

WASSIP Advisory Panel Meeting
April 13, 2009
Hawthorne Suites
Anchorage, Alaska

Chair: Eric Volk, ADFG

Call to order: 8:15 am

Attendees:

Michael Link, BBSRI/BBNA/LGL
Scott Raborn, BBNA/LGL
Tim Baker, ADFG
Mark Witteveen, ADFG
Steve Honnold, ADFG
Chuck McCallum, Lake & Peninsula Borough
Judy Berger, ADFG
Bill Templin, ADFG,
Eric Volk, ADFG
Chris Habicht, ADFG
Jim Jasper, ADFG
Jennifer Hooper, AVCP
Art Nelson, BSFA
Andrew Munro, ADFG
Pat Martin, CAMF
Mike Sloan, Kawerak
Brad Barr, CAMF
Jill Klein, YR DFA

Missing:

Tanana Chiefs Conference
Aleut Corporation
Aleutian East Borough
Federal Representative

8 out of 12 signatories are present

Preamble: These minutes follow the meeting agenda and are designed to summarize the main points from the meeting. For clarity, minutes are grouped by topic. This organization sometimes resulted in the summary of various communications that occurred during different times within the meeting into one section. Sentences or sentence fragments in **BOLD** within the minutes are action items or motions.

Agenda

1. Welcome and introductions
2. Review and approval of agenda
3. Presentation of current project status
 - a. Project budget update
 - b. 2008 sampling report
 - c. 2009 sampling operational plan
 - d. Actions in response to TC and AP comments
 - i. Additions to the baseline
 - ii. Temporal variation within the baseline
 - iii. Communicating results
 - iv. Methods to increase precision and accuracy
 - v. Marker development
 - e. Project timeline
4. Review and approval of minutes from September, 2008 meeting

1. Welcome and introductions

The Chair (Eric Volk) welcomed participants and everybody introduced themselves. Several handouts were made available, including the agenda, minutes from the September 2008 meeting, and a proposed timeline for the project.

2. Review and approval of agenda

Eric Volk added three items to the agenda:

- a. #5, Technical committee update
- b. #6, Attendance and quorum
- c. #7, Next meeting

Agenda was approved.

3. Presentation of current project status

a. Project budget update

Budget update (Presentation by Eric Volk)

Summary of Funding Sources

NOAA, \$200,000

MSFFA CIP, \$200,000

BBSID, \$1,500,000

MSFFA (2), \$2,375,000

Sampling and Sockeye Baseline, \$1,500,000 (FY10, 11, proposed)

Summary of projected Costs	
Sampling 2009 Fishery	\$170,000
SNP development	
Chum salmon	\$160,000
Sockeye salmon	\$150,000
Baseline development	
Chum salmon	\$633,000
Sockeye salmon	\$738,500
Mixture Analysis	
Chum salmon	\$1,683,780
Sockeye salmon	\$1,335,630
Analysis and Report Writing	\$324,000
Total	\$5,144,910
Available in CIP's	\$3,710,000
	(\$1,484,910)

Michael Link: Is sockeye analysis contingent on funding of additional sockeye baseline work?

Eric Volk: No decision has been made that we will not do it if we do not get the funds for SNP and baseline development. Decisions will be made with AP consensus.

Eric Volk: The chair will provide budget summary to the AP members in meeting minutes.

b. 2008 sampling report
Sampling Report for 2008 and Plan for 2009 (Presentation by Bill Templin)

Pat Martin: Emphasized that sample tables must reflect chum sampling strata from marine waters of Y1. Adequate sampling did not occur in 2006. Since then, most focus has been on Black River, but samples more north would be good to include.

Loretta Bullard: Were adequate samples collected from early parts of Area M fisheries in 2006/2007?

Steve Honnold and Mark Witteveen: Yes, the early portions of fisheries were well sampled.

Eric – we will get all these numbers into a single report.

Bill Templin – will clarify marine waters in Y1 in tables. Larry Dubois explained that samples were on tenders. ADF&G does sample in the 3 mouths (North, South, or Black) depending on where the processors are located.

c. 2009 sampling operational plan

Bill Templin: The sampling plan for 2009 is essentially the same as in 2007-2008. ADF&G will sample sockeye at no extra cost, but there is no plan to analyze sockeye samples from 2009. In 2009 the primary intent is to sample chum. In 2009 we will spend money and make the effort to acquire samples from Kuskokwim Bay (W5) commercial fishing periods. There is a new processor in Platinum. There are minor changes in strata listed in Tables 2 & 6.

Mark Witteveen: Minor changes sampling in August, nothing changed in 2009.

Eric Volk: Question in sampling plan 2009. August South Peninsula, specific line for August sampling but not in text. Shumagin Island should also have August. Need to change Table 1 to reflect August sampling in South Peninsula Fisheries. "Post June" needs to change the date to include August 31. All the rest of the numbers remain the same.

Mark Witteveen: In Table 1, SEDM, there are 3 strata, you could add August in Table 1. August got combined in Shumagin. Shumagin should be Post June.

Eric Volk: Shumagin July needs to be put into 4 strata for 2009. The 2008 had 3 strata + August sampling, now should read 4 strata. Table 6, Moses Point 4 fishing periods (4 x 150 = 400) with total collected 400 should be corrected as 600 fish in 2009 table

Eric Volk: Requested that AP reach general consensus that sockeye samples for 2006-2008 and chum samples from 2007-2008 are appropriate for analysis. This is important given the tight timeline that we are working under to produce results for the 2012 BOF meeting.

Chuck McCallum: This is generally okay, but wants some flexibility to add some 2009 sockeye samples at a later date.

Eric Volk: Will note that it is still the case that the language of the last meeting minutes is acceptable.

Bill Templin and Chris Habicht: We have already extracted 2006-2007 sockeye in lab and need to move into 2008 soon for sockeye.

Pat Martin: Thinks we should include 2009 samples into analysis and would rather not preclude anything at this time. He posed the question of whether there was interest in fishing the general district of Bristol Bay.

Mikhael Link: General district not going to happen, not too worried about it.

Tim Baker: There had been a discussion last fall and a sampling plan would need to be made to get samples. It would cost \$500,000 for three years, but Bristol Bay Regional Seafood Development Association (BBRSDA) decided not to fund. No existing monies will be used for sampling in the general district.

Loretta Bullard: Acceptability of 2007-2009 sampling for chum dependant upon results of 2009 sampling.

Break - 9:35am (15 minutes)

Back to order 9:50am

d. Actions in response to TC and AP comments

i. Additions to the baseline

Chris Habicht provided an overview of the coastwide sockeye salmon baseline

- Baseline contains: 302 populations from 465 collections with 32,952 fish distributed from Russia to Washington. Over the past year we added: 119 new sites (Bristol Bay 33; Peninsula 10; Kodiak 14; Cook Inlet 31; Copper 5; SE & BC 25); 12 augmented collections (N=95 to N=140); and 54 temporal collections.
- Proof tests indicate: >90% correct allocations to drainages in Bristol Bay. High levels of diversity among Alaska Peninsula populations bodes well for more identifiable reporting groups. Norton Sound populations are highly identifiable.

Bill Templin provided an overview of the coastwide chum salmon baseline

- The chum baseline has been improved and has 167 populations represented by 199 collections (N=15,622). The previous version had 119 populations.
- The chum baseline is heavily supported by collaborative projects – University of Washington, Washington Department of Fish and Wildlife, Auke Bay Labs, and an international collaboration through the NPAFC process called PacSNP.
- The Aleutian Islands need to have additional samples taken.

More populations to be added to the baseline through collaborative efforts with other funds and sources.

ii. Temporal variation within the baseline

Jim Jasper presented two slides (one for sockeye salmon and one for chum salmon) that graphically represented the F_{st} values between paired collections taken at the same site in different years relative to the F_{st} values among all pairs of collections. There were 10 sites with multiple-year collections for sockeye salmon and 18 sites for chum salmon. The pattern was that the F_{st} values between collections, within sites was generally much lower than the F_{st} values among collections from different sites. Although the F_{st} values for collections taken in different years at the same site were always low for both species, some of the F_{st} values among sites were also low. For sockeye salmon low F_{st} values

were observed between two collections within the Wood River and between a Kvichak drainage collection and a Kuskokwim drainage collection. For chum salmon, low Fst values were observed among western Alaska collections. The hope is that additional markers will increase the Fst values among sites and the expectation is that the within-site Fst values will remain low.

iii. Communicating results

Communication with Advisory Panel and the Technical Committee

1. Semi-annual meetings- more often if requested
2. ADFG technical document series – this is a framework for
 - a. asking questions;
 - b. describing sampling protocols, and lab methods,
 - c. describing baseline development/evaluation
 - d. describing mixed stock analyses and reports.
 - e. new graphical methods (e.g. previous temporal plots).
 - f. Webpage on the ADFG-GCL website: FAQs, handouts, posters, and publications. The FAQ – series will be slides explaining terms and will be available for reference to explain/answer questions.
 - i. Public access
 - ii. Quick, easy to understand information

Discussion on the WASSIP web page:

Pat Martin - Is there any value of WASSIP members to have a web page?

Eric V. – a web page takes a web page steward.

Loretta – this will possibly help generate funding from other sources.

Tim Baker – It takes money/organization to set up a web page, so it is easier to do within ADFG. It will be possible to have links to AP member organizations and the MOU; funding sources could then use it to make decisions.

The ADFG TC documents will not be publicly available, because some are covered under the MOU. Their main purpose is to communicate with TC. However, they will be available to the AP.

Tim Baker – For the BB board meeting, the 2006-2008 sockeye GSI preliminary results will be out this fall in a report. This will be equivalent to the first 1/2 of WASSIP within Bristol Bay. The report will come out in November and ADFG is currently working on it. We'll make sure the AP members get it at least one month before the BB board meeting.

iv. Methods to increase precision and accuracy

Jim Jasper first presented results from an experimental analysis where multiple mixtures were analyzed simultaneously. Since each mixture contains information about the baseline, the objective was to examine the effects of adding the collective information from multiple mixtures to the baseline. His results showed that while precision was

improved slightly for well identified regions, bias was very large for poorly identified regions.

Jim Jasper also presented results from a hierarchical Bayesian analysis of a mock Port Moller Test Fishery. The analysis showed improved bias and precision over SPAM and BAYES estimates in 10 mixtures of 200 individuals made up from tower samples in proportions similar to those estimated in the 2008 Port Moller Test Fishery

Jim Jasper presented two slides showing marked improvements in the power of detecting very small contributions within mixture samples (down to 1%) by combining information from multiple strata. He showed results from mixtures made from four strata of 380 real fish each that were sampled from the baseline. He used mixed stock analysis on these mixtures using a baseline that excluded these fish. In his example, using fish from the northern Alaska Peninsula at 1% and the remainder made up of fish from Bristol Bay, he was able to produce an estimate of 1% with 90% confidence intervals that did not include zero.

No substantive questions followed this presentation.

Break for lunch. 11:50 return 1pm
Resume 1:30pm

v. *Marker development*

Bill Templin did a review of slides for marker development. In order to meet the 2012 deadline, we have contracted for the sockeye marker development. This should be completed by late fall.

e. Project timeline

The proposed project timeline was presented that is designed around a deadline for review and reporting of June/July 2012.

The additional baseline analyses will take 6-8 months for lab analysis, but some of these can overlap with analysis of WASSIP fishery samples.

Chum loci will be selected by January 2010 and “locked in” and sockeye loci will be selected by March 2010.

Any questions on timeline: NONE.

A discussion ensued about the genetic variation among chum salmon:

Bill Templin showed slides with a 3D projection of western Alaska chum pops. American River does get good separation.

Jill Klein –WASSIP will use 2009 samples for chum. She is comfortable with sampling plan for both species in 2009 even though sockeye are not scheduled for analysis.

Eric Volk - We have no current plan to analyze 2009 sockeye salmon until we have funding to analyze those samples. Eric recognizes that we don't know what samples will be collected in 2009.

Chuck McCallun - How much would it cost to analyze the 2009 sockeye salmon, so that we can start planning?

Bill – Lab costs: \$2/fish for extraction cost and \$22/fish for genotyping. Issue – what do we do with samples that are not analyzed – AP needs to resolve this.

4. Review and approval of minutes from September, 2008 meeting

WASSIP Advisory Panel Meeting Minutes Sept. 24, 2008

Minutes were reviewed and minor changes were recorded.

Eric Volk – Will make corrections to meeting minutes.

September 24, 2009 corrected minutes approved by AP.

5. TC Update

Eric Volk: To the extent possible, we will try to have all TC members present at meetings. It is important to respond to the need and desire to have someone on the TC with expertise in harvest rate estimation in WASSIP. Terry Quinn and Milo Adkison are possibilities. Eric has already spoken with Terry who declined. We should seat someone early in the process.

Pat Martin: Milo would be great and constructive, with knowledge about populations and biology.

Tim Baker: Milo would be good and Tim will also put in a good word.

Eric Volk: Notes general consensus that Milo is acceptable to entire AP, and he will speak with Milo.

6. Attendance and quorum

Eric Volk: Wanted to clarify how the AP sees consensus when a full AP is not present. He would like to know if presiding members or designees can make decisions at meetings.

Pat Martin: Agrees in principle so long as all AP members who wanted to attend were able to. Meeting materials must be distributed with sufficient lead time for AP to comment.

Eric Volk: Is format for meeting minutes generally acceptable?

The AP agrees that the way meeting minutes are recorded is acceptable and that some streamlining is appropriate. The frequency of meetings (2 times per year) is also acceptable for now. However, if there is a key decision in the lab, we will need to get together.

7. Next Meeting

Eric Volk: Tentatively, the next meeting will occur in September, 2009. It will be important to have most TC members present. We should have a rough idea of how the 2009 sampling went, though a final sampling report will not be ready at that time.

Pat Martin: Keep it in September – concerned about the March date when the methods need to be locked down. Rough idea will be good enough.

A discussion ensued about the expansion of the genetic data to harvest rates:

Pat Martin suggested that stock composition proportions should be converted into harvest rates and felt that the Department is best situated and is responsible for doing this work, but perceived reluctance by Eric to commit to this work. Eric explained that his reluctance is due to a lack of staff to do the work, not opposition to doing the expansions. There was some discussion about contracting out the expansion work, but both Pat and Eric agreed that the expertise resides within the Department. Tim Baker and Eric agreed that although the Department has the expertise, all available staff are already fully committed.

Eric said that he will do best to address this project need. He suggested that the most valuable thing to do is to get the person on the TC who has some background with expansion methods. Pat felt that regardless of the TC makeup, there should be someone within the Department who is responsible for the expansion work. Tim Baker pointed out that in areas where we can do an adequate job, this work will be done, but a lot of information gaps in some areas will make it difficult to make these estimates.

Meeting adjourned 3:15pm

