

**Plan Team Report
Gulf of Alaska Groundfish Plan Team Meeting
November 16-19, 2004
AFSC, Seattle WA**

The meeting of the GOA groundfish Plan Team convened November 16-19, 2004 in Seattle, WA. The following team members were present:

Gulf of Alaska Groundfish Plan Team
Jim Ianelli (NMFS AFSC) co-chair
Diana Stram (NPFMC) co-chair
Sandra Lowe (NMFS AFSC)
Bill Bechtol (ADF&G)
Jeff Fujioka (NMFS AFSC/AB)
Jon Heifetz (NMFS AFSC/AB)
Nick Sagalkin (ADF&G)
Tory O'Connell (ADF&G)
Tom Pearson (NMFS)
Beth Sinclair (NMFS AFSC MML)
Bill Clark (IPHC)
Sarah Gaichas (NMFS AFSC)
Bob Foy (UAF)

Kathy Kuletz was absent. Approximately 20 members of the public, state and agency staff also attended.

The Team welcomed new member Nick Sagalkin (ADF&G) who replaced Mike Ruccio this year. The Team also welcomed the assistance of Erik Eisenhardt (WDF) who assisted while the Team awaited a response from the State of WA on the appointment of a Team member to replace Farron Wallace.

The Team gratefully acknowledges the years of service by departing team members Bill Bechtol (ADF&G) and Beth Sinclair (MML). Their many years of hard work and insight were much appreciated by the team and they wish them well in all future endeavors.

This is the first year that the GOA team has begun biennial assessments for most species.

As agreed upon in September, the Team decided to have assessment authors present an overview of their species, including any updated catch information from the fishery, submit an executive summary of their assessment, and be available to answer any questions by the Team. The breadth of detail varied by assessment author, with some executive summaries (notably for some rockfish species) including new projections with updated catch information.

Flatfish Assessments:

Jack Turnock presented the flatfish assessments. These are all on a biennial assessment schedule. Only rex sole and Dover sole had assessments this year given the use of a new model (rex sole) and the use of an age-structured model to provide ABC recommendations this year (Dover sole).

Rex Sole:

Increased maturity information for rex sole prompted the development of model for rex sole. This assessment was presented in a draft form at the September meeting, and presented to the SSC in October. The

assessment has been updated, and per Plan Team convention the model may be used in next year's assessment cycle to establish ABCs for Rex sole in 2006 and 2007.

Many flatfish species biomass increased in 2003. The model does not appear to be fitting the increase in 2003. There was no indication of large recruitment in the length composition data, therefore the biomass increase observed in 2003 appears questionable.

Questions were again raised (similar to September) regarding the selectivity curves. The survey samples indicate much smaller fish, while the fishery data shows larger fish. How is the fishery seemingly avoiding the smaller fish? Fishery lengths were noted to be inclusive of all observed catches. The maturity sampling locations appear to be close to shore and in the area surrounding Kodiak and therefore may not be representative of the broader distribution of the fishery. What is the likelihood that maturity samples are representative of the entire population? More maturity information is necessary to validate this.

As calculated in the model, the F35 and F40 values would result in catching all fish where the selectivity = 1.0. The authors backcalculated F rates to obtain a consistent ABC with last year (without the model). The Team did not agree with the authors' rationale for calculating the F rates to be consistent with last year's ABC, however the Team did express concern regarding the potential volatility of catch in the fishery and potential to catch all of the large fish. The author suggested that there should be other criteria for establishing the ABC than the model projection. The projection would lead to high ABCs in the next couple years and with the population declining sharply afterwards. This would lead to extreme instability in the fishery which is not advisable.

The Team noted that this stock is in Tier 3a, and while the tier sets maximum ABC, the ABC could set below the maximum at the author's discretion as is done in other stocks. This stock was previously in Tier 5. The ABCs for 2005 and 2006 are a rollover from 2004. The model will not be utilized until next year to recommend ABCs.

The Team had lingering concerns regarding the data utilized in the model and questioned what new data would be available for next year. The Team noted that it will likely be faced with this same problem next year with the assessment, and made suggestions for information availability and questions in order to assist the authors in problem solving the vast difference in selectivity between the survey and the fishery. It was noted that new survey information will be available next year. Suggestions were made to get more maturity information from the fishery. The author explained that approximately 50% of the samples were from the fishery but that it may be possible to collect additional maturity information.

Suggestions from members of the team included:

- Survey maturity samples over wider geographic range.
- Calculate maturity for the survey (to obtain an indication of to what extent fishery selectivity are representative).
- Could look at $F=M$ as compared with real catches. ($F=M$ would give an ABC close to actual catches in previous years).

Members of the public present noted that the fishery is primarily located on the shelf and upper slope. It was suggested that there may be an impact of the use of halibut excluders. The fishery is primarily a catcher processor fishery and these CPs use halibut excluders which could produce size differences in the catch.

Questions were raised regarding any potential work that has been done on halibut excluders and what other species are similarly excluded? Sarah Gaichas commented that skates are also excluded.

Catch was noted to be much less than TAC due to halibut bycatch in this fishery. Rex sole are considered to be the most valuable flatfish of flatfish complex. Once the groundfish fishery becomes rationalized, the

fishery can make better use of halibut limits. The public noted that the stock is patchily distributed and difficult to catch.

The Team recommended that the author look closely at the maturity data. It is important to determine how the fishery is able to avoid younger fish. What did the data look like prior to the use of halibut excluders? It was noted that this may be difficult to distinguish depending on how the observer data reported at that time. The maturity samples are primarily from shore based processors but the majority of the catch comes from CPs. It may be that using survey maturities instead may be a better representation of the overall fishery.

Questions were raised regarding to what extent the fishery and survey ages are aged by the same people? This should be investigated to ensure that the data are not reflective of an inconsistency in ageing techniques. Other questions included whether ages for rex sole have been validated, for instance by marginal increment analysis? The author agreed to check on this. The ages should have a consistent bias and the authors should document age data for rex sole. The Team noted that this has been a problem sometimes in the past with moving to an age-structured model without adequate validation of ages.

Additional questions from the Team on the assessment included whether there has there been a shift to larger fish age over time (as portrayed in the assessment figure 4.2) or is this actually an artifact of the way that the survey is presented? What are the sample sizes for ages?

Members of the public also questioned to what extent the data shows an indication of the stock segregating by age seasonally such that in spring in the fishery are seeing different ages than in summer during the survey. The Team encourages the author to look into this as well as a possible explanation for the distribution of ages in the survey versus the fishery.

Dover sole:

The assessment included updated catch and fishery information, otherwise it is similar to last year's assessment. The model is similar to other flatfish models.

The biomass of Dover sole in 2003 biomass increased (similar to observed increases in both arrowtooth and rex sole). Recruitment is restricted in the model, therefore the model is not fitting the recent biomass increase. The weighting scheme in the model smoothes the recruitment closer to an average recruitment. The author noted that the difference in natural mortality between males and females is unknown.

Length by depth data does not show larger fish in deeper water. It was noted that this could be due to the timing of the summer survey. The same results have been seen for different surveys, with larger fish not present in deep water. The most recent 2003 survey does show some smaller fish in shallow depth ranges.

The Plan Team approved of the recommended ABCs for 2005 and 2006. It was noted that while Dover sole makes up the majority of the deep-water flatfish complex the complex also includes Greenland turbot and deep-sea sole. The ABC is based on Dover sole primarily with some additional quota included for the other two components as listed.

Questions were raised by the Team regarding the need for consistency in basing ABCs for complexes on a major component of the complex with other smaller components included. There is a need for consistent treatment of minor complex components across complexes. It was suggested that the assessment author include in the Dover sole assessment separate tables for Greenland turbot and deep sea sole to clarify that these are assessed and included separately from the Dover sole ABC.

Arrowtooth Flounder:

The author noted a continued steep biomass increase in 2003. Catch of arrowtooth was less than last year. ABCs and OFLS for 2005 and 2006 were utilized from the projections provided to the Team in September. No updated assessment or information was provided to the Team on this species.

Flathead Sole:

The author noted that catch of flathead sole has been similar to previous years. ABCs and OFLS for 2005 and 2006 were utilized from the projections provided to the Team in September. No updated assessment or information was provided to the Team on this species.

Pollock:

Martin Dorn presented the assessment for walleye pollock. A new section was added to the assessment this year discussing ecosystem concerns. The assessment author discussed some pollock survival indices developed by FOCI (precipitation based survival index and a wind mixing index) but explained that as yet there was no clear correlation between physical indices and recruitment.

The assessment author discussed preliminary information on trophic interactions based on results from the Ecopath model. Arrowtooth is still considered to be a major predator on juvenile and adult pollock, with halibut also a main predator on adult pollock. It was noted that there is a tendency for halibut to consume larger pollock than juveniles. Arrowtooth, halibut, pacific cod, and pollock were estimated in the model by stomach samples from the GOA survey. There was discussion of the relative importance of pollock in the diets of Stellar sea lions, and the population trends of pollock predators. Arrowtooth and SSLs were inversely correlated to pollock, thus some potential exists for competition for pollock prey. Discussion focused upon under which conditions arrowtooth are favored (and vice versa). Environmental changes were discussed, and the possible change in the vertical distribution of prey (bottom dwelling prey more favorable for flatfish over SSLs), changing temperature trends, and impacts of surface warming. Questions were raised regarding any noted changes in arrowtooth distribution. They are considered to be distributed throughout the GOA, though more concentrated in gullies.

It was suggested that a climate model in the GOA might provide useful information, particularly with respect to correlating temperature trends with population trends in other species (e.g bird decline). The author noted the work on physical indices such as wind mixing but agreed that it might be possible to look at these on an even broader scale. Questions were raised regarding the potential change in depth distribution of pollock and whether this type of information is possible from the survey information. Mike Guttormsen noted that from the survey data there was not much indication of that.

The Team commended the author on the utility of examining different indices and ecosystem consideration in the context of the stock assessment. The Team suggested looking at a principal component analysis to further investigate relationships between variables. The Team also cautioned that the variability in each of these variables needs to be explicitly stated in the discussion and the underlying assumptions. The author reiterated that the intent of this section was only to show the potential for competition between predators, and that no conclusions were intended to be drawn from this. This was an exploratory investigation in potential predation and competition effects.

Bill Clark commented that the trends shown by the assessment author are consistent with recent halibut survey population estimates (noting that recent years have been more problematic but through 2000 shows a long-term stable trend). It is interesting to note the importance of large pollock in diet of halibut, and that they seem to shift to pollock as they increase in size.

A discussion of bycatch information noted that the bycatch of sleeper sharks is highest in the pollock fishery. This was noted to be both spatially and possibly seasonally-related.

Catch at age from the survey showed the prevalence of the 2000 year class in all areas, while Prince William Sound was dominated by the 99 year class. Estimates in Shelikof remained low. If the 99 year class was as strong as initially anticipated, a larger increase would have been expected. However there appeared to be more spawning in Shelikof than in the last several years.

A question was raised regarding why the length at 50% mature in Chirikof was larger than for Shelikof. The authors answered that this is more likely due to noisy data, and lack of small fish in Chirikof, but not something representing a significant concern. It was explained that if equal sampling in occurs in Chirikof and Shelikof, they are equal weighting. This year there was no juvenile layer seen in bottom layer, but at present there was no intention to change the depth distribution in survey.

Chris Wilson discussed overall survey plans following a MACE meeting to discuss proposed research and an overview of the current survey schedule. The Team was updated on those aspects of the meeting of interest to GOA stocks and the GOA summer survey. These topics included:

1. MACE summer/winter survey effort: adequacy of spatial and temporal coverage
2. Oscar Dyson vs Miller Freeman and implication to the time series
3. Current and proposed future research efforts to improve survey estimates how research effort competes with BS and GOA survey effort
4. Potential collaboration that could be done with MACE/REFM to improve BS/GOA Pollock stock assessment effort
5. GOA Pollock maturity project
6. Other MACE/REFM collaborative efforts: FIT research

Chris requested input from the Team on any information or requests for potentially major spawning areas that the survey should be potentially adding to existing coverage. He mentioned that the summer work (2003) was principally a feasibility study, to assess whether acoustic methods were applicable for assessing Pollock. He noted that the survey was successful therefore they could possibly expand coverage. The coverage has expanded to 140 degrees east longitude(Yakutat) but not yet into PWS yet, however could look into expanding there if there was sufficient interest. The Team had no guidance on to what extent PWS coverage was a priority.

There was discussion of what type of survey design was appropriate for the summer survey. Currently, the survey utilizes 20 mile spacing across the continental shelf. It is possible that the survey could also assist the rockfish working group, as well as collecting bottom type information from acoustic gear, which could also potentially assist in habitat information.

The Team was updated on the upcoming use and timing of the new vessel the Oscar Dyson and plans to calibrate both vessels the following winter. Currently MACE is developing a standard protocol for inter-vessel comparison. The current schedule is to use the Dyson for field work in April. Lingering questions remain regarding the actual timing of the Dyson's availability as the Miller Freeman is already committed to work on the west coast. The Teams will be updated by MACE as soon as more information is known on vessel availability and any resulting impact on survey scheduling.

The assessment author discussed the comparison of models and the impact on model projected biomass of downweighting the Shelikof survey data. A higher estimate of stock size is obtained as compared with the base model if Shelikof is downweighted. There was a limited effect on projected biomass of reducing the weight on the ADFG survey.

Some questions by the Team on the model fit to survey estimates included to what effect fishery selectivity has changed related to SSL protection measures? Is it possible that they are being concentrated in bays? Julie Bonney noted that haulout and rookery closures in 1999 matched the observed patterns in fishery selectivity. The author noted that there could be a relationship.

The model was noted to be projecting a stock trending upwards based on the maturity of 1999 and 2000 year class, with biomass projected to be at B37%. There are lingering concerns however as there has been no indication of a strong year class since 2000. There are also remaining concerns regarding uncertainty in the data and the variability associated with estimates of episodic recruitment. While the model does not predict a significant probability of going below B20 in next 4 years, after 2006 the trend begins to drop due to lack of recruitment in the last 3 years. Long term projections show an increase due to the assumption of eventual recruitment.

The author's recommendation was to use an F rate of $F_{50\%}$ for two years (2005-06). This was intended to be a temporary change that would help to accomplish the following:

- Stabilize catches rather than allow short-term increase followed by decrease
- Keeps stock from dropping as low as might be possible under other F rates
- Addresses residual concerns with respect to the 1999 year class

The author explained that the models are not formulated to give a sense of short-term decline with no strong recruitment in the immediate future, as the model formulation assumes eventual recruitment. Concern was expressed by the author that with no sign of recruitment to the stock since 2000, more precaution in establishing ABCs was warranted.

While the Team approved of the need for conservatism based on the rationale put forward by the authors, they did not approve of the author's recommendation of accomplishing this using an $F_{50\%}$ rate for two years. The Team discussed balancing the need for conservatism while debating to what extent the goal of stabilizing harvest is a TAC consideration and not an ABC consideration. The team discussed whether or not applying a specific control rule would be endorsing a harvest policy, or if applying a control rule to act as a buffer against uncertainty and concerns with the lack of apparent recruitment in this stock were appropriate. It was discussed that there will be additional data available next year, thus any resulting recommendation for 2006 can be modified at that time pending data to support modification.

The Team acknowledged that this was the first year that they were endorsing the 1999 year class as being properly estimated as an average class, and as such it would then be inconsistent to recommend specific F rates to decrease the ABC. The Team acknowledged concerns with potentially raising the quota when there are biological concerns regarding the health of the stock, and questioned to what extent the model has built-in conservatism to account for uncertainty. The assessment author explained that the projected increase in biomass is largely a model result and has yet not been verified in the survey results or other indices of population status.

The Team felt that there was appropriate justification biologically to continue to constrain the ABC for this stock. Methods to do so were debated, including a possible stair-step mechanism to mitigate against extreme year-to-year changes in ABCs. The Team elected to use an ABC that represented a compromise between the average of the 2004 ABC and the projected 2005 ABC from an adjusted $F_{40\%}$ harvest strategy. The Team recommended a 2006 ABC consistent with the author's recommendation of 86,280 mt. 2005 and 2006 OFLs were recommended based on the projected values.

Pacific cod:

Grant Thompson presented the assessment for Pacific cod. The model was the same as utilized in the past however a new methodology was employed for adjusting the maximum permissible ABC.

Some questions were raised by the Team regarding the use of data in the model. One comment questioned the data from specific regions, and to what extent size and movement differences may impact model results. Specific examples were noted in areas near Kodiak where movement amongst cod populations might be limited. Other questions were raised regarding the length at age data whereby previous information had questioned the legitimacy of the relationship of length at age thus the model was adjusted to account for this. However new age data in the Bering Sea shows length at age close to these old data, which if this were also applicable for the GOA, would imply that now the model formulation could be incorrect.

The author discussed the new methodology for adjusting the maximum permissible ABC. The goal of this is to decrease the variability, and while this method could be employed in this year, it is expected that an improved methodology would be sought for the following assessment. A new spatially-explicit model is also in development and is anticipated for use next year.

Concerns were raised by members of the industry present regarding the implications of smoothing catch to be less variable, as in cases of an increase in abundance, the relative change in ABC is very small. There was a general discussion of which is preferable, a staircase mechanism to increase slowly followed by potentially rapid decline, or a smoothed catch such that there are neither large increases nor drops. Industry members present questioned to what extent this smoothing approach impacts potential environmentally caused variability. The author commented that at this point the intent is solely to sustainably manage the population by addressing the variability in the data.

The Team discussed the pros and cons of having a standard mechanism to reduce from the maximum permissible ABC in cases where it is warranted. Currently if the Team does not agree with the maximum permissible ABC for any species, there is no standard methodology to reduce it. Due to extended discussions of what was (and was not) a viable approach to reduce the GOA pollock ABC this year, the Team questioned the inconsistency of approving one approach and not another. The Team also discussed to what extent an approach should be consistently applied to all species.

The Team did not have consensus as to whether or not there should be consistent methodology in reducing the ABC from the maximum permissible, thus it remains up to individual assessment author to recommend appropriate means to do so.

The Team accepted the author's recommended ABC based on the new calculation methodology. The Team noted that this new approach was viable for use this year because, as in previous years, the approach is designed to minimize risk on a declining stock. This is as opposed to pollock, where the biomass has been variable and the concerns are related to stock status and conservation.

The Team did not recommend the use of this modified risk-averse methodology to all stocks, and noted in fact that approach may not be utilized next year for cod if an improved approach is developed. It was noted that this work may also fall under the auspices of the MSE initiatives.

The Team accepted the apportionment scheme and did not recommend changes to the apportionment strategy at this time.

Rockfish:

Dana Hanselman presented the rockfish assessments (POP, northerns, PSR, other slope, Rougheye, shorttraker)

Pacific Ocean Perch:

Given the new biennial assessment schedule, this assessment was a modified executive summary/assessment, as the projection was updated with recent catch information, ABC recommendations were not straight rollovers from 2004 given these updated projections, but a full assessment was not necessary in this year. The ABC increased approximately 400 mt when using the updated projection. Catch was noted to not be fully utilized.

Next year, survey data as well as new age data will be included in the full assessment.

The Team approved of the 2005/2006 ABCs and OFLs as proposed by the authors in the Executive Summary of the assessment based on the updated projection numbers using updated catch information.

Some additional analyses were presented as appendices to the assessment. A suggestion was made from a team member that the analysis in appendix 2 (on age-truncation and effects on spawning biomass) might be improved if it were focused on the stock recruitment curve rather than on the F40 proxy. It was clarified that while this would be beneficial, currently the stock assessment is not utilizing the SR curve.

Northern rockfish:

Again this Executive Summary represented an updated projection using updated catch information. Here the catch was fully utilized. The same apportionments were recommended as per last year, based on survey biomass estimated proportions.

The Team approved the 2005/2006 projections based on updated catch for ABCs and OFLs.

Pelagic Shelf Rockfish:

The authors recommended an alternative model (for Dusky rockfish) to that utilized last year. The appendix to the assessment is a comparison of models 1-3

Changes using this new model include downweighted catch, and increased survey biomass weighting. The model appeared to do a better job tracking the survey biomass adjustment than the previous year's model configuration.

The Plan Team approved of the projected ABCs and OFLs for 2005 and 2006 from the new model. The remainder of the ABC for PSR is made up of the combined ABCs for yellowtail, darks and widow rockfish. For these stocks the authors' and Team recommended a roll over from 2004, given that there is no new survey information available and no models utilized to project biomass of these stocks.

The Team discussed the apportionment strategy and the problems of separate apportionments by species or aggregating together first and then apportioning across areas. Members of industry present noted that it would be important to look at the catch composition to see what are the relative contributions by these minor components. It was noted that Dusky rockfish makes up the majority of the catch (and ABC) and should possibly be managed separately.

The Plan Team decided to leave the apportionment strategy the same as for last year, but to suggest the authors examine the catch composition (particularly of minor components) by area in next year's assessment to ensure that this aggregated system is appropriate and no one component is being overexploited in individual areas.

Shortraker, Rougheye and other slope rockfish:

Rougheye:

The author presented an overview of a new rougheye rockfish model. Per Plan Team convention this model is reviewed this year with the intent to utilize the model for ABC recommendations in the following year.

Two alternative models were presented. The models are similar to the POP model structure but incorporate data from the sablefish longline survey.

Preliminary results indicated similar fits for both models but the authors acknowledged uncertain recruitment due to lack of available age-data. Model 1 was preferred by the authors as the more conservative choice, given that natural mortality was specified in this model. Until more data is available to better estimate natural mortality and catchability parameters the authors recommended the use of model 1 for recommending ABCs. Further feedback to the authors from Plan Team members on model specifications and estimated parameters would transpire over the course of the year such that the model could be utilized in the following specifications process.

Team members questioned if the new rougheye model indicated any conservation concern for this stock? The authors noted that the model is recommending a higher ABC than the current harvest strategy therefore there does not appear to be a conservation concern for the rougheye portion of the stock complex (rougheye and shortraker are currently combined for ABCs).

Other slope rockfish:

The Team recommended the use of the rollovers from the 2004 ABC and OFL for 2005 and 2006 given that no new survey data is available. It was noted that catch in WGOA vastly exceeded the ABC (600%). Comments from in-season management indicated that this was an unusual year and that much of the catch was sharpchin rockfish. It was noted to be difficult to harvest POP and northerns without bycatch in the other slope rockfish

The Team expressed concern regarding the excessive bycatch of other slope rockfish in the directed rockfish fisheries. The Team was concerned as to whether or not the biomass estimated for the ABC calculation is correct. The Team noted that new survey information will be available next year, and that this may give a greater indication of the relative biomass estimates for these species which make up a majority of the high discards (e.g., sharpchin).

Shortraker/Rougheye complex:

The Team noted the SSC's concerns from December 2003 regarding the complex ABC and the relative catch composition between shortraker and rougheye.

In response to these noted concerns, the authors prepared appendix 9A to the SR/RE SAFE report detailing alternative ABCs for these species individually as well as a complex. The Team noted that it is necessary to establish the appropriate methodology for separating shortraker and rougheye catch, whether that is straight observer data or to expand this by the percent coverage by gear type. A higher percentage of trawl weight for SR/RE is observed but the longline catch is not well observed.

It was noted that currently on boats that have 30% observer coverage, observer data is only used for discards and otherwise they are only using electronic reporting for landings at the processor. This is notably not as accurate as extrapolating the observer basket samples but this extrapolation is not being done.

The Team recommended that improved species identification is necessary at the plant level as species are not being identified shoreside. The requirement of full retention might assist in this but it is necessary to have some quantification of discard catch and improved shoreside identification to species level. The Team recommends that observer coverage be increased at these shoreside plants. Julie Bonney noted that part of the pilot program would encourage species identification at plant levels.

The Team recommended alternative 4 (in appendix 9A) to split out shortraker and rougheye and establish separate ABCs for each. The Team recommends that these species be split out immediately and recommended separate ABCs and OFLs for each for 2005 and 2006. In the case that this cannot go through immediately, the interim recommendation would be a roll over from 2004 until such a time as they can be broken out separately.

Demersal Shelf Rockfish:

There were no new survey data. Biomass estimates were updated using recent average weight data. The Plan Team approved of the author's recommendations for 2005 and 2006 ABCs and OFLs.

The author noted that the directed fishery is shut down for 2005. Concerns have been expressed regarding the catch rates of yelloweye rockfish in the sportfish fishery. It was noted that restrictive bag limits have led to high mortality rates in the sportfish fishery even with a declining fleet size. This could eventually be problematic for the halibut longline fishery. Bag limits in the king salmon and halibut sportfish fishery have led to increased interest in yelloweye as a target sportfish. Another noted source of yelloweye mortality is in the halibut subsistence fishery which could be a significant source of mortality. It was discussed that full retention is still not in place in the Federal fishery, but is in place in the state fishery.

Dark rockfish FMP amendment rationale:

Per SSC request, the Team discussed the rationale for recommending (in September) that Dark rockfish be removed from the FMP and turned over to State management. The following represents the primary rationale for initiating this amendment:

- Dusky rockfish (previously Light Dusky) and Dark rockfish (previously Dark Dusky) have now been separated to species level.
- Dark rockfish occurs in nearshore reef habitats and is not specifically assessed by the GOA trawl survey
- Nearshore rockfish such as Dark rockfish could easily be overfished in local areas under the relatively high TAC for the PSR assemblage.

The team notes that while its' recommendation is for removing only Dark rockfish from the FMP, this same rationale could be applied to any of the minor components under the pelagic shelf rockfish assemblage if any of these components were specifically targeted. The PSR ABC and TAC are based primarily on the abundance of Dusky rockfish with additional quota for the minor components. The Team has already recommended (under the PSR agenda item) that the authors' evaluate the catch composition by area for these minor components of the PSR assemblage to investigate if they are being locally over-exploited in the aggregate quota apportionment scheme utilized at present for management of the complex.

The Team encourages the initiation of an FMP amendment to remove Dark rockfish to State management.

Thornyhead rockfish:

The Team concurred with the author's recommendation to roll over 2004 ABCs and OFLs for 2005 and 2006. No new survey information was available this year. Catch was considerably under quota in 2004. It was noted that this has not always been the case for thornyheads, as catch in the past has exceeded the TAC

and ABC. This stock is usually placed on bycatch status in the beginning of the year for management purposes. Next year a new assessment will be available incorporating new survey data.

Atka Mackerel:

The Team concurred with the author's recommendation to rollover the 2004 ABC and OFL for 2005 and 2006. It was noted that in 2004, the ABC and TAC of 600 mt was exceeded with catch over 800 mt. There was a discussion as to whether or not 600 mt was sufficient to cover incidental catch in other fisheries or if the excessive catch in 2004. The author indicated that a preliminary look at some of the haul-by-haul data indicated that it was more likely "topping off" and in fact some of the hauls were actually in the percentage range of a directed Atka mackerel fishery.

The Team decided that if the excess catch did not appear to be incidental then there was no reason to raise the ABC from last year of 600 mt.

Criteria for Assessments in Off Years:

The Team discussed what criteria would trigger an assessment in "off" years, and what information should be included in Executive Summaries in the absence of an assessment. For Executive Summary contents, the Team chose to use the template modified by the Auke Bay lab in use for their rockfish Executive Summaries. Assessment authors were then advised to follow this format in as much as was possible in this year's SAFE Report.

The Team reiterated that in the absence of established criteria, it is still at the discretion of individual assessment authors for the necessity of doing an assessment in an off year. Some suggestions to trigger a full assessment however include structural changes to an assessment model. It was determined that updating catch and re-estimating parameters should not necessarily require a full assessment. This type of updating was done notably for many rockfish species including POP and northern rockfish.

Skates:

Sarah Gaichas presented the assessment for skates. There was no new survey data from last year. Skates are on a biennial assessment cycle thus there was no new assessment for this year. Next year there will be a full assessment for skates including available survey data from the GOA survey as well as additional age data (pending staff availability at ADF&G). Most data thus far has been from ADF&G staff despite the fact that it is federal fishery. The author noted the grateful assistance of ADF&G staff for their continued effort on behalf of the skate data collection.

The author's recommendation for skate ABCs and OFLs was similar to last year in recommending separate ABCs and OFLs by species and area with a gulfwide ABC and OFL for the combined bathyrāja species ("other skates").

The Team spent a considerable amount of time reviewing the skate situation which developed last year, the author's recommendations last year, the Council's actions in the specifications process, and any additional information available from the fishery. Members of the industry present indicated that interest in the directed fishery in 2004 declined due to market considerations. Anecdotal evidence indicated that CPUE may have decreased as well. Reported landings were primarily in federal waters. Catch of Big and Longnose skates is roughly 2/3 in the trawl fleet and 1/3 in the longline fleet.

The SSC requested in December 2003 that no directed fishery go forward in 2005 without an adequate sampling program developed. While ADF&G has volunteered their time to sample skates, no federal data collection program has been initiated. It was noted that data collection efforts are underway for 2005 using

limited SAIP funds, but a federal data collection program is not in place to adequately sample skates. It was noted that the timing of any data collection effort would be best at the conclusion of the state waters P cod fishery.

Given concerns regarding inadequate data collection and the need for conservative management measures, the Plan Team strongly recommends that no directed fishery for skates occur prior to obtaining more information from the fishery and from the 2005 trawl survey. The Team notes that it continues to request discard data from both the halibut fishery and the halibut survey.

Additional concerns were raised regarding the identification of skates to species level at the processing plants. It was noted that observer are trained in skate identification but there may not be adequate identification at the processing plants.

The Team recommends collecting maturity information for skates from the survey. The Team also recommends that skate sampling also be added to the priorities for any changes to existing observer protocols.

Concerns were raised by Plan Team members regarding the restrictive nature of area-specific OFLS. It was specifically noted that it could shut down the halibut fishery if the OFL is exceeded for skates. Other in-season management measures mentioned to assist in conservative management for skates included area closures and target fishery closures.

Understanding that market considerations did not promote rapid development of a fishery in the 2004 fishery, the Plan Team remains concerned with the potential for over-exploitation of skates. The speed of the fishery could occur very rapidly again and it would be more conservative to assume that give an opening, a fishery could develop rapidly to fill this. The author expressed concern regarding the anecdotal evidence of low CPUE as this could indicate a decline in the population. There continues to be a lack of information on skates, and the author remains concerned that the directed fishery is occurring on mature females. There is no information discard mortality.

Discussion focused upon means to restrict the development of a target fishery on skates. Last year the ABC was sufficient to support a small, directed fishery. The Team's stated intention is that no directed fishery be allowed, however current ABC's could potentially allow for a directed fishery. Development of directed fishery will be dependant on TAC considerations. Industry members present expressed concern that when the TAC is too low, it ends up forcing the industry to increase discards at sea.

The Team recommends a modification of the assessment author's recommendation. The Team recommendation is that skates be managed under species-specific OFLs for big skates, longnose skates and combined all bathyrāja species "other skates" categories. These OFLs are gulfwide. The Team recommends that area-specific ABCs be established for big skates and longnose skates. The "other skates" category (all bathyrāja sp.) should be managed under a gulfwide ABC. The Team felt that this level of conservative management was necessary to protect skates given the lack of available information on the fishery, and the vulnerable nature of the species without being overly restrictive on target fisheries. The Team further reiterates that it is their intention that no directed fishery for skates be developed in 2005, and recommends that skates be put on bycatch-only status from the beginning of the year.

Industry members commented that this solution was infeasible and that the only way to effectively prohibit a directed skate fishery is to set a restrictive TAC. They did not believe that the Team's recommendation offered any additional protection by splitting species out by species and area. The author reiterated that the Plan Team solution was a better reflection of the current available data on the fishery and that if longnose skates are also a target in the directed fishery, this approach would offer better protection to that species.

Other Species Recommendation (FMP Amendment)

The Team further recommends that immediate measures be taken to revise the GOA other species TAC calculation. Currently in the FMP the TAC for other species is established as “5% of the sum of the target species TAC”. Understanding that measures are on-going to revise the other species category, the Team recommends that an immediate plan amendment be initiated to establish the calculation “as less than or equal to 5% of the sum of the target species TACs”. This would serve as an interim measure until a more comprehensive plan amendment can be initiated to revise the other species category.