Crab Plan Team Report

The Crab Plan Team convened their Spring meeting from May 16-18th at the Alaska Fisheries Science Center in Seattle, WA. Members present included the following:

Forrest Bowers (ADF&G-Dutch Harbor), Chair
Ginny Eckert (UAF/UAS), Vice-Chair
Diana Stram (NPFMC)
Doug Pengilly (ADF&G-Kodiak)
Gretchen Harrington (NMFS–Juneau)
Wayne Donaldson(ADF&G-Kodiak)
Jack Turnock (NMFS/AFSC-Seattle)
Joshua Greenberg (UAF)
Shareef Siddeek (ADF&G-Juneau)
Herman Savikko (ADF&G-Juneau)

Lou Rugolo (NMFS/AFSC-Kodiak) was absent.

Members of the public (and state and agency staff) present for all or part of the meeting included: Pat Livingston (AFSC/NMFS), Anne Hollowed (AFSC/NMFS), Keith Colburn, Doug Wells, Dave Barnard (ADF&G-Kodiak), Arni Thomson, Gordon Kristjansin, Ed Poulson, Dave Benson, Kevin Kaldestad, Steve Hughes, Jie Zheng (ADF&G-Juneau), Jack Tagart, Phil Hanson, Frank Kelty, Braxton Dew (AFSC/NMFS), Doug Woodby (ADF&G-Juneau), Mike Bell (CIE)

The agenda for the meeting is attached. Changes to the agenda included removal of the industry review of the snow crab assessment, rearranging agenda items for scheduling purposes on the morning of May 18th (Norton Sound assessment and State/Federal action plan), and adding approval of the minutes to the membership issues agenda item. The agenda was then approved with these changes.

Membership Issues

Forrest Bowers (formerly Vice Chair) replaced Bob Otto as Chair of the Crab Plan Team. Ginny Eckert was elected as Vice Chair. The team discussed the terms of reference section regarding the two-year succession of chairmanship and the possibility that this should be revised to allow some flexibility on an annual basis. The team decided to revisit the terms of reference at their meeting in September.

The team noted the continued need to add additional expertise to the plan team. It was noted that when the position to replace Bob Otto in Kodiak is filled this person will also sit on the plan team and should have considerable expertise to add to the team makeup. Additional biological and stock assessment expertise is desirable. The team formed a committee to work on soliciting ideas and personnel for potential membership on the plan team. The committee consists of Doug Pengilly, Ginny Eckert and Diana Stram. The search committee will report back to the CPT in September and hope to have additional membership on the team for approval at the December Council meeting.

The team approved the revised minutes from the September 2005 CPT meeting. These minutes will now be posted on the Council's website.

Review of 2005/2006 Fisheries

Forrest Bowers provided the team an overview of the 2005/2006 crab fisheries. This is the first season that the fishery has been prosecuted under rationalization.

Red King Crab:
Forrest noted that there was a general decline in catch rates over the time period of the fishery and a general westerly shift in harvest from the 2003/2004 fishery.

Snow crab:
2005/2006 had the highest GHL/TAC in recent years. The fishery was still open and it appeared unlikely that the fishery would harvest the entire TAC. Snow crab on average had the highest weight in recent years. Pot limits were noted to have been liberalized last year. Jack Turnock questioned the observed drop in CPUE regarding to what extent this could represent a possible vessel effect. Other questions from the team involved why the fleet did not begin fishing before January and whether a CPUE decline is an indication of less crab. Forrest noted that the start date was likely market driven this year. There was limited interest in fishing for snow crab before January between the red king crab season ending in December and the Pacific cod fishing season in January.

The team discussed the different indication that CPUE provides under a rationalized fishery. Reductions in CPUE are related to the availability of crab (in the absence of an Olympic fishery it can be harder to locate crab), the amount of IFQ available by vessel and an increase in the diversity of operations. The fleet is less homogenous now.

Members of the public commented that fishermen are actually more likely to share information now under rationalization and that the graph of CPUE is directly related to effort. Some public noted that fishermen going after traditional grounds might have affected their CPUE, as well as an icing event in January that moved fishermen off productive grounds and impacted fleet behavior during that time period.

Some preliminary graphs of the distribution of the fishery showed no fishing west of St. Matthew and more effort concentrated southeast of the Pribilofs. Members of the public commented that it was not possible to fish in the northwest this year due to weather and ice cover but this area is still of interest to the fleet.

Tanner crab:
This is the first time this fishery has been open (western section only) since 1996. There was a notably high deadloss in the fishery. Forrest noted that there was limited indication that this was due to highgrading but more sublegal sized crabs were observed than normal. There were no instances of bitter crab syndrome observed. Low catch rates were attributed to the fleet's lack of knowledge of the closing date for the fishery since it was the first time it had been open since 1996. Members of the public noted that this will not happen again next year.

Aleutian Islands Golden King Crab:
This fishery has the highest catch rate. Harvest by location was slightly more compressed in 2005/06 particularly in the western AI. Wayne Donaldson noted that the fleet appears to be fishing in the same areas but the relative harvest from those areas has changed.

Norton Sound Red King Crab:
These crab are notably smaller than Bristol Bay red king crab but have a decent market price. The fleet is smaller and is a more local Norton Sound area-based fleet. The fishery occurs over the summer. Braxton Dew noted the increased deadloss for red king crab. Forrest replied that because the fishery is prosecuted as a single trip there is often a considerable waiting period to offload catch resulting in high deadlosses.

Review of 2005/06 Bristol Bay red king crab bycatch data

Dave Barnard (ADF&G) presented an overview of a recent report on bycatch in the 2005/06 Bristol Bay red king crab fishery (Barnard and Pengilly 2006). This report was distributed to plan team members prior to the meeting and copies were available at the meeting for the public as well.

The team discussed the increase in soak times in the fishery under rationalization and the indication that shell condition rather than size of crab seems to influence retention rates. Observations indicated a higher number of new shell crabs in delivery than in sampled pot lifts. Very old shell crab appear less likely to be delivered.

Members of the public questioned how increased trends in apparent highgrading might influence TAC estimates for next year. Doug Pengilly noted that the harvest strategy assumes a 20% handling mortality. Additional considerations in the harvest strategy are that discards include crabs other than legal males and that additional effort is being expended to catch the TAC which increases bycatch. Forrest Bowers reiterated that these data are still preliminary and the department has not yet made any decisions on how best to evaluate and incorporate these results.

Lance noted that PNCIAC will be meeting next week to discuss the industry concerns with observed evidence of highgrading and how best to discourage this practice. Keith Colburn noted the need to track bycatch relative to the survey trends. Phil noted that if PNCIAC were to offer suggestions that they would need some degree of confidence in the summer survey estimates for sorting based upon projections from the survey. He questioned how well estimates of 20% highgrading (of old shell and very old shell) in addition to industry's 20% corresponds to the survey estimate. Forrest Bowers noted that the survey estimate is roughly 40% but that this should be taken as a conservative estimate. Doug Pengilly noted that it is unclear how well the observer cataloguing of shell condition corresponds to processor grading.
Kevin commented that similar to the evolution of understanding in prosecuting the CDQ fishery, the general fishery can be educated to reduce the amount of highgrading in subsequent years. This year may not be the best indication of how the fleet will operate in years to come. Ed Poulson noted that the industry needs to move towards full retention and to deal with this pressing issue of discarding of legal crab. He noted that by the end of the season most crabs had been picked over. Keith concurred that there were indications that areas had been picked over multiple times and discards were likely discarded more than once. He noted that some members of the fleet tried to fish outside of the high CPUE areas specifically to avoid that.

Dave Barnard noted that similar data are not yet available for the 2005/06 Tanner or snow crab fisheries but that data will be available for stock assessments in August with a full report on those fisheries possible by November.

Trawl survey overview

Bob Lauth (AFSC/NMFS) provided the team with an overview of the 2005 survey, with specific emphasis on the problems encountered last year with the survey and the means by which they are working to eliminate these issues in the future. The team greatly appreciated the presentation by Dr. Lauth and would greatly benefit by a similar presentation following the 2006 survey (i.e. for the September 2006 plan team meeting).

Braxton Dew commented that the current methodology for evaluating hot spots and the stratification protocol (i.e. a 5 station average surrounding the hot spot) may bias the estimate low. He solicited comments from the team on to what extent this should not be considered adaptive sampling.

Doug Pengilly commented that it is representative of an adaptive sampling protocol, but is not post-stratification sampling which would imply an optimal sampling design. Jack Turnock commented that is represents a form of incomplete adaptive sampling because the protocol is to sample 5 stations rather than to continue to sample stations until the criteria you are trying to meet in the sample has run out. The team

commented that this is a concern that could possibly be addressed by the survey design group in future surveys.

Snow crab assessment review

Jack Turnock presented an overview of his 2005 snow crab assessment (appendix A to the 2005 Crab SAFE report).

Siddeek requested if he had evaluated the comment from the crab overfishing workshop regarding the Bmsy values outside of the data range. Jack noted that he had no answer for that but that given that the stock was declining at the beginning of the model due to previously low recruitment, he constrained the steepness parameter to be close to the red king crab spawner recruit curve and then estimated Bmsy and Fmsy.

The team discussed that use of the model would serve to damp down the observed variation in survey estimates (both high and low). Doug Pengilly requested to what extent 1985 and 1986 survey years are influencing the estimates. Jack noted that he could look at downweighting these years to evaluate how they are influencing the results. Siddeek commented that adding age-structure to the length-based model would allow for better fits in general. Jack noted that he has added structure to track the age of the animals in the model but that it is not truly age-based due to a lack of sufficient data.

Comments on the model:

- Need to do sensitivity analysis for which parameters are most influencing model results
- Industry concerns with model results and growth increments at later maturity stages. Similar results (accumulation of smaller crab) not observed on the grounds. Industry concerned with yield forecast is model is adopted.
- Concerns voiced form public that model proxies(ie shell condition) may be mis-specified
- Concern that model structure and parameters change radically from one year to the next
- Concern that plan team does not have enough information to evaluate to what extent this is an adequate model, some more technical review body should advise on this. It was noted that while a CIE review did occur, it was several years ago and the model has changed substantially since that time.

The team would like to see a formal documentation of issues of concern with the model and how they are addressed by the authors on an annual basis (e.g. similar to the groundfish assessments treatment of SSC comments). This documentation should include comments by the public, the crab plan team and the SSC as necessary.

The team discussed the need to comment on adoption of the model but felt that their role was advisory in nature and not definitive in the choice of model adoption. This was noted to be for the discretion of the SSC and NMFS. The team is concerned that the assessment includes far more information than just biomass estimates and is unclear how this information will be treated (e.g., biological reference points) if the model is adopted. Given that OF definitions are still under development, whereas biomass and abundance estimates will be needed for TAC determination in fall 2006, the team suggested that the SSC's review of and input on the model concentrate on its use for estimating biomass and abundance needed for determination of the TAC in fall 2006..

Crab overfishing analysis

Preliminary results from the workgroup

The team received an update from members of the inter-agency workgroup on their progress in the analysis to revise the crab overfishing definitions and discussed recent workshops and reviews that have occurred in conjunction with the analysis. Diana Stram provided an overview of the recent workshop held in February to

assist the workgroup in some issues of concerns with respect to the analysis and an overview of the workshop report. Copies of the report were provided to the team. The report was presented to the SSC at the April Council meeting.

Jie Zheng provided an overview of the previous crab tier system and the new proposed tier system (revised at the crab workshop). Siddeek presented some preliminary analysis of reference point results for red king crab. He highlighted where suggestions from the workshop were incorporated into the analysis. The team discussed the results showing a dramatic decrease in Fmsy when the mating ratio used decreased from 1:3 to 1:2. The team discussed molting and mating ratios and the problems inherent with their specification in modeling.

The team discussed the changes in fishing period due to rationalization and how this was parameterized in the mode. Siddeek noted that it is considered in the model (length of fishing period) but has limited effect on results. The discussion noted that there should be some effect seen of the handling mortality and natural mortality over the longer time period considered but the model does not indicate any effect at present.

Jack Turnock presented preliminary results of simulations for red king crab and snow crab. The team noted that the results are widely varying for the same stocks between Siddeek and Jie's work and Jack and Lou's work and requested clarification on where these two analyses differ in parameterization and what is driving the observed large differences in results.

Jack summarized how spawning biomass estimated in his model, using female spawning biomass for snow crab and a mating ratio of 1.7. Siddeek's mating ratio is higher than this. Jack's analysis includes an estimation for male spawning biomass. Siddeek is using a different assumption for males available for mating. For red king crab, Siddeek splits primiparous and multiparous to estimate how many crabs available for mating. Jack is using mating ratio of 2.1 for red king crab (ratio mature females to non-molting males) as a default value. Siddeek noted that for snow crab the mating ratio is 1.2 in his analysis and he used total effective spawning biomass. The main difference in the two snow crab analyses is in the discount rate for primiparous. Female natural mortality is higher than male natural mortality. The formulation of Fmsy at time of fishing also different between model simulations.

Team members commented that it was not clear from Jack's analysis where and by what means recommendations from the workshop were incorporated. There appear to be too many differences in the approaches by both groups to evaluate the impact of the analysis. Many differences in parameterization remain. Spawning biomass calculation remains a large difference between the two approaches. Noting that the CIE review will shed light on these differences and issues in need of resolution the team deferred further discussion of these issues to that time.

The team noted however that these differences in approaches are all possible under the same tier framework and makes it difficult to evaluate the impact of choosing this framework. Are these sensitivity analyses or competing approaches for how to adopt the framework? The team discussed the necessity of clarifying the review process that is presumed to go along with the annual OFL determination as it will prove critical in determining what approach is used under the adopted tier system. Currently there is no documentation of by what means the tier system will be adopted and the review process that will accompany this. This documentation will be included in the EA analysis and will form part of the description of the alternative, but would also be useful in advance to team members and the public in order to better understand how a new tier system will be implemented.

The initial tier review process envisioned conceptually included the SSC and the Council process for determining appropriate tier levels and OFLs on an annual basis. However for crab stocks the timing of the fall Council meeting precludes the ability to set OFLs at that meeting as TACs have already been established.

The team discussed the problems with timing and the ability to set OFLS in the spring prior to the survey and TAC setting occurring in the fall. Discussion focused upon the inherent problems with this approach in terms of utilizing older data as well as the potential market impacts from establishing an OFL in May/June and a TAC in September/October. The team noted that a frameworking process for crab may not match as well as groundfish does with the Council process.

A suggestion was put forward to modify the timing to evaluate a process whereby the framework and models are evaluated in May/June with review and decisions on parameterization and tier levels made by the SSC at that point, and OFLs subsequently established following the incorporation of new information from the survey by September. OFLs and TACs would then, under this process, be announced to the Council in October.

The team decided to recommend (for the EA) looking at two alternative processes for the implementation and review process. The first alternative would be to establish OFLs in May/June (CPT and SSC recommendations) using data from the previous year and establishing them at the Council meeting in June. The second alternative would be to evaluate the framework and agree upon parameterization and tier levels in May/June with OFLs subsequently established following the survey information in September. The pros and cons of both alternatives would be discussed in the EA. Diana and Gretchen volunteered to write up a documentation of these two options for the process of determining OFLs for the fall CPT meeting for distribution to the team and discussion thereof in conjunction with the review at that time of the overfishing analysis.

Center for Independent Experts (CIE) Review
Mike Bell of the CIE provided an overview to the team of the CIE review of the preliminary analysis. This review was conducted April 24-28 at the AFSC, Seattle. The final report from this review will be available June 1st. He noted that this will include 3 separate reports, one from each reviewer, and that no consensus on issues is required by the CIE for the reviewers in their individual reports. His oral report to the team contained preliminary findings only as the final reports were not yet available. Discussion with the CPT at this time however would also serve to provide additional input to the reviewers on their findings prior to finalizing their report for June.

He noted that the CIE recognizes the excellence of the scientific approach and expertise involved in work product thus far. The criticisms in the review are intended as constructive improvements to the analysis.

Team members questioned Dr. Bell regarding some of the report recommendations. One topic was the calculation of fertilized egg production. It was noted that survey information is not always informative on an annual basis as to fertilized egg production. Some years it would be possible but could not be done reliably every year. The relationship between total egg production and total fertilized egg production was also noted to be complicated and potentially variable between years.

Note that given the preliminary nature of the CIE report a synopsis of the presentation is not included here. The full report will contain all the details.

CPT discussion of results and recommendation for moving forward:
The team remains uncomfortable with the amount of uncertainty inherent in the current approach. Default values are not specified and can be highly variable depending upon the assessment author's choices. Implementation of the framework may be difficult. The CPT requests input from the SSC regarding their comfort level with the ability to implement this framework given the current amount of uncertainty and choices left to the discussion of the stock assessment authors (*Note this also goes back to the discussion of the review process and implementation of tier system previously*). The ability to move forward with an amendment analysis would be difficult given the current uncertainty in the analysis.

The ability of the workgroup to resolve default values for analytical purposes was discussed. Workgroup members commented that they did not believe they would come to agreement within themselves regarding establishing default values. The group has not met together since summer 2005. They have not been able to come to agreement on F and B values for base cases in the analyses.

The team requested clarification from the workgroup on how they planned to incorporate the recommendations from the workshop, CPT, CIE and SSC into the analysis. Members of the workgroup did not feel that they would be able to unilaterally incorporate recommendations from these bodies into their analyses as a group without some outside assistance (i.e. facilitator) to resolve pertinent issues among them. If the group were to meet as a whole with a facilitator to discuss how to incorporate these recommendations, the CPT would like to see a schedule brought forward following that meeting on timing for incorporation of these suggestions and a realistic timeline for completion of the analysis. A suggestion of timing would be to meet as a group (possibly with a facilitator) in July and following this have the analysis completed in time for a review by the CPT at the September plan team meeting. Some suggestions were made regarding potential facilitators who could meet with the workgroup and assist them in resolving these differences. The person should be a modeler preferably with a shellfish biology background.

Should this suggested schedule be followed (meeting in July, completion of analysis by September), the CPT further specifies that there be one single presentation to the team in September as indicative of the demonstrated coordination within the group. The CPT recommends that with additional information in front of them in September, regarding the analysis as well as further clarification and discussion of the alternative processes for OFL determination, they would be better able to discuss timing for initial review of the analysis and subsequently convey this information to the Council in October.

Economic review of crab fisheries data from crab rationalization program

Ron Felthoven (AFSC/NMFS) provided the team an overview of the types of data collection and reports to come in the future from the review of the crab rationalization program. He noted that an annual report from RAM will be produced in October 2006, an 18 month program report to the Council in February 2007 (and 3 and 5 year reports to follow). The AFSC is planning to work on a social impact analysis for the 3 and 5 year reports. He noted that while some of the pre-rationalization data will be analyzed in the February report it may not be possible to compare this with post-rationalization data by that point.

The team noted that it is their intent to expand upon the economic section in future SAFE reports. Some of the information which could be included, within the restrictions of confidentiality, could be summaries of some of the data to be collection on consolidation.

The team greatly appreciated the report by Dr. Felthoven.

Review of stock assessment models

Jie Zheng presented an overview of the Norton Sound red king crab assessment.
Team members questioned the tagging data available and why this was not used to estimate natural mortality. Jie noted that this data is useful for growth but not for mortality. The utility of using CPUE from the winter survey was also questioned. It appeared inconsistent to utilize the length composition data from that survey but not the CPUE data as well.

A summary of stock status overview was provided. It was noted that retained catch in this fishery does not include discards. There are no observers in the fishery and thus limited information available on discards. Recent harvests have been above the harvest rate. A recruitment spike was noted in the length frequency

data from the 2003 fishery. Abundance estimates are uncertain due to a lack of survey data. The last survey was completed in 2002. Estimated legal abundance declined in 2006.

Forrest Bowers noted that Norton Sound was excluded from crab rationalization. Recent BOF actions modified the Norton Sound section to include all of the St. Lawrence Island section so the GHL applied to a larger area than previously. Managers are not sure if outside areas will be fished due to the prevalence in the fishery of smaller vessels and the super exclusive zone.

It was suggested to try running the model with and without different data sets (e.g. CPUE and survey data separately) to evaluate the impact on stock status. This could give an indication of how influential the winter length data versus the fishery CPUE are in determining stock status changes.

Jie Zheng gave an overview of his Bristol Bay research model. This model was initially utilized to evaluate survey catchability, bycatch and "red bag" issues. This model has been presented previously to the crab workshop and to the CIE for their review.

Siddeek presented an overview of the Aleutian Islands golden king crab assessment.
This analysis was presented at the AFS meeting in 2005. It has not been updated since that time.

Questions were posed regarding the observed increase in the eastern CPUE. It was noted that there have been no changes in fishing practices or locations since 1996, although the general number of pots per vessel has increased. Members of the public noted that the move to a different gear configuration whereby more legal (and less smaller sized) crabs are retained might have impacted the CPUE accordingly.

The fishery has a high discard rate (3 of 4) because the majority of the catch is females and sublegal males. The model uses a constant mortality of 20%. Discards were noted to be size related. The model does not include the pot survey data, but this is planned to be included for presentation to the CPT in September.

Survey distribution for the stock was noted to be deeper than the fishery, with juvenile crabs located at much deeper depths than the fishery. It was noted that if the fishery is only representing a slice of the depth range for the species, than this might be an indicator of interannual changes in actual abundance. This will be a flat indicator however regardless of interannual changes in abundance. It would be preferable to obtain an independent idea of what is going in with abundance outside of that specific area.

CPUE in the survey was noted to be problematic. The survey only occurs every three years.

Projection of status of stocks

Jack Turnock presented a draft document on stock status projections for snow crab including results for mean biomass and the probability of rebuilding by year. The team commended the effort put forward in the document, noting that this was the type of information that the team would be looking for in the future under this type of agenda item, and particularly with respect to stocks under rebuilding plans. This type of document addresses the need for some form of stock status projections as recommended previously. The team feels that some qualitative form of stock status projection, particularly in reference to model performance, would be useful at the spring plan team meeting.

Stock status indications for St. Matthew blue king crab and Pribilof blue king crab remain similar to last year with limited recruitment anticipated. Tanner crab showed a large increase last year which could be a result of survey error thus projections for next year remain uncertain. Expectations, however, are that the stock is on a slow recovery to continued rebuilding. There is no new information available to evaluate Petrel Bank red king crab, however a survey will be done in November 2006 and more information on the stock status will be available at that time.

Bering Sea crab EFH measures considered by Council

Diana Stram presented an overview of a discussion paper for the June Council meeting regarding the possible need for habitat protection measures for St. Matthew blue king crab and EBS snow crab stocks. This paper was in response to a Council motion requesting a review of existing measures for these stocks and potential fishery interactions. The team's comments were solicited regarding completeness of the measures outlined in the paper, additional information available on habitat requirements for these crab species, display of maps of ovigerous females, and any insight regarding the efficacy of existing measures and the perceived need for additional measures at this time.

Team members offered the following comments regarding the information presented and suggestions for additional information to be analyzed in order to evaluate the need for any additional measures at this time:

- No new information is available since the rebuilding plans were crafted regarding habitat requirements and vulnerability
- Changes in bycatch would be the most pertinent new information to analyze, particularly the composition by sex and life history stage of the bycatch by trawl fisheries
- Areas to the north of the Pribilofs have had increased effort in yellowfin sole trawl fishery in recent years. There is some potential that this might affect the migration and reproduction of snow crab. Again the composition of these fisheries contribution to bycatch would be useful to analyze
- Longline fisheries (particularly halibut fishery) contribution to blue king crab bycatch should be considered
- Timing and catch composition in trawl and fixed gear fisheries should be considered

Summer research issues/schedule

The team was updated on summer 2006 research plans by both the Bering Sea Fisheries Research Foundation (BSFRF) and ADF&G.

Bering Sea Fisheries Research Foundation:
Steve Hughes provided an overview of the BSFRF plans for the next 18 months and their recently awarded funding from NPRB. The new survey will be a full scale survey for Bristol Bay red king crab modeled after the pilot study completed last year. The intent is to match the NMFS survey in time and space. The summer of 2007 plans will allow them to do paired tows for comparison with the NMFS survey. He noted that if there are ideas for studies needing specialized information, the BSFRF survey could be a means of obtaining this information.

NMFS/ADF&G:
Doug Pengilly provided an overview of ADF&G summer research plans. The Aleutian Islands golden king crab triennial survey will begin July 1st. The Norton Sound survey (originally planned for 2005) will be conducted this summer. The Petrel Bank survey will occur in November.

The NMFS summer groundfish/crab survey will be conducted as usual this summer.

State/Federal Action Plan

Doug Woodby (ADF&G) provided the team with a review of the recently drafted revised State/Federal Action plan. He noted that the first three pages of the plan represent a minor re-write of the previous agreement which has been updated to be in accordance with changes due to rationalization, information exchange and the peer review process. The plan will be presented to the Council for their concurrence at the June Council meeting.

The main focus of the revision was in establishing the timeline for information exchange pertinent to the TAC setting process. The appendix details the specifics of the timeline.

Gretchen Harrington noted that one item that is missing from the detailed list in the appendix is the requirement of NMFS to report on the status of stocks under rebuilding plans.

The team notes that the details of the plan are understood to include the requirement of NMFS to report on the status of stocks under rebuilding plans. If there is a future revision anticipated to the State/Federal Action plan, the team recommends that this section be revised to explicitly include this in it for clarity.

Review of recent BOF actions

Wayne Donaldson briefed the team on two proposals that the BOF took action on recently. Both proposals were approved. Both proposals were done on agenda change requests.

1- Elimination of minimum TAC for eastern Bering Sea Tanner crab.
2- Overage on CDQ deliveries will be ticketed on overages over 3%. Proceeds of overage will not go to vessel, same as IFQ.

Discussion of SAFE report

The team notes that suggestions were made previously regarding updating the economic section of the SAFE report with forthcoming data on crab rationalization. The team discussed the necessity as per last year, of meeting data quality act requirements for peer review of some SAFE sections. A suggestion was made to establish subcommittees of reviewers for various sections in order to meet these requirements.

The team discussed the timeline for compiling and updating sections of the SAFE report for 2006, noting that the timeline will be particularly tight following the September plan team meeting.

Other issues/new business

The Fall plan team meeting will be held in Anchorage, September 13-15, location to be determined. It is anticipated that the meeting will be the full three days in length.

The meeting adjourned at 4:30pm on May 18th.

NPFMC Crab Plan Team meeting

May 16-18, 2005

Observer Training Room (Room 1055), AFSC, Seattle, WA

Agenda

May 16
9am-12pm:
Membership issues:

- Election of vice-chair
- Membership needs: Discussion of need for additional CPT members (replacement of vacancies, need for additional expertise)

Review of 2005/06 Fisheries:

- Review of 2005/06 fisheries (incl. Norton Sound) – ADF&G (Bowers)
- Review 2005/06 Bristol Bay red king crab bycatch data – ADF&G (Barnard)

Trawl Survey overview

- Trawl survey overview from 2005

12:00 – 1:00 lunch

1pm-5pm:

Review of snow crab assessment

- CPT discussion of consideration for adoption
- Industry comments/review of snow crab assessment

May 17
9am-12pm:
Crab Overfishing Analysis (time certain)

- Review of preliminary analysis of crab overfishing definitions revision (including report from Crab Workshop)
- CIE review of crab overfishing analysis
- Discussion of analytical needs, timing, SSC presentation in June and Initial Review by Council (Dec 2006)

12:00 – 1:00 lunch
1pm-5pm:

- Continue crab overfishing analysis.

May 18
9am-12pm:
Economic review of crab fisheries data from Crab Rationalization program

Review of stock assessment models (incl. Norton Sound)

Projection of the status of stocks which will be updated and modified for the Fall CPT meeting – ADF&G/NOAA

12:00 – 1:00 lunch

1pm-5pm:

Bering Sea Crab EFH Measures considered by Council – St. Matthew blue king crab and EBS snow crab discussion paper for June Council meeting.

- CPT comments on adequacy of existing measures.

Summer research issues/schedule – NOAA/ADF&G (Pengilly)

State/Federal action plan and timeline for fall TAC setting

Review of recent ABOF actions on Bering Sea Tanner TAC and CDQ fishery management plan – ADF&G (Donaldson)

Discussion of SAFE and other reporting issues

Other issues/new business

Adjourn (5pm)