

**Western Alaska Salmon Stock Identification Project
Joint Meeting of Advisory Panel and Technical Committee
15-16 March, 2012
Hilton Hotel
Anchorage, Alaska**

MINUTES

(Meeting will commence at 8:30 AM)

Chair: Eric Volk, Alaska Department of Fish and Game (ADFG)

Call to Order: 8:40 AM Thursday March 15th

Attending: (Name and affiliation)

Aaron Poetter, ADFG

Eric Volk, ADFG

Tim Baker, ADFG

Doug Eggers, ADFG

Chris Habicht, ADFG

Lisa Fox, ADFG

Art Nelson, Bering Sea Fishermen's Association (BSFA)

Andrew Munro, ADFG

Denby Lloyd, Aleutians East Borough (AEB)

Bill Templin, ADFG

Pat Martin, Concerned Area M Fishermen (CAMF)

Matt Nemeth, ADFG

Tyler Dann, ADFG

Alisa Frothingham, Tanana Chiefs Conference (TCC)

Bruce Barrett, Chignik Regional Aquaculture Association

Katie Howard, ADFG

Casie Stockdale, Association of Village Council Presidents (AVCP)

Birch Foster, ADFG

Todd Anderson, ADFG

Steve Brown, CAMF

Jill Klein, Yukon River Drainage Fisheries Association (YEDFA)

Michael Link, Bristol Bay Native Association (BBNA/BBSRI/LGL)

Chuck McCallum, Lake and Penn Borough

Brad Barr, CAMF

Tom Wooding, CAMF

Missing:

Robin Waples, NOAA Fisheries, (Technical Committee; TC)
Bruce Weir, University of Washington, TC
Tom Quinn, University of Washington, TC
Milo Adkison, University of Alaska Fairbanks, TC
Lisa Kangas, TCC
Karen Gillis, BSFA
Loretta Bullard, Kawerak, Inc.
Dick Jacobsen, Aleut Corporation
Ernie Weiss, AEB
Rose Fosdick, Kawerak, Inc.
Charlie Lean, Norton Sound Economic Development Corporation

Agenda:

1. Welcome and introductions
2. Review and approval of agenda
3. Project updates and timeline
4. Public Comments (there will be at least one opportunity each day)
5. Estimation of reporting group escapements for sockeye (TD 18)
6. Estimation of reporting group escapements for chum and discussion of issues
7. Further discussion on estimation of harvests and harvest rates
8. Sockeye baseline (draft report) and chum baseline (TD)
9. Structure of report tables
10. WASSIP outreach in advance of results publication
11. WASSIP results roll-out (Chuck and Pat)
12. Board of Fish meetings; update and input
13. Scheduling of next meeting

Notes:

1. Welcome and introductions

Eric Volk (EV) – Opened the meeting and thanked all for attending. Noted that there are a lot of topics to cover and also noted that the minutes from last meeting were not posted yet.

2. Review and approval of agenda

EV - Overview of agenda:

- Timeline update, end date not flexible, document reviews need to be done soon.
- Technical Document 18 (Estimation of reporting group escapements for sockeye) – like to go through comments together, find solutions to concerns.
- Rough draft of chum version still has a lot of holes, but concerns will be similar to sockeye technical document. Estimates of escapement for chum need to be addressed today.
- Harvest rates, Doug’s simulations of harvest rates, what’s the quality of those

data, and what's the utility. Need to address the differences of opinions of the stakeholders, the possible separation of timelines by species.

- Sockeye baseline and chum baseline updates, won't take long.
- Structure of report tables, need a common understanding of how these data will be presented.
- WASSIP outreach, waiting for input from AP members to be proactive to this, Michael Link might have insight.
- BOF will be moved up in agenda to go before the WASSIP results roll-out, need to interact with the BOF sooner than later to make sure they are getting results presented right.
- Chuck and Pat have a little on WASSIP roll-out.
- Scheduling next meeting, need to find a spot in May.
- Agenda addition, update on another chum and sockeye genetics project, involves a subset of the AP involved in WASSIP.

3. Project updates and timeline

Bill Templin (BT) provided the timeline update.

- It was pointed out that some of the technical document timelines are not really accurate. An updated timeline would be available at the end of this meeting.
- There was discussion on how to best get information out:
 - FTP site will be set up for documents
 - Password protected
 - It would not be a public website
 - Emails will continue for general communications.

4. Public comments (there will be at least one opportunity each day)

No public comments.

5. Estimation of reporting group escapements for sockeye (TD 18)

Andrew Munro (AM) provided the reporting groups for sockeye presentation:

Weir CV discussion:

- There were concerns that applying the same CV to all weired locations was not appropriate:
 - Bruce Barrett (BB) – Chignik weir has video counts which make it a bit different than other large rivers, but for a river that is deep with high velocity, you're going to underestimate the counts. When testing the video camera, we found that there's an underestimate of sockeye counts. It's not a problem any more in Chignik, but in other big river systems there might be a similar issue.
 - Second issue, is Chignik is a specific case that is more like a tower that has ten minute counts and expansions. So why are we using a weir CV?
 - Denby Lloyd (DL) – Back to the Chignik weir, ten minute sampling issue on towers and weir count issues?

- Tim Baker (TB) – The counts for Chignik would be more accurate
 - Todd Anderson (TA) – The fish coming through are consistent, have to assume that the observer bias has to be lower than tower counts.
 - BB – Agree with Todd and Tim, if you have questions then you stop the video and rewind it.
 - DL – Can we have some language describing this difference?
 - EV – Yes.
- There was a general feeling that the CVs were too low:
 - Pat Martin (PM) – can you report on the expert opinion poll?
 - DL – Do we really believe 0.02 when we don't really have anything to base that on? The TC thinks it's too small and the expert opinion blind poll suggests that 0.02 is too small too.
 - EV – the numbers generally ranged from 0.05 – 0.07. The place where we still have a CV of 0.02 is Chignik. This is the CV when the weir is operating properly.
 - Todd Anderson (TA) – For the early run the 0.02 is fine, the late run has the issue of not having the weir in. The gates are always open and the counts are really accurate.
 - Steve Brown (SB) – Used to work Fish and Game in Kodiak and I counted fish on a weir. 0.02 seems to be incredibly precise, particularly when you're counting chums when there are tons of pinks coming through. There are bear issues and panels on weirs getting ripped off. If I counted 100,000 fish, I'd be confident with plus or minus 5,000. A CV of 0.05 is a more realistic number.
 - TB – This is getting into the grey area, 0.04 – 0.05 is fine, but this CV is not going to effect the numbers as much as harvest estimates.
 - EV – Seems that 0.02 is too low; can we agree that 0.04 or 0.05 is acceptable?
 - DL – I'd be okay with 0.05 for the weirs, but not sure about the tower.
 - PM – I'd be more interested in expert opinion.
- There was some confusion over bias and uncertainty
 - We are mixing up CV and bias. We can't lump these two together.
- There was a clarification about how to interpret CVs.
 - CV is the standard deviation (SD) divided by the mean.
 - Two SDs from the mean on either side should cover about 95% of the estimates, so 95% of the estimates should be within 2 times the CV of the mean. (i.e. if CV is 2%, then you would expect the true value to be +/- 4% of the mean, 95% of the time.

Decision Point: All agreed that a CV of 0.04 for all weirs, while they were operational, was acceptable.

Tower CV discussion:

- Variation due to counting 10 minutes per hour:
 - TB – The V5 estimator is assuming the counts will be similar to each

other, variability over the entire season is very small. What we're really looking for is a count of the entire hour vs. the ten-minute count. We've done some tests and this is pretty accurate, but we've never had double counts for the whole hour.

- PM – Was the variance 8 – 10 %?
- TB – We care about the variance of the total counts at the end. There's more variability around the individual counts than the overall variance at the end of the season.
- Variation as a function of run size:
 - PM – Is there a tendency to underestimate when there are lots of fish?
 - DE – There's probably more error around those times.
 - TB – That's getting into bias and most of the time we're undercounting, but if that bias is consistent then you're okay. When it's not consistent year to year, then there are issues.
 - PM – If big systems are systematically biased low when counting we need to address this.
 - Michael Link (ML) – Not always biased low
 - PM – ML thinks some people bias low, DE thinks they are biased high, TB thinks this effects the precision.
 - DE – We won't have this problem in WASSIP years because we haven't had a huge-cycle year.
 - TB – We tested all 8 of the rivers and did an estimate of CVs and came up with 1 – 3%.
 - PM – The CV is somewhere in between the Woody and Cousens CV and 1 – 3%. 0.04 is Milo's comment on a best-case scenario.
 - AM – The Woody estimate is a general estimate; the tower count CV is specific to towers in Bristol Bay. The Cousens CV is based on personal communication.
 - Matt Nemeth (MN) – I don't have experience with Bristol Bay tower systems, but we're still mixing bias and sampling error. We can't really get at these biases and difference of opinions can lead to confidence limits on their own counts.
 - PM – We need to define the differences between biases and CVs in the documents.

Decision Point: All agreed that a CV of 0.05 for all towers, while they were operational, was acceptable.

Nushagak sonar CV discussion:

- There were no concerns with the CV proposed for the Nushagak sonar.

Decision Point: All agreed that CVs of 0.031, 0.026, and 0.033 for 2006, 2007, and 2008, respectively, for the Nushagak sonar was acceptable.

Aerial survey bias correction and CV discussion:

There was a general agreement that the expansion factor of 2.47 was fine as long as the aerial survey numbers were standard peak, in-river, live fish counts:

- There is a difference in the late-run vs. early-run survey ability in Chignik.
- BB – Is the 2.47 expansion factor valid for escapements based on aerial survey counts in North and South Peninsula,
 - BB – For those surveys they are combining a peak count. What is included in that peak count? I can't replicate the estimates (Cold Bay example). My suggestion is to have Kodiak do a data dump and calculate the peak count based on standard methodology. This expansion factor would be fine if these were based on a true peak count.
 - EV – It would be good to have BB work with MN.
 - BB – Carcasses are added and multiple surveys are used to find peak index escapement. We need to really define the peak count.
 - MN – 2006 – 2008 is what we would need to review, correct? (yes) If we can add more insight to this then we'd be happy to.
 - Aaron Poetter (AP) – Using methods established by Arnie Shaul. We do use the peak count and the carcass count to account for stream residence.
 - MN – Carcass counts don't add much.
 - MN – Bruce, Andrew, me, and Doug can get together and figure out what we need to respond to, and get the data together by the end of the month.
 - PM – How does this square with Bob Murphy?
 - MN – We'll need to talk with him.

Break: 10:08 AM

Resume: 10:27 AM

- DL – Has anyone seen any other issues in other areas for aerial surveys? Would it behoove us to go back in and look? Has anyone?
 - TA – there could be carcass counts in upper Chignik.
 - BB – Those might not be included. So far Chignik is clean. AYK survey count that had peak count that was unreasonable (Kanektok weir).
 - DE – The expansion factor gave an escapement that year that was way higher than any other escapement.
 - BB – Were there other counts?
 - DE – Peninsula counts are much better than AYK and Bristol Bay.
 - DL – Can some of these aerial survey issues be distilled down and highlighted with managers to investigate these issues in other areas?
 - EV – Let's see how this comes out in the discussion. A cursory look can probably be done but anything more we'll have to readdress this.

Decision Point: All agreed that Department staff would look through aerial survey data from the Peninsula and elsewhere for chum and sockeye salmon to make sure the numbers used were in-river, of live fish, and the peak count. Department staff would work with BB to insure these stipulations were met. The Department would also

investigate similar issues for aerial survey data in other WASSIP areas.

Decision Point: All agreed that an expansion factor (i.e. bias correction) of 2.47 for sockeye salmon aerial surveys (where the count was in-river, of live fish, and the peak count) was acceptable.

Decision Point: All agreed that a CV of 0.54 for sockeye salmon the aerial surveys was acceptable.

Black Lake and Chignik Lake and surrounding producing rivers.

- BB – We need to comment that these systems do exist and account for them.
- Tyler Dann (TD) – We have the Surprise Lake sample in the baseline and the AP decided to not include it because it is so distinct.
- BB – I just noticed that South Peninsula has rivers clearly delineated as moderate or small productive systems. Some of the fishermen will pick this up. It needs to be noted in the document.

6. Estimation of reporting group escapements for chum and discussion of issues

DE – Presentation

- BB – Peak aerial survey counts was not defined in the document. In chum, it needs to be defined.
- DE – Fish in the mouth of the river are counted in some rivers.
 - BB – Why are both pink and chum salmon included? Why is this applicable to chum? Is stream residence time significantly different for pink and chum? This all needs to be clarified in the text.
 - EV – This was all talked about at the last meeting, but we didn't make any decision or make conclusions. But I think it's fair enough to make this all clear in the narrative.

AN – The weighting doesn't take into account whether the data are based on chum or pink data. Would it make sense to weight the data more heavily for chum?

- DE – There's a lot more between-site variation than there is between species.
- AM – (shows data in the table, weighted means and CVs) Very heavily weighted towards the pinks.
- Katie Howard (KH) – There might be paired data in the Anvik and for Andreafsky. I'll have to check to see if they are they good surveys.

EV – This is a good time to comment on using pink salmon aerial survey data.

- PM – The biggest number on there is chum and it's a lot bigger than the mean.
- DE – This is going to affect the peninsula more than AYK.
- PM – The pinks are reducing the value of the expansion factor of the chum.
- EV – We need to check with Katie Howard to see if there are more aerial surveys from AYK to include in the chum data. If there's no additional data from AYK we're down to just three chum surveys if we don't include pink salmon.
- PM – How much did you look at John Clark's reviews?

- DE – Those were used for the Norton Sound aerial surveys. They were similar to the ones calculated using the chum and pink surveys. I can take a look to see if they are in the same ranges as the expansion factors we came up with here.
- ML – What is the run reconstruction based on?
 - KH – Sonar stations.
 - DE – Estimates for different components for different management methods, the overall escapement is estimated for the run reconstruction using a hierarchical Bayesian method.
- PM – Doug, are you confident with these CVs?
 - DE – They seem a little low. I haven't figured out if they've included all the variance components.
 - PM – Is that something we can look into further?
 - EV – You're not going to redo all of the run reconstructions, what could you do?
 - DE – I could check to see if they included all of the error components.
 - KH – They do, and this has been a vetted method by the joint technical committee.
 - EV – If it seems necessary, we can somewhat arbitrarily up these CVs if that's something we need to do.
 - Casie Stockdale (CS) – Katie, what do you think about these CVs?
 - KH – It seems like it's been pretty well accepted by the people involved with this, and I'm pretty comfortable with it.
 - TB – This is something to use because of consistency with vetted methods. Arbitrarily inflating this CV would be less defensible.
 - EV – We need to make sure that is documented.

Art Nelson (AN) – Mistake in the table for Norton Sound Area. Eastern Norton Sound estimates, that was largely before the fishery tanked, it was a totally different situation than it is now.

- DE – We're accounting for the reduced fishing.
- AN – Could you walk through that part again?
- DE – The assumption is that the exploitation rates are the same and the abundance is reflected by the relative catch.
- AN – We don't have an alternative method right now, but I'll try to find other ways.
- EV – This is a sketchy way to go about it, but with the lack of information we need to find a way to get there.
- TB – Why didn't we use the same CV for each year?
 - DE – There are different components in different years.

DL – How is the harvest rate for sockeye being estimated? Are we using pre – WASSIP estimates of escapement? There are biases that could be due to difference of catchability of different species, and that's not addressed here.

BB – For the North Alaska Peninsula, peak count needs to be checked. In lines 111-129, there is a reference to escapements “above” the weir and they not include the mouth count. Would you include the mouth count in the peak count?

- DE – The mouth counts are included in SEAK surveys.
 - BB – I wouldn’t be sure that fish counted in the mouth are actually escaping through that system. The mouth count should not be counted.
 - TA – It depends on the system.
 - BB – Those fish can hold in the mouth for a long time. The expansion factor would be a lesser amount if you include the mouth.
 - AP – We don’t include mouth counts through the whole season, but at the end of the season we do include those fish if they are there in the season index. We take into account the-21 day stream life.
 - ML – If you’re including the stream life then these data are already expanded, then they shouldn’t have expansion factors applied again.
 - EV – We’ve got this identified as a significant area that we need to look into.

AN – Back to the Kuskokwim for a question. Is Kogrukluuk included? Why not?

- DE – We could include it.

Break for lunch: 12:00

Resume: 1:27

7. Further discussion on estimation of harvests and harvest rates

EV – Stresses the importance of harvest rates and opens the discussion on the topic:

DE – Presentation on harvest numbers.

BB – Was the consensus to remove the Eastern District sample from Chignik? (yes)

- AM – What do we do with fish that were not assigned? Do we include them in the harvest number? Where do we incorporate these fish?
- EV – How often does that issue come up?
- AM – No more than a dozen times. It depends on how you break up the harvest rate.

PM – What’s the rationale for not doing harvest estimates at a finer scale?

- DE – It’s a lot of work if there’s no interest in it.
- DL – This is for harvest rate or just catches?
- EV – There are specific decisions on how to report harvest rates, but how are we going to get these data and what is the quality of this data? Opinions?
 - ML – What are our options?
 - EV – One option is that we do not pursue the harvest rate exercise, for either both species or just one. If we do pursue this issue, then we have to decide if we do both species, and also at what level we need to report this.

- DE – If we do the harvest rate, we should make an attempt to do them for the aggregate of the whole area of WASSIP.
- AN – I'm struggling of some of the utility of CWAK as a group, and I don't see the harvest rate being useful for anything.
 - EV – Some of the utility of using harvest rates has been lost because of our inability to distinguish the reporting groups within CWAK.
- DL – People want to know the impact, the only way to get at that is with harvest. Without the harvest, it's going to be hard to present. Doing some assessment of harvest rate is vital to this exercise, how detailed it gets is up for discussion.
 - EV – What would be your first impression of whether we would need to get it down to the fishery or stratum?
 - DL – For some of the areas that you can't determine using GSI, I can see not dividing those up. But this isn't a June fishery study. There might be a lot of information value doing some of the area stratum-specific harvest rates.
 - AN – When we're estimating harvest in Kotzebue based on CPUE, it's a stretch.
- PM – I want to see it in the form of harvest rate.
 - DL – People are going to want to see the calculation. If we don't do them, they will do it for themselves. The Department can do better job especially of estimating confidence intervals and the AP can make sure the appropriate cautions are placed in along with the estimates.
- Chris Habicht (CH) – The more area strata you aggregate, the tighter the confidence intervals will be around each estimate. There may be places where you can aggregate some strata areas and not others.
 - DL – That leaves more decisions to be made.
 - ML – We need to find the utility of applying the estimates to harvest rate that have such wide confidence intervals that the data becomes useless. There's something distracting about that. We know what the estimate is in a generic way, but we have so much uncertainty in the escapement that we end up not being able to say anything.
 - PM – I'm not sure really how informative the genetics are without any of the escapement and harvest rates.
 - ML – The CVs around our escapements are pretty substantial, and those will translate into uninformative harvest rate estimates.
 - PM – I don't agree with that.
- BB – The BOF is going to make decisions on fisheries. If they are given the point estimates, they are going to run with that data. They are going to want to know what the impacts of these fisheries are, so they're going to want to know some harvest estimate. They're going to ask for that data, then they're going to look at the point estimate and that's all they're going to look at.
- ML – What's the cost associated with running harvest rates? Time? Workload?
 - EV – It's a lot of work, and it's going to make the timeline tighter. The idea of pushing the timeline back is a non-starter. It seems that there are some varying degrees of opinion strength on the subject of harvest rates.

- TB – If you want to see this for every single group, I think that'd be bad. We should aggregate it up to larger groups.
- BT – We are missing one piece of the picture, at what level are we supplying estimates, for regional and sub-regional groups?

[This next sequence of dialog took place after the section on the Structure of Report Tables, but was focused on harvest rates, so was moved here]

EV – Is there agreement around the table that we should be putting effort into calculating harvest rates?

- PM – Yes, otherwise go home. If we have to condense efforts, then removing harvest rate would be the wrong place to condense.
- EV – If we're going to do this, then we lay out a list of decisions that the AP will use to help make these decisions.
- PM – A decision that has already been made, harvest rate, is now being questioned. The dynamic that you're proposing is one that has been changed.
 - EV – In my opinion, we have not provided enough clarity on that exercise. It's bad enough that people have questioned the sanity of doing this exercise. This is trying to put clarity on the direction set up a long time ago but has been given little clarity.
 - PM – We are revisiting the issue that harvest rate may not need to be represented at the same resolution as the stock composition. It's very hard to make this the most efficient decision making processes. We ought to try and find appropriate scaling for harvest rates.
- ML – Should we be hosting more AP meetings to get these decisions made?
- AM – We could present estimates of run sizes and uncertainty, and not calculate harvest rates. People can calculate them on their own?
 - PM – Don't do the harvest rate numbers, but just put out the numbers for anyone else to do?
 - AM – Do we do the extra step to deal with all the little issues that come up?
 - PM – All the effort that it takes professional people to come out with these estimates. Doing these harvests is fundamentally important. The state needs to own the concept. It's the state's constitutionality that makes it the state's duty.
 - BB – I follow what AM is saying and it would be a relatively easy calculation, from a utility standpoint and a timeline standpoint, I follow what you're saying.
- AN – Taking estimate to the harvest level is getting incredibly sloppy. We set up super high quality standards at the beginning and we are now dropping the bar for the harvest and escapement numbers.
 - PM – Are we going to only value things where we can be very precise? Are salmon just too messy for us? I agree about the relative precision, but it's our job to use the messy data to come up with the results.

- Chuck McCallum (CM) – We have to get this done on time, and there’s risk of making errors by rushing it. If it was doable, then I’d say go for it. But we don’t have time to do this and we could make errors.
 - EV – We have to come to terms with the AP having a discussion about the MOU and what “where possible” means.
 - CM – As much as we can, do it, but I don’t know when to push too far.
 - DL – I remain convinced that a lot of the value of this exercise is our ability to provide different types of information. Genetic stock ID is one kind, but the fundamental concepts of the usefulness of this process is for escapement and harvest. “Where possible” is probably everything that we’ve been working with, and we shouldn’t fall back. We should go through the exercise of determining the level of precision of harvest rates. It’s not acceptable to bring forward the information but not follow through.
 - EV – do you feel that the Department needs to step up on this issue?
 - DL – Yes.
- TB – What is the scientifically defensible approach? We won’t get criticized on the genetics, we’ll get criticized on how we apply them. Can’t we come out with some areas that we’re confident with this, and other areas that we aren’t? I’d like to keep a little of that scientifically defensible rigor. On any of those numbers with CVs greater than 0.5 or 0.6, there’s not going to be any information out there. We can select which of these we are confident with.
- PM – There’s a choice in whether we have lots of precision and we’re going to feel good about it or if we’re going to embrace the sloppiness and move forward with it. If you want to go back to catch and effort fishing then that’s what you’re looking at. The value for the State is Andrew working with Doug and getting these numbers put together.
- EV – I’d like to pursue this, but we need to come face to face with the issues that doing these harvest rates will bring up. There are different issues from the State perspective.
- PM – Saying that we can’t do harvest rates because we’re out of time is a non-starter.

9. Structure of report tables (this item was moved up one slot to before the break because some AP members need to leave)

CH – Presentation on report table formats

PM – I like the same table format at the top of each and I like the suffix table.

CH – We’re combining some temporal strata to get the harvest.

- PM – How was the decision made to not pool strata?
- ML – We never decided the process.
- CH – There were a lot of decisions on how to increase precision. One of the key things was that we were not going to implement procedures that were not

published. Many ideas have been brought up, but a lot of them have been dropped.

- BT – One of the ideas was dynamic pooling of reporting groups. We are not pooling samples across strata.
- PM – Why not? We've had the opportunity, but since we've got sloppy harvest and escapement estimates we've stopped squeezing the genetics as hard and we're not pooling temporal strata to increase genetic accuracy.
- TB – When you pool you lose some of the accuracy, because the fish that are in those different fisheries represent different harvests.

EV – Composition tables and appendices. Are they working?

- BT – The appendices will have all the information, but the tables will have the basic information.

Decision Point: All agreed that the result table formats were acceptable.

Break: 3:45 PM

Resume: 4:06 PM

8. Sockeye baseline (draft report) and chum baseline (TD) (move down one slot to after the break)

Tyler Dann (TD) – presented both the sockeye and chum salmon baseline presentations

PM – Were there temporal differences with some chum baseline collections?

- BT – That happens some times.
- TD – Some of the older collections do not have reliable metadata, were different and were excluded from the baseline.
- PM – Were there any temporal differences between collections in Norton Sound?
- BT – We'll have to get back to you on that.

BT – We may have to send chum baseline Technical Document to AP and TC at the same time to get a quicker turnaround.

10. WASSIP outreach in advance of results publication

[ML presented an overview of WASSIP to BBNA]

The background is that we had a non-public update and workshop on WASSIP and the CWAK issue. We envisioned a public gathering, but ended up being a small-scale meeting and so recommended the Department not come. Everyone was appreciative of the heads up. It was worthwhile for them to see an example of what was going to be coming out when the report comes out. Overall it was a very productive meeting. Some of the content was a bit on the technical side, but we kept everyone engaged and people were really interested.

- EV – We will be willing to give slides to AP members if you want to give these talks without the Department’s presence.
- BB – Chignik preseason meeting, might be a good time to give some overhead of this.
 - TA – Sure, first week of June.
 - CM – Getting some support material from the Department and then us making the best of what we can do out in Chignik would be good. We might do something at the Borough Assembly meeting. I wouldn’t want to pull in staff to either of those.
- CS – There’s a presentation to the Kuskokwim working group that we could add a WASSIP presentation to.
 - BT – I’m on the agenda for the Thursday morning.
 - DL – Should we be circulating the times and places for meetings?
 - TB – There are a lot of people who are aware of WASSIP without the specifics. Bristol Bay users are aware of genetics, they just want an overview.
- EV – I have briefed the director and the commissioner, which was good.

12. Board of Fisheries meetings; update and input

EV – We haven’t talked to the BOF specifically, but we have talked to the commissioner about the need to talk to BOF. My vision is to have the AP providing the context of the WASSIP project. The BOF will not be interested in a full day, and we want the Department working with the AP so that it’s not perceived as a Department report.

- DL – Hopefully the board will be amenable to that idea. The technical aspects of the reports need to be presented by the Department. The Department would need to take the lead, but we can craft some things for the AP to present limited ideas. AP needs to present a unified front.
- EV – Part of that vision is that there is lot of different perspectives on the AP, and I think that the board needs to see those opinions.
- AN – Each of us will be representing the data in the way we see it, the Department can present the data in an impartial manner.
- DL – Most of us will be there at the BOF meeting representing our stakeholders. What we would be presenting is the process, which we would be celebrating.
- CM – Another angle to present would be that virtually no one understands the dynamic that has developed around this project. The only point in pursuing this is to try to give the public an idea of what this relationship looks like. How do we give the public a glimpse of that?
- TB – Is there a way to give a presentation around the BOF meeting? The Department has put in a proposal to allow the discussion of the results of WASSIP.
 - EV – There is the possibility to discuss WASSIP outside of the regulatory meeting.
 - DL – Which regulatory meeting? All three?
 - EV – Yes, that’s my impression.
 - DL – What’s the tolerance of the board for hearing it the third time.

- EV – Not sure what the tolerance of WASSIP will be on the first time. Sometime this summer we'll need to engage the chair of the BOF and engage the board in October in their work session.
- AN – We need to nudge them along, or force them to see this project for a half day.
- EV – I encourage you to engage your favorite BOF member on this topic.
- DL – Next week there's an end of season and partial workshop that you could go to.
- TB – You could probably give the background and then in another meeting go for more.
- AN – How much time would be needed?
- BT – We could distill it down to a half day. But we'd need input from AP members to know what is important to cover. Most of the BOF has had genetics talks before.
- **EV – ACTION ITEM – Start the ball rolling to get some communication going with the board.**
- AN – Ask for a day and go from there. Go into results even if they're preliminary.

11. WASSIP results roll-out (Chuck and Pat)

CM – What I'm thinking is that the narrative introduction of this document will be extraordinarily important. I'm suggesting that the Department does the first round and I'll do my best to go through that. I'd like to work all the different opinions into the document. Also, how to help the Department present this information.

- EV – The introductory document is important and needs input from everyone around the table. I'll put up the straw dog, might encourage you to send me some verbiage.

12. Board of Fish meetings; update and input

PM – Chris and I went to Tufte talk and here are the take home messages:

- Visual presentation of data.
- He hates PowerPoint because the presenter is controlling the flow of information, PowerPoints are low information per slide and he wants figures to be information rich.
- He favors sparklines.
- Any way to get the data across.
- The best thing you can do is give the audience a chunk of your time.
- Initial wave of information can be picked over by the recipient. How do you bring what we learned there to this venue? A "poster session" with social so that the BOF can pick their own information from the posters.

BT – What are good ways to present the data? There are pages and pages and pages of tables and the information is in between tables. We need to mock up something, and see what we've got.

13. Agenda addition, update on another chum and sockeye genetics project, involves a subset of the AP involved in WASSIP.

EV – A subset of the AP will be putting together a proposal so that it can get funded. This money is actually in the Fish and Game budget. The basic idea would be to explore the use of available markers to try to address the issue of CWAK.

- DL – Do you see this as a furtherance of getting better resolution? (yes)
- EV – This is an investigative project, with application in the future.
- DL – Need to be mindful of any samples associated with WASSIP, but I think this is a great idea.

14. Scheduling of next meeting

Wednesday, May 16th

Meeting adjourned: 5:00 pm