WASSIP Advisory Panel Meeting March 24, 2008 Hawthorne Suites Anchorage, AK

Chair: John Hilsinger

A. Call to order 8:45 AM

Meeting attendees

John Hilsinger	ADF&G
Bill Templin	ADF&G
Eric Volk	ADF&G
Julie Raymond-Yakoubian	Kawerak
Chuck McCallum	Lake and Peninsula Borough.
Guy Wade	BBSRI
Michael Link	BBSRI (LGL)
Gene Sandone	ADF&G
Beth Stewart	Aleutians East Borough
Becca Robbins-Gisclair	YRDFA
Jennifer Hooper	AVCP
Mike Smith	TCC
Karen Gillis	BSFA
Tim Baker	ADF&G
Steve Brown	CAMF
Pat Martin	CAMF
Mark Witteveen	ADF&G

B. Introductions, roll call, and approval of agenda

All MOU signatories were present except the Aleut Corporation and USFWS. All participants were present for the entire meeting except Mike Smith, who departed early. It was noted that two past ADFG participants, Drs. Jim Seeb and Doug Eggers had moved on to other jobs. Several documents were provided for meeting participants including the agenda, draft notes from the 4/13/07 AP meeting, the progress report to NOAA, 2007 and draft 2008 sampling plans and the recently submitted proposal to AYK-SSI. Two additions were made to the agenda: 1) a discussion of desired accuracy levels for GSI analyses and 2) extending the sampling period for South Peninsula fish to August. The agenda was approved with these additions.

C and D. Review and approval of notes from 4/13/07 AP meeting.

Time was taken for people to review the document. The bottom of page four referenced a motion that "both sockeye and chum pre-proposals should include

specific language that includes that ADFG will strive to meet a goal of high resolution GSI with 99% accuracy with 1% error." The notes state that this motion passed 2-0. This was amended to state that the motion passed unanimously, and the numbers were removed.

It was also noted that while chum and sockeye species components of WASSIP could be separated to pursue funding, the implied consensus on page three that analysis could continue on either species once all funding was secured for either species, was erroneous as this would effectively change the MOU. This is a policy, not a technical issue. This statement was struck from the draft notes by unanimous consent. Minutes from the last meeting were adopted by unanimous consent.

A discussion followed regarding a re-statement of the motion to indicate that high resolution GSI ( accuracy  $\pm -1\%$ , 99% of the time) should be a goal, but that failure to achieve that goal should not negate the results of the study if that goal is not achievable. The tradeoffs associated with lumping samples to achieve the desired accuracy were discussed and it was noted that at some point, excessive lumping of samples would make the exercise fruitless. In some respects, this is a social and political issue. It was generally agreed that we should strive for the greatest accuracy we can, but not reject results if this very high standard was not reached for all stock components. Pat Martin presented some analyses for discussion concerning the need to achieve higher resolution in the GSI estimates. The current resolution (+/- 5%, 90% of the time) works well for fisheries with high harvest rates and high relative contributions in the catch like Bristol Bay sockeye fisheries. It doesn't work well for fisheries when proportional contribution is low, but harvest rates could be high. The highest possible resolution is needed and lumping may be required. The notion that some preliminary analyses could help inform this question was advanced. Opinion was expressed that while it was inappropriate to report on segments of analyses, it might be useful for labs to perform some preliminary analyses to determine accuracy levels. It was agreed that the trade-offs between accuracy and stock resolution was a re-occurring issue that should be left up to the TC.

There was discussion of how to treat data limited situations, such as Southeast Mainland District (SEMD). Several people noted that even with perfect stock discrimination, results were dependant upon the sampling program and its goals. The general understanding now is that we are sampling for the stock proportions in harvests. When we embark upon analyses, there will be questions about undersampled areas, such as SEMD. Beth noted that SEMD was likely to remain that way unless test fisheries were used to provide samples. There are issues about whether a test fishery provides a similar suite of samples as would occur in a commercial fishery. It was understood that sampling of SEMD would continue, but that these samples might not be analyzed in the first cut. The issue of analysis for marker development was discussed. ADFG lab is working with Mike Garvin, NMFS, so we will have access to makers he is developing.

## Break

E. Membership and Activity of WASSIP Technical Committee

Membership of TC

The recommended membership of the technical committee was reviewed, noting the importance of convening the committee soon. Robin Waples, Bruce Weir and Tom Quinn have agreed to serve, but Terry Quinn has not committed. There was general discussion about whether to proceed with three members, try to convince Terry Quinn to participate, or find a replacement for him. Several AP members expressed the need for a population dynamics expert to translate stock proportions in samples into population estimates and harvest rates. This was entered as new agenda item E(1).

Regarding Terry Quinn, Gene noted that Terry was less interested in being a part of the Technical Committee mainly because of the specific proposal, which was focused on genetics. He would have more to offer once stock proportions in samples were available and their meaning in a population context was considered. Pat spoke with Terry and he may still be available for the Technical Committee if it seems interesting later on. Some expressed concern that we not slow progress while deciding on Terry or another population dynamics person.

The chair suggested that we could convene the TC in April to have them review the 2008 proposal to AYKSSI to develop a chum baseline and analyze one year of samples. As part of this review, the TC would resolve issues around the use of mSATs versus SNP's. It was noted that the Technical Committee was designed by the MOU to look at the whole program, not just the funding proposal. It was suggested that the proposal be re-drafted with a specific emphasis on the end product we are looking for, and an emphasis on the need for a population dynamics person. Perhaps there could be an addendum not written by the genetics lab.

Gene pointed out that in order to calculate harvest rates; we need total run data, which would not be available for chum in Kuskokwim, Norton Sound, Kotzebue, or Bristol Bay. The initial premise of the sampling plan was for N=400 in all time/area strata to determine numbers harvested, not harvest rates. Michael Link noted that harvest rates were beyond the scope of the MOU and we should stick to stock contributions to fisheries.

It was recognized that the Technical Committee needs to meet very soon and that it is not essential that a population dynamics person be present at the first meeting. ADF&G genetics lab staff noted that the different methods may have roughly equivalent resolution capabilities at this stage, but that the need to process 141,000 specimens dictated a high throughput method, most effective with SNPs.

The AP passed by unanimous consent a motion made by Michael Link and seconded by Steve Brown that the Technical Committee be invited to meet as soon as possible in order to do two things: 1) evaluate the adequacy of SNPs versus mSATs to do stock composition in western Alaska fisheries and 2) conduct a technical review for the Advisory Panel of the chum salmon proposal. The motion also noted that the Technical Committee could number 3 or 4 (desired if possible) members to do this and the Technical Committee would provide the review to the Advisory Panel.

A second motion made by Beth Stewart and seconded by Chuck McCallum passed by unanimous consent that if Terry Quinn is unavailable for the Technical Committee another population dynamics expert should be found and could be approved by the AP via e-mail poll

E1. Discussion about incorporation of harvest rates.

Several AP members expressed their opinion that results of WASSIP genetic analyses must eventually be expressed in terms of population harvest rates to have the broadest meaning. Limitations with regard to stock discrimination and reliable abundance estimates were again noted. Some members noted again that this was outside the original intent of the WASSIP MOU, but others understood that the presence of a population dynamics expert on the Technical Committee implied that we would eventually go to harvest rates. This could be made as an addendum to the current plan. The chair reviewed concerns arising from the 1987 tagging study where consideration of harvest rates was added on after the program was agreed to. This created significant anxiety due to data quality and the many assumptions necessary. He is nervous about extending beyond the original intent without clear discussions regarding the assumptions required in such analyses. Pat Martin agreed to draft the language that would recognize the addition of this goal.

## LUNCH

## F. Funding

The 2008 sampling collection funding from the federal government did not materialize.

There is currently \$200,000 available in the first \$1.5 million for 2008 chum and sockeye sample collection.

The chair informed the AP that ADF&G is primarily a SNP's lab and that if the TC decided that mSATs was more appropriate, a different lab would have to perform the analyses. Bill reiterated that the large number of samples dictates the need for SNP's.

The original funding needed for WASSIP was about \$4 million over three years. To increase odds of funding through state, we combined two years into a capital budget request. Concern was raised about whether or not this funding had the WASSIP name on it. This request was submitted as a package combined with some Mat Su work. The question was raised that if the funding did not have the WASSIP name on it, would ADF&G still pursue the study according to the MOU? The chair said that absent any legislative intent language, the agency would proceed within the MOU. There is no particular implication that anyone would be pulling out from MOU.

Karen asked the question if SSI funding would still be necessary if the legislature approves the funding request. John replied probably not. The proposal to the legislature is not as extensive as the one previously submitted to AYK-SSI.

The question was raised about whether sockeye analyses could proceed without chum. Some spoke to the fact that this makes sense; others were opposed to this. One reason for opposition was that chum and sockeye have overlapping distributions in Aleutians East Borough fishery. There was general agreement to table this discussion until we know if the legislature approves the funding request.

Discussion of timeline. ADF&G genetics staff noted that 141,000 fish would take more than one year of solid lab time with dedicated staff. There will be a delay between the decision to start and actually starting the analyses. It was also noted that lab time was only part of it and that at least an equal amount of time would be needed for analyses and report writing.

An AP member asked the question if we could run samples now and supplement later with additional markers. It can be done, but it is much more efficient to make the call now. If we ran the sockeye first, it would provide some additional time for more SNPs development. WDFW, Auke Bay and UAF are all looking for SNPs. How would sockeye analyses fare regarding rare stocks? Bill noted that experience suggests we are very good with sockeye and that the 90% +/- 5% is conservative and we are usually better. But, even with N=400, we still have trouble when the stock contribution is < 5%. This is mainly a sampling issue. Pat noted that in the Cook Inlet study, when stock contributions are 1-3%, the confidence intervals include zero. The technique of small area estimation may help for rarer stocks. This issue requires input from the TC and the AP could reconvene by teleconference following their meeting.

G. Review of 2007 sampling.

There are some mistakes in the 2007 sampling plan, including issues at Black River and changing proportions for chum in Bristol Bay. Although the test fishery near Port Moeller catches mainly sockeye, the chums collected should also be recorded in our spreadsheet. Tenders worked well with ADF&G last year for Yukon/Black samples, but if there is no fishery this year, we will have a difficult time obtaining some samples.

Mark noted some typos in the 2007 report, no samples taken at Three Hills and the 2233 number is for Port Heiden. Also, there were no August Dolgoi samples listed for 2007. Some number columns do not add up correctly. Staff will go over the sample numbers in the report and correct mistakes.

## I. Plans for 2008 sampling

The question was raised about whether to sample two new openings in W. Chignik area. It was agreed that we should. Where specimens collected were not part of the original plan, they should be noted in a footnote.

Discussed BSAI Pollock fishery samples.

In view of concerns that samples are taken properly (Lake and Penn Borough), should we have observers for WASSIP sampling? This would be okay and would build public confidence. The biggest issue is representative samples across space and time and transparency in that sampling.

Pat noted some location discrepancies in the proposal, including Meshik River and Pumice Creek.

Pat proposed language to be inserted to MOU regarding harvest rates. Chair reiterated concerns about how we make the assumptions we have to make in order to do this. Does the AP have to agree? Going to step of harvests rates, you make a lot of assumptions, and do we end up in a hard debate about these assumptions and the concern for agenda driven debate? Can we put this into a context that does not require the assumptions? There was broad discussion on the difficulties of reaching consensus on assumptions. Consensus was reached for a footnote inserted at end of paragraph 2 after ".....possible."

"Recognizing the importance of these results to conservation considerations the program shall, to the extent possible, extend stock contribution estimates to stock-specific harvest rates in the study areas"

J. In summary the AP agreed to:

Approve minutes with amendments to page three; struck "if funding.....either species".

Bottom page 4, changed the 2-0 comment to consensus.

Top of page 5, after bold add section based upon notes about 95 % etc.

Motion approved to invite TC to 1) evaluate adequacy of snps vs msats 2) provide a technical review of chum proposal to AYKSSI.

Motion approved that if Terry Quinn unavailable, then should get another population dynamics expert with approval of AP, by e-mail poll.

Motion approved to wait until mid April until after TC meets to decide on separate species analysis

Agree to sample W. Chignik during early periods and decide later what to do with those.

Agree to look at 2006-2008 sample plans and send to Bill for correction.

Agree to footnote sentence to MOU.

K. Closing comments

Link: Elaborate on funding. Last year chum proposal agreed to go to AYKSSI. Raise money for sockeye. Spent time searching and spent political capital to get it into CIP. This spring, Senator Hoffman was stunned that the 1.5KK did not include both species. Others were also somewhat dismayed. We are now 5 years out and the people putting out money want results. If language has been stripped from the CIP, then this may be the reason. Need to get started. If WASSIP wants to stay relevant, we need to get started. We went to the mat, and AP has not met in a year. These guys want some action.

John Hilsinger: Same impression as Link.

Adjourn

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