members want \$3.5 M dollars, like SSRAA paid for Klawok hatchery that, at the time of sale, was a working facility. The Gunnuk physical plant is a mess and there is no comparison. There is a disconnect between the Commissioner and the Division. Steve does not think the higher price should be paid. The clock is running out but the Division has no skin in the game and they personally lose nothing by delaying. The State went through a bid process and NSRAA was the only bidder, but they still hold on to an unreasonable expectation of value for the facility. Support in Kake has been great for the project. Particularly the group Heinrich represents, Kake Tribal. The City of Kake and Organized Village of Kake are in strong support. Heinrich Kadake said, “We are 100% behind NSRAA getting the hatchery there, and we still can’t figure out why the State won’t sell the hatchery to NSRAA. NSRAA could help our village move forward. The hatchery is deteriorating. Every year the value is going down. The best thing for the community and the fishermen around is for NSRAA to run that hatchery. Our cold storage has not operated for three years and the hydro can help operate the cold storage with cheaper power. It will add to everything that happens in my little village. Thank you to the Board for still trying to buy the hatchery.” Steve last remarked that last year was a pretty exciting year when people began to see the numbers of fish that were coming back. Board discussion recapped that Steve has been authorized to offer \$500,000. A Board member said, “In the light of the past discussion we certainly can’t afford \$3.5 M.” Steve recapped that NSRAA bid fair market value for equipment on site. Heinrich said the Deputy Commissioner was in Kake and they met with him. The NSRAA bid is still being considered. Board members volunteered to meet with Steve and the Lt. Governor. The President said he thought the amount we are offering is a fair price especially when you weigh the offer next to what is needed to be invested to make the program operational. NSRAA has the permits in hand already. A board member asked about the concept of the egg take barge. “If you had one there you could get the broodstock, is the value then as an incubation facility? Our original estimate is without a hydro operating would that lower our costs?” Steve said it is not a huge consideration NSRAA has 5cfs water rights for our own hydro. A Board member mentioned it is short step from egg take barges to floating hatcheries. Some of the ideas that came up 40 years ago now, seemed off the wall then. Deborah thanked the President for his personal investment in helping move the Gunnuk Creek program along. He has worked hand in hand with Steve. Board applause in appreciation of Kevin’s effort.

Approve the November 2016 slate of NSRAA Board Candidates

M/S 11/9/16(h) M/S Dave Moore/Sven To approve the slate of candidates. MCWOO

At Large Gillnet: Dan Pardee, and Lars Strangeland

At Large Seine: Justin Peeler, and Tom Meiners

At Large Power Troll: Zachary Olson

General Manager Evaluation Process Explanation

The annual evaluation process was explained and the form passed out. Kevin relays concerns to Steve and Steve responds. This keeps a clear channel of Communication. Issues also can be addressed in Executive Session to discuss the evaluation.

Audit Committee Report - Deborah Lyons, Secretary/Treasurer

The committee met in Steve’s office at 8 AM yesterday with Steve, Kevin, Deborah and Justin. George was absent and Karen Tarver of Elgee Rehfeld Mertz on teleconference. Karen’s comment was: “Steve and his staff are doing a wonderful job.” The Committee went over the Audit report and

Letter in detail. There were no material weaknesses because of the work Steve has done over the years. Advice from the Auditor is to keep the outside accounting assistance for the year-end preparation of the books. NSRAA financial position has changed because we have taken on debt. How does NSRAA compare with other organizations in terms of employee compensation and retirement? Karen said we are in the medium high range comparatively. The auditor's job is to maintain independence and communicate to the Board through the letter to the Board. No internal controls issues are identified. The staff should be complimented. Steve said it is not an easy thing to do. This is the sixth year in a row for a clean audit. Chip has put together an impressive system to track inventory. Steve said the audit is intense and he is always happy to get to day three when he gets feedback on how the audit is going. Kevin asked what is the worst-case scenario, what do we avoid by going through the audit process? Among other things, the audit process sets standards for the future. Some other organizations had been badly managed. Sheldon Jackson College collapse, and a regional Board that did not understand the balance sheet were cited as examples of poor financial management. It is worth it to have a good General Manager, strong Board involvement and an experienced auditor. Steve discussed how the internal controls procedures keep multiple sets of eyes and hands on the transactions. Because NSRAA has State grants there is a higher level of scrutiny. The Board had a discussion about changing the auditor and whether it was time to do that. NSRAA has been with ERM for ten years. They are very good and we have changed the principle auditor to keep a fresh set of eyes on the books. An SPC Board member said we might consider changing companies... "Ten years seems like a long time." Kevin explained it has been discussed and Brian the Board member has been consistent about suggesting changing. Steve said the initial difference of changing to ERM was profound. The previous audits were poor. NSRAA credits ERM with raising our standards and helping the organization achieve the degree of accountability we now enjoy. ERM asked to be copied in the monthly update that Steve sends out to the Board. They are very engaged. When we switched from Max to Karen as the principle auditor she had to learn about forward funding, cost recovery and the Hidden Falls tax assessment account. These are all things NSRAA does that are somewhat unique. More Board history with ERM was discussed. The President said, "If using the same firm and a different Principle satisfies the best practice of the new set of eyes, OK. But I don't want to go backward either and change to a new firm just for the sake of doing so that is not giving us as good service." Brian said five to seven years is standard to change and the data the auditor would look at is the same in any event.

****Break for Lunch****

Program Options Discussion (continued)

Thomas Bay discussion: The Board intent is to put fish there this spring. The Thomas Bay Baseline Investigation report by ADFG Patrick Fowler and Troy Thynes has just been completed today. Justin Peeler, NSRAA Board member and VP had made test sets sampling for fish in the area. The report stated that "although few Chinook were encountered interception rates might be higher in a intense seine fishery for chums returning." The report answered questions raised in the RPT. The decision whether to permit placing the fish there will be made following the next RPT meeting and ADFG Commissioner decision.

Steve said, "We might not be able to fix Hidden Falls. We've been releasing 80M at HF and barely making broodstock. Status quo is not the way to go here." Steve recommends moving 20M fry to remote release at Thomas Bay. He thought if NSRAA moved 40M there to start it might be too many and we might not get enough broodstock returning back to HF in these poor survival years. He thought we could talk about 25M at TB to start, if that is the way the Board wants to go. Ten net pens have been ordered and are coming to Petersburg. The fish culture method will be half of the fish on site raised to 4.0 grams at release. The permit, once attained, would be in perpetuity. Fish returning to Thomas Bay would be picked up in the District 8 Gillnet fishery for Stikine sockeye. It has the same run timing. The RPT meets the 30th November in Juneau. For the trollers Eric J. is planning to attend RPT. Bert and Zach both said they would go if they need to.

Board of Fish proposals - Steve Reifenstuhl

M/S 11/9/16(i) M/S Deb/Dan Pardee. To approve submitting the Board of Fisheries proposals on behalf of NSRAA as developed by the General Manager. MCWOO

- SE Cove THA – add gillnet as legal gear type
- Crawfish Inlet-Establish Terminal Harvest Area, gillnet and seine gear area & Troll gear
- Halibut Point Marine Special Harvest Area 1,650' by 2,000 by 1,650. A king salmon experimental harvest area.
- Deep Inlet & Bear Cove SHA/THA. Housekeeping measure to align September closure of areas.

Troll discussion - What's working, what's not... Is there something we can do?

Chip submits marine survival estimates to Leon Shaul annually at ADF&G and Leon compiles survivals for wild and hatchery fish.

Coho enhancement project categories are:

- Hatchery rearing and release
- Lake Rearing-stocked into lake
- Remote release – Coho reared at hatchery and released elsewhere, like Deep Inlet.

Coho marine survivals have been tracked for 35 years for wild and enhanced fish. By comparing survival rates for enhanced Coho strategies against the wild Coho survival we may gain insight into the performance of our programs. We can explore:

How well hatchery strategies stack up against wild systems

Long term trends in survival rates

Correlation between wild and hatchery survival. Chip presented the data and said first we will look at WILD vs. SE hatcheries combined, and then break out wild compared to NSRAA programs only.

Marine survival rates will be compared by sites and by year. The colored formatting shows the years of higher survival rates. In certain periods survivals tracked **high** across a large number of sites. Those years were 1990 to 1994 and 2001 to 2003, to a lesser degree.

From 1980 through 2014 WILD Coho Marine survival averaged 13.1%. For the same period all SEAK hatchery Coho averaged 8.6%, 4.6% below wild. When the graph showing both WILD and hatchery survivals by year was overlaid there seemed to be a very clear correlation that as the wild stock marine survival rose and fell, so did the hatchery survivals, only lower. The SEAK Lake rearing Coho marine survival averaged 10.3% or 2.9% below WILD. When WILD and Lake rearing were overlaid there was a general similar trend but a few more departures in variation. The SEAK remote release Coho average 7.7 marine survivals, 5.4 % below WILD. The hatchery remote releases did not bounce up and down as much as the wilds. The NSRAA Coho marine survival averaged 10% only 2.5% below WILD. Comparing hatchery to wild there was a pretty strong correlation to wild survivals. For Hidden Falls alone 2012 MS was 1%, 2013 MS was 5% and 2014 MS was 3%. In the same years the wilds did much, much better at 9%, 14% and 14% respectively. The NSRAA Lake rearing Coho were the all-stars averaging 11.9% marine survival only 1.2% below the wild survival rate. NSRAA lake reared Coho actually exceeded wild marine survival by quite significant amounts 2002 and 2004 and for the years 2012, 2013 and 2014 hit 7%, 12% and 10% MS compared to 9%, 14%, 14% of the wilds. The remote release Coho did not do real well and averaged 6% MS, 7.7 % below the wilds. Comparing the remote release Coho with the wilds showed dismal returns all through 1997 to 2012 with one exception. In 2013 and 2014 survival rates picked back up to 11% and 8%.

Chip showed some data comparing Chinook enhanced and wild survivals. For the years 1992 through 2009 the wild Marine Survival rate was 2.5% and the combined NSRAA, SSRAA and DIPAC survival rate was 1.8%. Since 2003 the NSRAA Medvejie Chinook seemed to track the opposite of the wild stocks with better survivals in years when wild survivals were down and poorer survivals in years that the wild survivals were up.

Scott Wagner had run a new software program that produced area maps across regions of SE showing where NSRAA production was being harvested and there was a pretty amazing distribution of harvest of NSRAA Chinook and Coho in the Troll fishery. This was the first time the Board had seen the data and they were interested to see more in the future.

This January NSRAA is hosting the Alaska Fish Culture conference. Because there was no recording of this portion of the meeting this information was taken from the Secretary's notes and slides of the presentation.

Discussion of Chinook marking

Right now NSRAA marks 9% of the Chinook for the coded wire tag program. At the US Canada Salmon Treaty talks the ADF&G is exploring mass marking of Chinook in order to allow for more hatchery fish to be harvested. Whether they would count against the quota or not has not been decided. If mass marking were adopted 100% of the Chinook would have adipose fins clipped. Mass marking could be done with a van and tag machines and it is automated. The van costs about \$1.5 to \$1.6M and Steve thought it would take 55 workdays to mark all the fish. He thought it could be done but there are questions around the logistics, expense and staff availability. The tag budget is currently 90K and most of that is personnel time. Even if the Feds pay for the vans the work may require 75 workdays and an additional \$73,000 annually. Steve has given Mitch a budget estimate to take back to the Treaty team.

Hidden Fall Tax Assessment

Steve said, "The Board needs to answer the question whether NSRAA will do Cost Recovery at Hidden Falls this year or do the tax assessment on the seine fleet." Justin said, "For this year at Hidden Falls let's just do cost recovery. We can't anticipate a return big enough to fish on, on top of broodstock needs." Steve will inform the State of Alaska Department of Revenue that there will be no tax assessment this year.

Into Executive Session

Motion 11/9/16(j) M/S To go into Executive Session to discuss General Manager Evaluation and staff Bonus. Will/Brian MCWOO

Out of Executive Session

Motion 11/9/17(k) M/S Dan/William To come out of executive session Dan MCWOO

Employee Bonus

M/S 11/9/16(l) M/S Deborah/Bert To approve the employee bonus at the same level as last year. The motion carried on a roll call vote with one opposed.

Pacific Salmon Treaty Coalition – Deborah Lyons

Deborah thanked the NSRAA Board for their donation, the other Aquaculture Associations, DIPAC and SSRAA have also chipped in. The gear groups and processors are coming on board with donations. The ADFG Commissioner really appreciates the work the Coalition is doing and the support for the entire negotiating team.

Wild/Enhanced Salmon Interaction Study – Steve Reifentuhl

Steve gave a summary of the wild/hatchery interaction study. He also discussed it in the Board letter. Work is on going through 2022. There is a strong commitment from the other aquaculture boards to support the work. Most of the first phase of the work is being done in Prince William Sound and encompasses two life cycles of the pink salmon, or six years, and two Chum salmon life cycles, or eleven years. That work is being done in SE. There was paper from ADFG about the study and a critique of the ADFG paper was written by Dr. David Bernard.

United Fishermen of Alaska – Steve Reifentuhl

This topic was also covered in the letter to the Board. UFA is still struggling financially and a consulting group is helping with a strategic plan. They are an important group and are the voice and face of the commercial fishing industry to the Alaska State Legislature.

Board Procedures – Endorse Appointments to Elected Seats

Steve had developed some draft language to add to the bylaws. It would clarify the idea that the President can appoint a replacement for an elected Board seat that becomes vacant. At the next

election following the appointment the appointees name will be listed on the ballot so the gear group voters have an opportunity to learn who was appointed and an opportunity to vote for them. The proposed Bylaw change will be on the Spring Board meeting agenda.

SEAK Allocation Preliminary 2016 Update – Chip Blair

Chip explained the data for the update came from three sources: ADF&G 1994-2014 Final numbers, ADF&G preliminary numbers and the 2016 very preliminary operators estimates. The Alaska Board of Fisheries, requested that the fishing industry, develop allocation guidelines for the harvest of enhanced salmon. An historical retrospective of catch value was analyzed and ranges for the three gear groups Troll, Seine and Gillnet were developed. The general idea is that, to the extent possible, the value of enhancement production should be shared proportionally among the gear groups, in keeping with their historic percentage. This report is posted online. Chip said this year’s value is approximately \$35M. Close in value to last year. The data point is a five-year rolling average and changes slowly. A Board member asked how NSRAA is doing in comparison to the rest of Southeast? Chip said you need to keep in mind the allocation criteria is region wide. Steve said NSRAA and SSRAA did more for the net groups this last year but we are not there yet for the Troll. The President said please enlarge the size of the font on the charts. Steve said he would look into ways to better present the data. The Boardbook is online but the presentations are checked the day before the Board meeting and it is hard to bring everything together, fact-check it and get it online.

	TROLL	SEINE	GILLNET	TOTAL
1994-16 Total	\$117,118,169	\$293,590,217	\$234,926,881	\$645,635,266
1994-16 Avg.	\$5,092,094	\$12,764,792	\$10,214,212	\$28,071,099
1994-16 Percent	18%	45%	36%	100%
2016 Percent	14%	42%	44%	100%
TARGET	27-32%	44-49%	24-29%	

The President allowed Eric Jordan to make a statement. Eric’s opinion was that it was an exceptional meeting because the Board members were cordial and worked well together. The discussions were productive the meeting well-run and the staff preparation was excellent. Steve thanked the Board for the bonus on behalf of the staff and thanked the Board for the opportunity to work with them.

DATE OF THE SPRING BOARD MEETING

March 8th and 9th, 2017

Meeting adjourned.

Minutes submitted by:

Deborah A. Lyons

NSRAA Secretary Treasurer

NSRAA Board of Director's Meeting Minutes ~ FALL 2016
November 9-10 2016 1308 SMC Rd., Sitka, Alaska

SUMMARY OF ACTIONS

Approve Agenda

Motion 11/9/16(a) M/S Eric/Brian To approve the agenda with the suggested amendments.

MCWOO. Change Agenda item Chinook Futures Coalition update to Pacific Salmon Treaty Coalition report, add Chinook marking proposal, and add allocation percentage update.

Appointed Seats

Action 11/9/16(b) The Board cast ballots and endorsed the appointments of John Blankenship to the Subsistence seat for another two-year term, Dave Moore to the Interested Person for another term, and Henrich Kadake to the Native Organization seat.

Action 11/9/16(c) The President thought it was appropriate to appoint Jeremy to fill the Seine seat and there was no opposition to his appointment.

Elect new Vice President

Motion 11/9/16 (d) M/S William Bergmann/Eric Jordan. To elect Justin Peeler – Seine, to the seat of Vice President. M/S Wolfe/Jordan - To close nominations. The motion to elect Justin Peeler to replace John Barry carried without objection.

Approve Minutes

11/9/16(e) M/S Jordan/Moore To Approve the minutes of March 2 and 3rd, 2016 meeting.

MCWOO

Budget Committee Appointment

Action 11/9/16(f) Justin Peeler was appointed without objection as Seine representative.

Change Hidden Falls Coho and Chinook Production

M/S 11/9/16(g) Eric Jordan/ Zack Olson

Allow NSRAA to displace 600,000 Hidden Falls Coho from the freshwater raceways and to replace them with 600,000 Chinook moved from saltwater into freshwater production.

The motion carried on a roll call vote with 20 in favor and 2 against.

Approve the November 2016 slate of NSRAA Board Candidates

M/S 11/9/16(h) M/S Dave Moore/Sven To approve the slate of candidates. MCWOO

Board of Fisheries

M/S 11/9/16(i) M/S Deb/Dan Pardee. To approve submitting the Board of Fisheries proposals on behalf of NSRAA as developed by the General Manager. MCWOO

Into Executive Session

Motion 11/9/16(j) M/S Will/Brian To go into Executive Session to discuss General Manager Evaluation and staff Bonus. MCWOO

Out of Executive Session

Motion 11/9/17(k) M/S Dan/William To come out of executive session Dan MCWOO

Employee Bonus

M/S 11/9/16(l) M/S Deborah/Bert To approve the employee bonus at the same level as last year. The motion carried on a roll call vote with one opposed.