Minutes of the Joint Groundfish Plan Teams

North Pacific Fishery Management Council 605 W 4th Avenue, Suite 306 Anchorage, AK 99501

> Held at Alaska Fishery Science Center Seattle WA

The meeting was convened at the Alaska Fisheries Science Center in Seattle on November 17th 2014 and adjourned on the 21st. The combined Teams met until 3pm on the 17th. Plan Team members are listed below in sections specific to each Team.

BSAI and GOA Joint Plan Team Discussions

BSAI Team		GOA Team		
Mike Sigler	AFSC ABL (BSAI co-chair)	Jim Ianelli	AFSC REFM (GOA Chair)	
Grant Thompson	AFSC REFM (BSAI co-chair)	Jim Armstrong	NPFMC (Coordinator)	
Kerim Aydin	AFSC REFM	Sandra Lowe	AFSC REFM	
Lowell Fritz	AFSC NMML	Chris Lunsford	AFSC ABL	
Chris Siddon	ADF&G	Jon Heifetz	AFSC ABL	
Alan Haynie	AFSC REFM	Mike Dalton	AFSC REFM	
Diana Stram	NPFMC (Coordinator)	Kristen Green	ADF&G	
Bill Clark	IPHC (retired)	Obren Davis	NMFS AKRO	
Brenda Norcross	UAF	Mark Stichert	ADF&G	
Mary Furuness	NMFS AKRO Juneau	Paul Spencer	AFSC REFM	
David Barnard	ADF&G	Nancy Friday	AFSC NMML	
Leslie Slater*	USFWS	Jan Rumble	ADFG	
Dana Hanselman	AFSC ABL	Craig Faunce	AFSC FMA	
Vacant	WDFW	Ian Stewart	IPHC	
-		Vacant	WDFW	

^{*} absent

Administration

The Team reviewed the meeting agenda, noted timing changes to the agenda, and assigned minutes for the first day. The GOA Team noted a modification in the order of presentations and the BSAI Team added the octopus presentation after the squid presentation.

Diana Stram provided a brief update on Council staff's use of the Granicus system (in use by the Council currently) as a place to upload all Powerpoint presentations and help facilitate dissemination of these during the meeting for use in writing minutes and summaries by Team members. Links to the assessments are also posted there to facilitate downloading documents to ipads. The REFM site will maintain the SAFE report through the various drafting stages: 1) the chapters drafted for this meeting; 2) post Plan Team drafts including the introduction and summary section prepared by the the Teams for SSC/Council consideration, and 3) the final SAFE report that is accepted by the SSC/Council.

The Teams noted additions and modifications to the agenda. The Teams welcomed new GOA Plan Team member Jim Armstrong (NPFMC staff).

Terms of reference

The Teams reviewed their Terms of Reference and made minor changes to reflect the timing of the fall Plan Team and Council meeting. The Teams indicated officers would be reviewed annually at the September meeting and review terms of reference in even years. The terms of reference for Council Plan Teams are posted on the Council's website.

Research priorities

Diana Stram provided the Teams with an overview of the subgroup's progress on revising research priorities and requested Team input on applicable examples to frame the prioritization into the definitions provided by the Council/SSC at the October meeting. The Teams discussed some of the proposed examples from the subgroup to help establish the best example for the second highest category "urgent" in the new definitions with 'critical on-going monitoring' being the highest. The Teams concurred with the subgroup that once 'urgent' was appropriately understood as a prioritization that the other categories below it would be easier for placing specific research priorities. Individual Teams were requested to provide Diana input to existing (or new) research priorities during the course of assessment review and a checklist for information to include was sent out. The subgroup will reconvene after the Plan Team meetings are concluded and review/fill in new research priorities, revise according to Team suggestions and prioritize based on examples. The report of all the changes will be emailed to the Joint Teams for review and comment. The SSC will take this up in February.

Team procedures

Grant Thompson reported on suggested formats for writing Team summaries including:

- 1. If a rapporteur is unsure what the Team's recommendation was, including uncertainty as to whether any recommendation was made in the first place, it is better to include a comment to this effect than to hide a pseudo-recommendation in the text by using language such as "the Team suggests" or "the Team agreed that authors should" (as opposed to the established format for Team recommendations).
- 2. Edits should reflect the Team's discussion
- 3. Suggestions for how to write SAFE Intro summaries under the current process: Use standard subheadings (in the same order for each stock):
 - o Changes from previous assessment

Distinguish between those items that have an impact on reference points or specifications from those that are presented for information only (alternatively, the latter items may be omitted entirely)

o Spawning biomass and stock status trends

Mention something about spawning biomass if the stock is managed under Tiers 1-3 Discussion of recruitment strengths under this subheading is also useful for stocks managed under Tiers 1-3, as it helps to explain the described trends

- o Tier determination/Plan Team discussion and resulting ABCs and OFLs
- o Status determination
- o Ecosystem considerations (this one is optional)

If assessment authors change their estimates of reference points or specifications so that they differ from the values in the chapter that the Team was provided, summary writers should include a comment to that effect in the initial draft of the Intro.

In general, but especially for "off-year" assessments, the amount of text should be roughly proportional to the amount of new information or degree of controversy in the assessment (as opposed to, e.g., making the amount of text proportional to the particular summary writer's personal interest in the particular stock)

The fact that a sentence may have been important in some previous year's summary does not mean that it must be retained for all time (e.g., if a stock was split from a complex, this fact probably does not need to be mentioned once the first year of split management scrolls off the top of the summary table).

For off-year assessments of stocks managed under Tier 3, make sure to distinguish between the *assessment* model and the *projection* model (e.g., do not say, "The model was re-run...").

Change the "Spawning biomass and stock status trends" subheading by deleting the word "status," so as not to confuse this subheading with the "Status determination" subheading.

The Teams recommend that the first recommendation under "Team procedures" in the September 2014 minutes be amended by striking the last seven words, so that the fourth bullet reads, "In the event that a document is revised prior to its presentation at the meeting, the author must provide the Team(s) with an efficient means of identifying which tables, figures, or pieces of text have been revised (e.g., use of redline/strikeout format, or a written description or list of changes)."

Observer Program Annual Deployment Plan Update

Craig Faunce of the North Pacific Observer Program at AFSC presented a summary of the 2015 Observer Annual Deployment Plan (ADP). The ADP was presented at the October 2014 Council meeting. The purpose of the presentation to the Plan Teams was to ensure that the Teams understand the impact of the ADP on data flows for different fleets and species. The main change for 2015 is that deployment on small vessels is now also trip-based.

Like previous ADPs, the 2015 ADP assigns vessels into one of 3 categories – 1) full coverage, 2) large-vessel partial coverage (catcher vessels >57.5 ft LOA and all trawl vessels not in #1), and 3) small-vessel partial coverage (catcher vessels between 40 and 57 ft LOA). Boats using jig gear or boats under 40' in length are not observed under this or previous ADPs.

In 2013 and 2014, observers were deployed into fishing activities in the small-vessel group according to "vessel selection". Vessels were selected to be observed for 2-month periods. In 2015 the ADP will utilize the same selection protocol for all partial coverage vessels: "trip selection." Under trip-selection, all vessels in partial coverage must declare their planned fishing trips in the Observer Declare and Deploy System (ODDS) – website odds.afsc.noaa.gov. The selection probabilities for the partial coverage vessels are approximately 12% for small-vessels and 24% for large-vessels.

Vessels can be released from observer responsibility for several reasons, with 9 vessels granted "conditional releases" because they participate in electronic monitoring programs, and the potential for 62 vessels if they have a history of taking 4-POB, including the vessel's master, and have a 4-person capacity life rafts. This could amount to 16% of this class of vessels, resulting in a drop in the expected rate of coverage for the small-vessel trip selection group from 12% of trips to 10% of trips.

Under the 2015 ADP, there is a high likelihood that vessels in the small-vessel partial coverage category using pot or hook-and-line gear may not be observed in some NMFS areas in the Bering Sea because of low fishing effort and the observer coverage levels in this class of vessels.

One challenge for the Observer Program is "tender deliveries", when a vessel offloads to a tender vessel and returns to port to begin a new fishing trip. Fishing trip definitions allow a vessel to deliver multiple loads to a tender as one fishing trip. The Council is investigating this topic and has requested further analysis in discussion papers.

Craig added some information for the Teams on the current 2014 trip-selection performance. He noted that the Observer Program is currently within 10% of the 2014 ADP goal/estimate of 4,718 days observed made in December 2013. With several weeks of fishing remaining in 2014, the Observer Program feels that their original forecast was very good. (In 2013, the Observer Program adjusted the deployment rate downward to ensure that they did not exceed their forecast, but this was not done in 2014 and the annual target is still being met.)

Julie Bonney asked if the Observer Program could make the ODDS system more user-friendly and mentioned that it can be challenging to reconcile fish tickets and trips. Craig noted that they have made changes to ODDS in version 1.4 to make it more user-friendly. Julie noted that people should know the upcoming outreach meetings will discuss ODDS improvements. Craig noted that Glenn Campbell from the Observer Program is also at the Marine Expo this week with a working version of the updated ODDS software and these changes are a part of several outreach meetings scheduled in coming weeks.

Stock structure and spatial management policy

Grant Thompson presented an update on recent Team and SSC comments regarding stock structure. He reviewed two "scales of concern:" 1) a three-level scale, which was adopted for provisional use by the BSAI Team in September 2013; and 2) a four-level scale (shown below), which was discussed but not adopted by the Joint Teams in November 2013, but which was used at the same meeting by the BSAI Team.

The Teams recommend that the following scale of concern be adopted in the context of the Council's stock structure and spatial management policy (with the understanding that all actions described here would be contingent on SSC concurrence):

- 1. Little or no concern, in which case no action needs to be taken
- 2. *Moderate concern*, in which case special monitoring (e.g., frequent updating of the template) is required at a minimum and Steps 2 and 3 of the Council's process may be activated
- 3. Strong concern, in which case Steps 2 and 3 of the Council's process must be activated
- 4. *Emergency*, in which case the Team will recommend separate harvest specifications at the ABC level, the OFL level, or both, for the next season (straight to Step 4 of the Council policy)

In October of this year, the SSC requested that the Teams assign a level of concern to all stocks for which the stock structure template has already been completed.

The Teams recommend assigning the following levels of concern to stocks for which the stock structure template has already been completed (shaded cells indicate levels established at this meeting):

FMP	Chapter	Stock	Author	Level
BSAI	1A	AI pollock	Barbeaux	Little
BSAI	2	BS Pacific cod	Thompson	Little
BSAI	4	Yellowfin sole	Wilderbuer	Little
BSAI	6	Arrowtooth flounder	Spies	Little
BSAI	13	Northern rockfish	Spencer	Little
BSAI	14	Blackspotted/rougheye rockfish	Spencer	Strong
BSAI	15	Shortraker rockfish	Spencer	Moderate
BSAI	16	Other rockfish	Spies	Moderate
BSAI	17	Atka mackerel	Lowe	Little
BSAI	18	Skates	Ormseth	Little
BSAI	21	Sharks	Tribuzio	Little
GOA	1	Pollock	Dorn	Little
GOA	7	Arrowtooth flounder	Spies	Little
GOA	9	Pacific ocean perch	Hanselman	Little
GOA	12	Dusky rockfish	Lunsford	Little
GOA	13	Rougheye/blackspotted rockfish	Shotwell	Little
GOA	17	Atka mackerel	Lowe	Little
GOA	18	Skates	Ormseth	Strong
GOA	20	Sharks	Tribuzio	Little

The Teams noted that, in some cases, "little" concern was identified in part because sufficient data were lacking to indicate otherwise.

In October 2014, the SSC also made the following recommendation:

"The SSC recommends that the current stock structure policy include a requirement for a recommended maximum area specific catch level when a stock or stock complex is elevated to the level of 'concern.' This would provide a clear guide to industry regarding what reductions in catch would be needed to alleviate the 'concern.' This area specific catch level would likely be estimated by the assessment author with review and comment by the Plan Teams and SSC."

The above request was prompted by the case of BSAI blackspotted/rougheye, in which the fishing fleet expressed an interest in voluntarily taking steps for reducing incidental catch in the WAI for 2014, but a WAI ABC had not been adopted. In fall of 2013, a representative of the fishing fleet obtained an unofficial potential WAI catch level directly from the assessment author, and interpreted this number as a *de facto* ABC to guide fishing operations. Team members felt that it is laudable for the fishing industry to have taken steps to reduce catch. However, the process followed in 2013 resulted in a recommended harvest level that was not scientifically reviewed and was inaccessible to the general public.

The Teams noted that, since the policy in question is a Council policy, it will be up to the Council to consider the SSC's request for an amendment to that policy. However, the Teams did discuss some features that such an amendment might include.

The Teams recommend that any suggested subarea catch level be reviewed by the respective Team, be obtained in a transparent process, and be accessible to the public so that progress in meeting management goals can be easily monitored. The term "maximum subarea species catch" was proposed as a label for subarea harvest recommendations that are not included in the OFL/ABC specifications.

The Teams also noted that several of the outstanding issues and questions of clarification identified at the November 2013 Joint Team meeting do not appear to have been addressed.

The Teams recommend that the following outstanding issues and questions of clarification be forwarded to the appropriate body (SSC, Council, or both):

- Does the Council's policy apply only to spatial structure, or does it also apply to stock structure? For example, does it apply to the process of splitting a stock out from a complex, or only to spatial management of the complex?
- Need for specific guidance on the role of the Teams.
- Need for a proactive default policy that covers both of the following cases: 1) data are insufficient to determine whether a biological concern exists, and 2) sufficient data exist to make such a determination but time or other resource constraints are anticipated to prevent those data from being analyzed for several years.
- Clarification of whether the current inconsistencies in spatial management between the two FMP areas that were summarized by the Stock Structure Working Group should be further examined or revised (and to whom such a charge would be assigned).
- How much time is allowed for acceptance (by the Council or SSC) of an industry response to a management concern?
- What is the relationship between evidence of stock structure and degree of concern? Two possibilities have been discussed: 1) degree of concern is synonymous with strength of evidence of stock structure, and 2) degree of concern is a function of both the strength of evidence of stock structure and the extent to which the fishery is impacting that structure.

Economic SAFE report

Ron Felthoven and Ben Fissel of AFSC presented the Economic Stock Assessment and Fishery Evaluation (SAFE) report to the Joint Plan Team. Ron Felthoven provided an overview of the document, new elements, planned new work, and on-going research efforts by the Economics and Social Sciences Research Program. Ron mentioned that many people contributed to the report, although Ben and Jean Lee of AKFIN have done the lion's share of the work.

New for 2014 is a section providing price predictions and nowcasts for seafood products for 2014-2016 based on COAR data through 2013 and conditional on U.S. export data through the first half of 2014. Also new is additional information on the halibut fishery. In supplementary tables, data are also presented in different formats (e.g., breakouts by rockfish species). The Econ SAFE also includes updates on several sections introduced in last year's report: data from the National Catch Shares Report for Alaska catch share fisheries and information for 2008-2013 from the Amendment 80 economic data report (EDR).

Ben Fissel presented updated changes in index share across the GOA and BSAI for ex-vessel and wholesale markets for catcher vessels and catcher processors. These indices provide insight into: 1) how product value is changing from year to year; and 2) to what degree changes in price versus quantity impacted the change in value.

In the November 2013 Joint Plan Team meeting, the Teams discussed whether it would be helpful to include information from the Economic SAFE Report in individual stock assessments. At that point, the Teams recommended that this discussion be continued at the September 2014 meeting, The Teams also noted that it may be helpful to compare how information from the Ecosystem Considerations section is included in individual stock assessments, but did not take this up.

The Teams again recommend that we more formally discuss how economics should be incorporated into individual stock assessments at the September 2015 meeting.

Sablefish

Dana Hanselman presented the sablefish assessment. New data included updated catch from 2005-2013, new 2014-2016 estimates for projections, relative abundance data from the 2014 longline survey and 2013 longline fishery, ages from the 2013 longline survey and 2013 fixed gear fishery, and lengths from the 2014 longline survey and the 2013 fixed gear and trawl fisheries. There were no changes to the assessment model. Some selected SSC and Plan Team comments were addressed in the presentation. Updated catches included an increase of about 1,500 t in the fixed gear fishery for the period 2006-2012; this update resulted in some changes to the retrospective analyses. The longline survey index had been declining since 2011, but showed a 15% increase from 2013 to 2014, largely in the central and western GOA. The IFQ fishery index has been on a sharp decline since 2008 (-13% in 2013). The GOA trawl fishery has shown a moderate declining trend since 2006.

Killer whale depredation was up in the Bering Sea and down in the Aleutian Islands. Sperm whale depredation was similar to the past few years. Sensitivity analyses show that including depredation results in an increase in the ABC. The problem then becomes how to account for that mortality in the fishery. Sperm whale expansion indices differ by area and ranged from 10-11% at the west Yakutat slope to about 1% for the NW and NE Aleutian slope, where sperm whales were observed for the first time. Overall expansion was 6% in 2011, 2-3% in 2012-2014.

Longline survey RPNs were up in the western and eastern GOA, Bering Sea, and the Aleutian Islands; little changed in the central GOA. Model fit to the longline survey index was trending down despite an increased survey estimate. The longline survey ages indicated the 2008 year class was average and not as strong as hoped for. The year class strength differed by area, being strongest in the western GOA/AI/BS. The model fits to the survey ages were relatively good, while fits to survey lengths were better for males than females. Weighted average CPUEs for all areas showed significant drops in recent years. Model fit to the domestic fishery RPW followed a fast decline. Fits to all area fishery ages were not as good for 2013 as previous years, especially for the plus group (age > 30). The probable cause was more than 60% of the fish from the western Aleutians being in the plus group, an area that is not surveyed, resulting in the poor model fit to the data. The discrepancy involved few boats and warrants further investigation. Other indices, (the gullies, the Aleutian Island survey, and the IPHC survey) show the same general trend of decreased CPUE.

Results from the model indicate decreases in total and spawning biomasses. Ten-year retrospective analyses show improvement since 2013 due to the additional 2005-2010 catch data and the exclusion of the 2003 data from the analysis. The revised Mohn's Rho decreased from 0.11 to 0.019. For recruitment, 1997, 2000, and 2008 are the largest in recent years, but 2008 has turned out to be about average. There are anecdotal reports of young of the year sablefish in surveys, but these won't be seen in the fishery for a few years. Spawners by year class indicate that 2008 accounts for about 10% of the spawning biomass, which is still dominated by the 2000 year class at about 16%. The 2015 biomass is projected to be at B_{35%}. The longline survey had a small rebound from a time series low in 2013. and that low was confirmed by the 2013 fishery CPUE index; the stock is at 35% of unfished spawning biomass; 2014 ABC was 13,722 t and the 2015 ABC is 13,657 t (12,400 t was projected); future projection is declining for several years.

Dana presented the ABC apportionment for 2015. The goals of apportionment are to take into account actual changes in the population distribution and reduce interannual variability in area ABCs. Two options are to 1) use the most recent survey and fishery CPUE distributions, or 2) use a 5-year exponential-like average. The current apportionment scheme (5-year exponential average) has become too volatile and changes in apportionment are probably too large to reflect actual distributional shifts. Also, the approach does not take into account measurement error and this can lead to very rapid changes in some area apportionments, which leads to large swings in apportionments. A third option is to go with the model ABC using the fixed standard apportionment that was used in 2013 and 2014. The author

recommends continuing with the fixed apportionment. This is an interim measure to smooth out ABC variability. Small changes in the apportionment for sablefish are not a biological concern. There is a PhD project with UAF to do a management strategy evaluation of apportionment strategies to maximize spawning biomass, minimize volatility, and consider economic yield. Hopefully this will provide guidance by September 2016.

The future will see continued use of the current assessment model while analyses are conducted on apportionment, a spatial model, estimating mortality of depredation in the fishery, recruitment processes (GOAIERP), and species-specific ecosystem considerations. Existing research priorities include apportionment, depredation, and recruitment processes.

Grenadiers

Pete Hulson presented an update of the grenadier stock assessment. Grenadiers are now in both FMPs as Ecosystem Component species. New data in the abbreviated assessment presented this year included updated catch, updated estimation of Aleutian Islands biomass, and updated longline survey results. In addition, use of the random effects model for estimation of biomass is new for the Gulf of Alaska. Unofficial Tier 5 values for ABC and OFL are substantially greater than current catches.

The Teams recommended that an abbreviated assessment be produced every other year (even years) for both regions (BSAI, GOA).