

PROPOSED AGENDA
Groundfish Management Team

Pacific Fishery Management Council
Clarion Hotel San Francisco Airport
San Bruno Room
401 East Millbrae Avenue
Millbrae, CA 94030
(650) 692-6363
October 28 - November 2, 2001

SUNDAY, OCTOBER 28, 2001 - 2 P.M.

A. Call to Order

Jim Hastie, Brian Culver, Co-Chairs

1. Roll Call
2. Announcements
3. Approve Agenda
4. Agenda Overview

John DeVore

C. Groundfish Management

C.3 Final Harvest Levels for 2002

Jim Hastie

C.4 Management Measures for 2002 and
Environmental Assessment - Initial Guidance

John DeVore

MONDAY, OCTOBER 29, 2001 - 8 A.M.

NOTE: Informational briefings to the GMT, where the team is expected to prepare a statement (e.g. agenda items C.2, C.3, C.5, C.6, C.7, C.8, F.1), will be done in concert with the GAP in the Embarcadero A Room. These briefings are scheduled for Monday, October 29 and Tuesday, October 30. See GAP agenda for timing. Otherwise, the team is expected to assist the GAP and the Council in shaping management measures for 2002 (agenda item C.4) and potential inseason adjustments for 2001 (agenda item C.9) as needed. The team will have the San Bruno Room dedicated for GMT use throughout the week.

C. Groundfish Management

C.3 Final Harvest Levels for 2002

Jim Hastie

NOTE: The informational briefing for this agenda item will be given to the GMT, GAP, and the SSC at 8:30 A.M. in the Sausalito B Room. Further discussion of this agenda item will occur after lunch when Dr. Hastie will be available to assist GAP and GMT deliberations.

C.2 Marine Recreational Fisheries Statistics Survey Update

Russell Porter

C.5 Groundfish Strategic Plan Implementation
Ecotrust/Pacific Marine Conservation Council
Capacity Reduction Analysis Proposal

Astrid Scholz

C.6 Rebuilding Plans
C.7 Groundfish Fishery Management Plan

John DeVore
Jim Glock

Environmental Impact Statement

C.3 Final Harvest Levels for 2002 - continued

Jim Hastie

C.4 Management Measures for 2002 and
Environmental Assessment - Initial Guidance

John DeVore, Jim Hastie

TUESDAY, OCTOBER 30, 2001 - 8 A.M.

F. Marine Reserves

F.1 Status of Marine Reserves Proposals for
Channel Island National Marine Sanctuary (CINMS)

Jim Seger, Patty Wolf, Sean Hastings

C. Groundfish Management, (continued)

C.8 Exempted Fishing Permits (EFPs)

Brian Culver, Dave Thomas

C.9 Status of Fisheries and Inseason Adjustments

John DeVore, Jim Hastie

C.4 Management Measures for 2002 and
Environmental Assessment - Further Guidance

John DeVore, Jim Hastie

ADJOURN

PFMC
10/12/01

DRAFT SUMMARY MINUTES Groundfish Management Team

National Marine Fisheries Service
Southwest Fisheries Science Center
Santa Cruz Laboratory
110 Shaffer Rd.
Santa Cruz, CA 95060
(831) 420-3900
September 24-28, 2001

MONDAY, SEPTEMBER 24, 2001 - 1 P.M.

Members Present:

Dr. Jim Hastie, National Marine Fisheries Service Northwest Fisheries Science Center
Mr. Brian Culver, Washington Department of Fish and Wildlife
Dr. Alec MacCall, National Marine Fisheries Service Southwest Fisheries Science Center
Mr. Dave Thomas, California Department of Fish and Game
Mr. Mark Saelens, Oregon Department of Fish and Wildlife

Others present:

Mr. Rod Moore, West Coast Seafood Processors Association, GAP chair
Dr. Steve Ralston, National Marine Fisheries Service Southwest Fisheries Science Center, SSC
Mr. Farron Wallace, Washington Department of Fish and Wildlife
Mr. Rob Jones, Northwest Indian Fisheries Commission
Ms. Kathy Fosmark, GAP
Dr. Astrid Scholz, Ecotrust
Mr. John DeVore, Council staff officer, Pacific Fishery Management Council

A. Call to Order

Dr. Hastie called the meeting to order at 1320. A round of introductions was made. The GMT added a discussion of the trip limit table for this fall's inseason adjustments. Ms. Carrie Nordeen asked the GMT to review her table for accuracy, preferably today. There was a general discussion regarding the rest of the agenda. Mr. DeVore stated he had a checklist for the SAFE document preparation. It was agreed that there wasn't much new RecFIN data to talk about. The WDFW will be proposing a new EFP to the Council at the next meeting and Mr. Saelens mentioned that the whiting EFP needs to be redone. The expectations for tomorrow's meeting agenda of bycatch/discard rates analysis was debated. There is a need to discuss rates used in the short term (2002) and in the long term. A list of the management alternatives and datasets available to develop the 2002 management measures EA was discussed. Mr. DeVore has the options adopted at the last Council meeting. Dr. Hastie brought some gross fleet revenue data tied to landed catch OYs by fishing sector. Mr. Moore also brought some processor economic data (Comparison of cost vs. prices for selected major groundfish species- attached).

A.2. NMFS/PFMC Trip Limit Table

The GMT discussed the draft trip limit table provided by Ms. Carrie Nordeen, NMFS and the draft newsletter article provided by Mr. DeVore. There was a mistake with the Petrale sole number (in both tables)- it didn't indicate the 30,000 lb/mo with no footrope restriction starting November 1. Mr. DeVore's table needs to append the yellowtail footnote to indicate the "yellowtail limit without flatfish is 1,500 lb/mo". There was an inconsistency in the weight of yellowtail in association with arrowtooth. Instead of "... 10% of weight of arrowtooth not to exceed 7,500 lbs per trip or 15,000 lbs/2 mos" (Council recommendation), it should stay as originally set, "... 10% of weight of arrowtooth not to exceed 2,500 lbs per trip or 20,000 lbs/2 mos".

The intent to close Dover sole retention didn't translate to a closure in the limited entry fixed gear fishery. This needs to go to no retention starting October 1. The same is true for shortspine thornyhead north of Pt. Conception which should be no retention starting October 1. However, there is not the same conservation problem with Dover and shortspine in the fixed gear fisheries, so the GMT recommended not disapproving the Council recommendation to keep the current trip limit schedule. The minor nearshore rockfish south limit needs to be changed effective October 1 (to 3,000 lbs/2 mos) on Mr. DeVore's table. Another mistake is that there was an intent to go to no retention on widow and yellowtail rockfish in limited entry fixed gear and open access fisheries. Both NMFS and PFMC tables need to be changed. The GMT conferenced with Ms. Nordeen from the NMFS Northwest Region with the recommended changes to her trip limit tables.

B. SAFE Document Preparation

Mr. DeVore ran through the SAFE document checklist. Mr. Saelens volunteered to provide the Recent History of Management - 2001 Fishery. Mr. Saelens also volunteered to be the GMT editor for any rewrites, etc. The GMT recommended adding the older years back to 1995 in this section. Mr. DeVore explained the Council deadline for edits and contributions is October 3. There was a general discussion relative to whether the SAFE document should be finished prior to or after the November Council meeting. The advantage to wait until after the November Council meeting is that it would contain final ABCs and OYs. The rationale for finishing the SAFE prior to the Council meeting is that it served as a proxy EA which is clearly not the case this year. The GMT recommended that the deadline be pushed back to after the November Council meeting. Many of the data tables which are done and relevant to Council decisions in November can be included either as attachments to the November briefing book or additions in the EA/RIR for 2002 management measures.

Dr. Hastie said he had the Tables 1-18 updated and ready to go. Tables 19-28, which didn't make the last SAFE document, will probably not be available this year as well. Dr. Hastie thought there was a problem with unreliable and unverified sport catch data that makes these tables irrelevant. Dr. MacCall thought the MRFSS estimates should be included in these SAFE document tables. Mr. Culver thought all sport catch estimates should be put in these tables. Mr. Saelens thought it could be handled with a text insert. Dr. Hastie thought all estimates should include qualifications to indicate which data is more reliable in the opinion of the GMT. Dr. MacCall offered to develop these tables and try to capture the range of estimates used and the rationale for those sport catch estimates that are used by the GMT.

Mr. DeVore ran through the rest of the checklist of tables and figures and who is responsible for delivering these specific inputs. Dr. Hastie explained that Figures 2 and 3 require updated whiting numbers to be completed. Mr. DeVore will contact Ms. Becky Renko about whiting numbers. The economic status section has addressed total fleet revenue in the past. Dr. Hastie thought a more thorough description of economic analyses relative to adopted trip limits would be more informative and appropriate to the SAFE document. Since these data will be in the EA/RIR, it will be easy to include it in the SAFE, especially if the deadline is extended to after the November Council meeting.

Dr. MacCall recommended a total catch table depicting commercial, recreational, and tribal catches by stock/complex be added to the SAFE document. The GMT agreed. Mr. DeVore asked whether newly-adopted rebuilding analyses should be included in the SAFE document. The GMT thought that would be a good thing and recommended they be included in the stock assessment appendices. They thought all the most relevant analyses be included for each overfished stock in the SAFE document (i.e. the ones which current rebuilding strategies are based).

C. Recreational Fishery Information Network (RecFIN)/Marine Recreational Fisheries Statistics Survey Update

No business at present. This agenda was postponed until updated data is available.

D. Exempted Fishing Permits

Mr. Culver explained that WDFW may propose a widow/yellowtail EFP for next year. They are working with industry to develop this further. Mr. Culver will also give an update to the Council in November of results from their arrowtooth EFP.

The meeting was adjourned for the day at 1710.

TUESDAY, SEPTEMBER 25, 2001 - 8 A.M.

Members Present:

Dr. Jim Hastie, National Marine Fisheries Service Northwest Fisheries Science Center
Mr. Brian Culver, Washington Department of Fish and Wildlife
Dr. Alec MacCall, National Marine Fisheries Service Southwest Fisheries Science Center
Mr. Dave Thomas, California Department of Fish and Game
Mr. Mark Saelens, Oregon Department of Fish and Wildlife
Ms. Yvonne deReynier, National Marine Fisheries Service Northwest Region

Others present:

Mr. Rod Moore, West Coast Seafood Processors Association, GAP chair
Dr. Steve Ralston, National Marine Fisheries Service Southwest Fisheries Science Center, SSC
Mr. Tom Jagielo, Washington Department of Fish and Wildlife, SSC
Dr. Mike Dalton, California State University, SSC
Mr. Farron Wallace, Washington Department of Fish and Wildlife
Mr. Don Pearson, National Marine Fisheries Service Southwest Fisheries Science Center
Ms. Cindy Thomson, National Marine Fisheries Service Southwest Fisheries Science Center
Dr. Rick Methot, National Marine Fisheries Service Northwest Fisheries Science Center (via conference call)
Ms. Karen Garrison, Natural Resource Defense Council
Mr. Peter Huhtula, Pacific Marine Conservation Council
Mr. Rob Jones, Northwest Indian Fisheries Commission
Dr. Astrid Scholz, Ecotrust
Mr. Jim Seger, Council staff officer, Pacific Fishery Management Council
Mr. John DeVore, Council staff officer, Pacific Fishery Management Council

E. Bycatch/Discard Rates Analysis

Dr. Hastie called the meeting to order at 0838. A round of introductions was made. Dr. Methot was connected via conference call from his office in Seattle.

Dr. Hastie explained the ground that will be covered today. The data and methodologies for the long term will be the focus for the morning. Later this morning and this afternoon, a reasonable range of alternative bycatch and discard rates to be used in the short term will be developed. As we progress in developing the range, the estimates within the range should be qualified relative to its efficacy. We need to document changes in relative biomasses, gear, etc. The rationale for recommending a preferred estimate should also be well articulated. Mr. Culver recommended that we segregate those rates to be used for 2002 management and those rates/methodologies to be used in the long term. Dr. Hastie asked if there was anything else to be discussed today.

Dr. Methot FAXed a handout, "Historical approaches to discard estimation", and a set of summary data tables which he reviewed for the group. The approaches for estimating discard include: 1) Pikitch et al. 1988; 2) Halibut and salmon in bottom trawls; 3) Babcock and Pikitch; Gillis et al.; Helser, Hastie, and Methot (EDCP analysis). Dr. Methot explained the work done last year to analyze EDCP logbook data to estimate bycatch and discard rates in the trawl DTS fishery. He indicated that this approach would be desirable for analyzing other fisheries as well. He also recommended that we consider new information and strategies for estimating fishery discards and that an analysis of relative effort by fishery and fishing strategy be done. Dr. Methot then reviewed the historical approaches for estimating discard. The DTS approach using EDCP data attempts to incorporate changes in trip limits. Forecasting the effort shifts is a separate task. Approaches used in halibut and salmon management are different in that groundfish bycatch is prohibited and treated as a random phenomenon (bycatch rate per hour of fishing effort). The Pikitch method

estimates bycatch rates by geographic strata and coincident species by tow hour. This approach will be similar to how NMFS observer data will be used. One difficulty of this approach is how to estimate discard as trip limits are approached. Dr. Methot added that, with restrictive trip limits, estimating discard rates as a fixed percentage of landed catch is not appropriate. The use of EDCP data within appropriate strata (the DTS methodology) has been a refinement from the original Pikitch approach. Dr. Methot recommended a hybrid approach utilizing the halibut/salmon and the DTS methodologies might be best. We would also need to incorporate observer data. He noted that there are still problems with poor observer coverage in California.

Dr. Hastie explained that one must pay attention to target strategies when looking at EDCP data. It is difficult to just look at the target species to estimate bycatch of coincident species. There is a different bycatch rate of canary for instance between trawl flatfish and DTS strategies, even when both strategies might target Dover sole. Dr. Methot also explained there is a highly skewed distribution of bycatches in the EDCP data. Mr. Culver agreed that bycatch is typically very skewed with only a few tows accounting for most of the bycatch. Dr. Ralston thought the data should be stratified between strategies, by respective trip limit schedules, and by the relative effort expended for each strata. Dr. Hastie said the challenge is to work with individual vessel data and overlay the fleet distribution of bycatch data. Mr. Saelens pointed out that the current EDCP data is limited in that individual fishermen may have noted targets (both species and strategies) differently. Dr. Methot said that Dr. Jean Rogers has a paper in press that shows strategies can be defined with relative accuracy by the nature of the data when EDCP data and fish tickets are used in concert. Mr. Moore explained that defining the strategy by looking at catch is inadequate if you don't know the depth and gear used. Dr. Hastie stated that depth is one of the variables he uses to stratify EDCP data. Dr. Methot agreed that was appropriate but stressed that we need to compromise between the definition of the data (level of detail) and the sample size of the data that is available. Mr. Saelens said that fishermen who record EDCP data need to be educated to gain useable data. Dr. Hastie and Mr. Culver said the point from Dr. Rogers study was that the catch data can be used to define strategies with relatively good accuracy. Dr. Ralston asked if the data needs to be stratified by tow. Mr. Wallace said catch by tow is required. Dr. Hastie said that stratification is preferred. Dr. Ralston thought fish ticket data had landings from blended strategies which would confuse the analysis. Dr. Hastie explained that the amount of time available to do these analyses is a factor. With more time, a more thorough analysis of EDCP and fish tickets could be done. Dr. Methot agreed and stated that fish ticket data has been used as a proxy for effort. Mr. Culver asked about the Rogers study. He stated that, at times, port samplers would write in the target strategy after the fact and one should be careful with data selection. Mr. Pearson stated that EDCP data often has mixed strategy tows. Dr. Hastie said that would be a problem if the mix of strategies is highly variable. If the mixed strategies are relatively consistent, then bycatch rates can be averaged across these strata. Dr. Ralston asked if we would have tow by tow data in the future? We need to separate what we want to do in the long term and what we can do in the short term. Mr. Moore explained that there may be more refined strategies to target different species within a single trip to take advantage of the trip limits available. Dr. Methot thought we should treat that mix of strategies as "noise" in the data. Dr. Ralston stated we probably won't be able to resolve these details now. There is an expectation of convening a workshop later to address these issues. We should key in on what we can do with the time available. Mr. Culver said we need to focus in on a process to make updated data available in a timely fashion and stay flexible on how we use observer, EDCP, and other data as it becomes available. Even with observer data, we still need real time logbook data. Dr. Ralston said we need to get real time catch and effort data and then overlay the trip limit schedules to understand the distributional nature of the bycatch. Dr. Hastie said the data distribution is of fundamental importance. Dr. Methot said we should discuss separate data treatment approaches. How do we address market v. trip limit-induced discard rates? Can look at discard as a function of effort and remaining limit. How we structure the technical analysis may differ depending on the cause of discarding. Dr. Ralston thought observer data might help differentiate what induces discard on a trip by trip basis. Dr. Hastie cautioned that we will probably need a critical mass of observer data before we can refine our strata. Mr. Culver asked if he thought the observer program should be stratified across strategies? Dr. Methot explained the current deployment plan to obtain representative data across fishing sectors is a challenge in and of itself. Mr. Saelens thought the 10% coverage may not be statistically adequate. Dr. Methot said the coverage will be greater than 10%. Mr. Saelens explained his point is that we will still need to integrate EDCP data with observer data.

Ms. Garrison asked if there was a plan to integrate observer data from disparate fishing sectors such as spot prawn and groundfish trawl? Dr. Methot said it is not appropriate to use observer data from a disparate sector to represent other sectors. Mr. Culver explained that we tend to stratify more to get representative data, not

combine across sectors and strategies. Dr. Ralston asked about state programs and whether observer data is mandated there. Mr. Saelens said that estimates of discard were required in the shrimp fishery to evaluate excluders. Dr. Ralston said that was good example of data that is available to understand discards in a particular fishing sector. Dr. Hastie said a PacFIN database should incorporate observer data from various sources to be useful. We need a central data repository. Dr. Ralston asked if a central database was being considered? Dr. Methot said that they are now trying to determine the NMFS observer database and haven't considered other data sources yet. He did agree that would be useful and should be done in the future. Mr. Saelens thought PacFIN would be a good repository of the data. Let PacFIN folks figure out how to standardize data from various sources. Dr. Ralston asked if NMFS observer data would be a stand-alone database, or would it be integrated in PacFIN? Dr. Methot said that it would be stand alone for now because of the confidential nature of the data. There are still wrinkles in combining long term data sources such as logbooks and fish tickets. It will be a challenge to integrate the observer data into the mix.

Dr. Hastie said one desirable approach might be to model bycatch using EDCP data as a function of remaining limit and effort. Observer data would be an important reality check to understand discard when management measures (eg. trip limits) change dramatically. Dr. Ralston agreed that was a good point. We should also address when data becomes obsolete. The conundrum is that one wants to be contemporary but still have enough data to represent reality. Dr. Hastie explained further that remaining limit is a tricky variable to model. The amount of remaining limit needs to be assessed relative to how it influences targeting given the size of the remaining limit. Dr. Ralston said that interpolation is tricky in that this is a non-linear relationship. Dr. Hastie said that interpretation of remaining limit is difficult in that one must differentiate targeting v. avoidance behavior of fishermen. A longer time series of testing these varying regimes across a range of limit opportunities is needed to understand this dynamic. Dr. Methot said a different relationship could be observed with a small limit opportunity and no limit opportunity. Our ability to calibrate the model across a small range of remaining limits is difficult. It should probably be treated as a threshold with a behavior/regime shift at some point. Dr. Hastie said, with more data acquisition, we might start to understand this relationship. Dr. Ralston stated that the GMT has been doing a good job of trying to understand the effect of varying trip limit regimes. Dr. Hastie suggested we go through an actual data exercise and determine how best to project effect of management measures in the short term given the data we currently have. Mr. Saelens thought it important to recommend we enhance the investment in EDCP/logbook data to make it more useful. Ms. deReynier said that NMFS has already gone on record stressing the importance of using the data we have now for crafting short-term estimates of bycatch.

Dr. MacCall, addressing long term strategies, stated that data used are cells of probability distributions. He thought integration of various data sources lends itself to a Bayesian approach. This may help weight contemporary data and prior assumptions appropriately to our best understanding. Dr. Ralston said that type of approach is consistent with Dr. Mark Powell's contention that we use alternate data sources, such as survey data, to best color our understanding of reality. Dr. Ralston also recommended that we address timeframes relative to the methodological approaches we use. Dr. Hastie stated it will be important to have a good handle on what we use earlier in the management cycle. Ms. deReynier stated we will be facing an accelerated schedule next year and can't count on the availability of observer data. Dr. Methot thought we should take our best shot at determining total catch targets and shape our landed catch targets inseason as we accumulate more observer data. Dr. Hastie said there is a compromise in the effort used to track discard inseason and developing a long term solution. Dr. Ralston said we should focus on long term solutions now. Dr. Hastie thought an SSC/GMT workshop could blend long and short term strategies. This will not be a binary approach. There will be some short term, simplified approaches used by necessity and more robust long term solutions. However, the short term approaches may still be informative in the long term.

Dr. Hastie changed the focus to what we need to accomplish in the next few weeks to prepare for a final Council decision. There are three full weeks to wrap up bycatch/discard and the EA/RIR. Drs. Ralston and Hastie decided to start with an overview of bycatch/discard methodologies. Mr. Wallace gave a PowerPoint presentation on bycatch rates and 1999 -2000 Washington-Oregon-California logbook data. Bycatch rates are fish ticket-adjusted logbook data of obtained catch. Initial filters applied to the data: eliminate zero catch tows, missing key data, eliminate data with no fish ticket association. Target fishery is defined by catch level, logbook recorded target species, and by set tow-specific species criteria (40%, 60%, 80% of total groundfish catch by tow), and other target criteria such as target rate, etc. Looking at ratios of targetable species to total groundfish caught by tow is informative. The data show arrowtooth to be a highly targetable species, but English sole is not. Need to define what the target fishery is up front. The Target Fishery Model

first ranks the target fishery using criteria to filter mixed "target" tows. Non-target tows are either lumped into "other" category or distributed to "target" categories. A critical question is how does trip limit attainment influence bycatch? Mr. Wallace includes the last tow (constrained) where bycatch is high with the unconstrained tows. Season, depth, and gear are stratified in the model. Bycatch rates are estimated by quarter, depth and target, and gear and target. Mr. Culver said that the effect of the cumulative limit structure is "filtered out" to the extent possible to get a representative bycatch rate estimate. Dr. Hastie said the concern is disaggregation may be more informative to model strategies, but low probability events are weighted more heavily. Dr. Ralston asked if the data from all states is normalized? Mr. Wallace said it was, but the species are separated by market category. There is a difficulty in considering how market limits influence hauled catch. Retained catch is influenced by market demand and is not accounted in the model. Mr. Moore said market discard is variable along the coast and between processors. The mix of product demand is influenced by nonlinear, unpredictable factors. Mr. Pearson said an index of market demand could be used. Mr. Moore said that differs from port to port. Mr. Pearson agreed, but said it could be factored in as another filter. Mr. Wallace also developed an area bycatch/effort model since strategies and species distributions differ geographically. A coastwide grid was developed in nm^2 increments- catch of canary by hour was determined for each nm^2 . Data were expanded based on a species-specific landed catch distribution. A spatial overlay of canary catch rates v. arrowtooth catch rates was shown as an example off the north Washington coast. Dr. Hastie stated that only start positions are recorded in logbooks. Therefore the data resolution may not lend itself to a substrate analysis of fishing strategies. Also, data modeled to a nm^2 is a finer resolution than the actual effort where tows could be 2-3 nm long. Dr. Hastie said the incentive to take constraining species in the past by finishing a mud tow in rocky habitat to catch the allowable canary limit was high. However, small footrope restrictions make these kind of strategies untenable. Therefore, this spatial modeling has much uncertainty relative to bycatch of coincident species. Mr. Wallace's model outputs estimated bycatch based on the logbook retained catch of coincident species by different target species/strategies. It doesn't account for gear effects or altered strategies relative to trip limit attainment (i.e. fishing strategies are different before and after trip limit attainment of incidental species). One analysis Mr. Wallace did was to look at canary bycatch in some areas between 1999 and 2000 for target arrowtooth tows. He noted a drop in canary bycatch in 2000 attributed to the small footrope restriction which changed fishing strategies for targeting arrowtooth. Dr. Hastie said that these data also contributed to the trip limits applied to arrowtooth to reduce canary bycatch. It also influenced the development of the WDFW arrowtooth EFP to prove that a change in fishing strategy would reduce canary bycatch. Mr. Wallace said the strength of this kind of analysis is the ability to stratify differential effort/strategies at a finer geographic scale. Dr. Ralston asked if this was a recommended analysis for determining bycatch rates coastwide? Mr. Wallace said it was developed for consideration as an applied spatial model. Dr. Ralston thought the California logbook data didn't have the spatial resolution but Mr. Wallace said that data was just as refined. Mr. Wallace stated that survey data could be spatially analyzed in similar fashion. Dr. Hastie said that he didn't feel comfortable treating survey data this way because spatial resolution wasn't as refined and there were far fewer observations. Dr. Ralston said there would have to be much more inference of spatial distribution using survey data. Dr. Hastie reminded the group that we have an extremely short period to develop estimates. There is a big difference in developing a descriptive model and a predictive model. Mr. Wallace said it would take much longer than a month to develop a useable spatial model. It could be useful in the long term, but not in time to use for modeling 2002 management measures. Mr. Seger asked how 1998 data was treated? Mr. Wallace said the 1998 and 1999 data was lumped for his comparative analysis. The point was made by the group that the result was highly dependent on the filtering of constrained v. unconstrained tows. The next step in model development is to map the distribution of fishing effort. Dr. MacCall said that, in the past, there were a limited number of species for which bycatch rates were assumed (and challenged). Now we have a significant number of species and fishery/species associations where bycatch can be estimated and challenged. There is not enough time to put all this together. Dr. Hastie said the challenge is to get a range of bycatch estimates and to do sensitivity analyses of estimates within the range. The end product of Mr. Wallace's spatial model are estimates of incidental catch rates for species in unconstrained tows for target species (defined by >40% of total groundfish). This matrix would be filled out on a species by species basis stratified geographically. Dr. Hastie stated that this is clearly a long term objective and, for the short term, we should focus on the gross bycatch rate estimate assumptions (and rationale) used for 2002 management. Dr. MacCall said we should focus on clear species/species complex associations and ignore the lower probability associations across fishing strategies. Dr. Hastie explained that there may be a rationale to use smaller bycatch rates given the gear changes, etc. over time. The bycatch assumptions used in the past (based on Pikitch etc.) are probably very conservative.

Mr. Culver said that one of the strategies in the arrowtooth EFP was to modify the gear (i.e. decrease the rise in the trawl net) to make the fishery cleaner. Dr. Hastie said it is unlikely that we can even pursue gear modifications for 2002 at this juncture. This might be a possible strategy to develop over the winter for a possible inseason adjustment. Mr. Moore cautioned we shouldn't pursue a "one size fits all" approach to gear modifications since there is a likely area difference in effective gear modification strategies. What works in Washington flatfish fisheries may not work in California. Mr. Culver said it is time to bring this issue up again. It was pursued in the past by the Legal Gear Committee but went nowhere.

Dr. Hastie produced tables of bycatch rates for a number of species relative to fishing strategies using EDCP data. However, he used the wrong EDCP data and computed the landings incorrectly. He will redo these tables correctly tonight to display tomorrow, but went over the tables as an example. Dr. Ralston asked if this was an alternative methodology from what Mr. Wallace presented and if the methods were robust. Dr. Hastie said it was a different analysis and he would play with the incremental steps and assumptions to determine how robust the methodology is. The strata for analysis were strategy (target species), gear, and depth (≤ 180 m, > 180 m). These strata were depicted relative to total pounds (of target species and of coincident species), percent of retained target species, and lbs per tow hour by coincident species in logbook-recorded tows. The data were from 1996-98 across all times of the year and all areas covered by EDCP data (Coos Bay north). Dr. Ralston asked if it was appropriate to apply this methodology coastwide. Dr. Hastie said this was one issue we need to resolve. Once we obtain 2000 data which has California data, then we can compare geographic data and more appropriately address bycatch rates in California fisheries. Mr. Wallace said we might want to stratify 2000 EDCP data in a more refined manner. Dr. Hastie said that might work in a descriptive manner, but probably not in a predictive manner. He suggested we draw analogies between what we see in EDCP data and with other methodologies such as Pikitch. Mr. Jagielo questioned whether that would capture the potential geographic variability in bycatch. Dr. Hastie reiterated that a comparative approach may make the best sense at this point as a check on our assumptions. Dr. Ralston wanted to know about potential biases. Dr. Hastie said that the gear changes aren't represented in this dataset. Mr. Wallace stated that Dr. Hastie didn't filter for unconstrained tows which was done for Mr. Wallace's spatial model. Mr. Wallace explained that two factors bias the estimates in different directions. The first bias is the rare tow that catches a lot of bycatch is filtered out. The second bias is there is no adjustment to account for the gear changes and changes in fishing strategy. Depending on how the data are filtered (pre-selected criteria), the true bias is unknown. Dr. Ralston suggested that, at a minimum, data need to be stratified by nearshore, shelf, and slope. Mr. Wallace said that, for most species, that is done. Dr. Ralston asked how the comparative analysis would be used to adjust assumptions. Is it used to validate or adjust the estimates? Dr. Hastie explained the models were never compared and should be done. If there are discrepancies, the next step is to ask why and try to determine reasons for these differences. The other comparative analysis would be to look at the historic ratio of retained catches of target species and incidental species and see how that compares to the total catch ratios as recorded in current logbooks. Dr. Ralston asked how these results could be used to predict bycatch rates. Dr. Hastie said he would use existing patterns of fishing strategies, trip limits, etc. to predict. Mr. Jagielo said fishing strategies are adaptive to the conditions and opportunities available. Mr. Culver said management measures are adapted to try to shape strategies to reduce bycatch depending on patterns observed in the past. Going to pg. 18 of his handout of tables, Dr. Hastie showed the number of vessels with landings of Dover by poundage ranges. He indicated that one alternative is to determine the bycatch and landed catch of target species on a per vessel basis. Given the number of season scenarios to analyze, it will be a task to estimate landed bycatch by cumulative limit periods for each scenario. The analysis needs to be robust enough to be useful in these analyses. With whatever scenario is adopted, there will be an associated distribution of effort that can be evaluated relative to the modeled bycatch rates used in the prediction. Mr. Jagielo said it is tough to determine what rates should be recommended. Dr. Hastie said the power of this analysis is that, after evaluating the effect of new management structures such as seasons, there will be a much more informed model for use. The other result that will be obtained is the frequency distribution of bycatch by vessel and the relative difference from average rates. Dr. MacCall thought it might be useful to calculate CVs from the log-normal survey data to index co-occurrence rates for comparison. Dr. Ralston suggested that it would be useful to do this EDCP analysis to calculate co-occurrence rates for a November decision if it is feasible to complete it on time. The measure of success is how well we stay below the landed catch OY targets for incidental species. Dr. Hastie pointed out that the only data available is for the trawl fishery and nothing similar exists for the fixed gear sector. Dr. Hastie predicted that the range of outcomes would be very little discard if the distributions are not skewed too much within the strata modeled and evaluated to a significant

discard depending on the EDCP results and the trip limits finally adopted. The best way is to evaluate comparable strategies with the same discard assumptions (as will be done in the EA). Mr. Wallace said that updated EDCP data will be available through 2000 by next week. These data need to be modeled next week to go into a NEPA analysis the week after. Mr. Wallace said that the data would not be available that soon. Dr. MacCall asked how we would go about setting discard rates by species. Dr. Hastie suggested we would set aside discard rates for each species and adjust trip limits for co-occurring species accordingly. Mr. Culver said that, in the past, we set discard according to the best information available and the landed catch ratios are always what we set.

Ms. Garrison said the conversation was helpful and the direction for addressing discard seems appropriate. The lawsuit doesn't question the appropriateness of past bycatch/discard assumptions, but the transparency of the steps taken to get there. She thought it would be best to take a precautionary approach where possible. She stressed the importance of documenting the steps. Dr. Hastie agreed that, even though thoughtful consideration was made in the past to estimate/set discard and bycatch rates, it wasn't always documented. He mentioned that accurate EDCP data summaries would be available tomorrow and a more complete analysis and data documentation by early next week. Dr. Ralston said the SSC would be more interested in the methods used and not necessarily the results. He asked whether the Council expects SSC buy off on the discard and bycatch assumptions or simply the methodological approach. Mr. DeVore thought the Council would be more interested in SSC comment on the methodology. There was a discussion on the expectations for the Council family to review the EA/RIR. It was explained that the NEPA analysis wouldn't make the briefing book mailout but would probably be Fed-Exed to the Council family prior to the meeting. The group wanted to know whether a PDF download of the NEPA analysis from the Council website would be possible. Mr. DeVore said he would ask, otherwise he would figure out a way to get an electronic version of the EA to those interested.

The group asked about the long term strategy for addressing this issue. The concept of a workshop over the winter struck a positive chord with everyone.

Dr. Ralston reviewed a series of draft publications that addressed using trawl survey data for determining co-occurrence ratios. Tables 2 and 3 of "Distribution and co-occurrence of rockfishes (family *Scorpaenidae*) over the continental shelf and slope of California and southern Oregon" illustrated how conflicting stratifications give dramatically different results. He separated out port and year effects of bocaccio:chilipepper in landed catches using ANOVA and compared it to these ratios in stock assessment trends. The trends are clearly going in different directions. Ms. Garrison stated that fishermen have noted an inverse production relationship between bocaccio and chilipepper analogous to sardines and anchovies-one species does well in years when the other is doing poorly.

Ms. Garrison stated the overall objective of reducing bycatch. She wanted to know what measures are being contemplated to accomplish this objective. What Council process is there to do this? Dr. Hastie said that the GMT has recommended various measures over the years to do this. He stated that the long term hope is the development of ITQs to manage and account for bycatch. Ms. Garrison thought ITQs were not the answer. Bycatch reduction measures need to be developed first. Mr. Moore said that there is a conservation representative on the GAP. How bycatch reduction is done currently is during the crafting of management measures. He stated that new approaches and measures are brought to the Council directly or through the various committees (GMT or GAP). Mr. Seger remarked that, as you see more constraints on the fishery to accomplish bycatch reduction of overfished or declined species, the struggle to develop management measures is indicative of attempts to reduce bycatch. Ms. Garrison thought this should be a clear objective for these advisory bodies. Dr. Hastie said it is and has been on the screen all along. Ms. deReynier stated that today's work would help develop this year's management measures. Mr. DeVore stated that bycatch reduction measures are addressed in rebuilding plans and EA/RIRs to adopt annual management measures. EFPs and full retention programs are other examples of strategies to develop more informed and effective bycatch reduction strategies. Ms. Garrison strongly recommended that the GMT champion new and creative bycatch reduction alternatives in the Council process. Dr. Hastie stated that the GMT fashions bycatch reduction measures in their recommendations but also has the charge of developing Magnuson-Stevens Act goals that address economic benefits to the nation. Dr. Dalton asked whether EFPs were being developed to address bycatch reduction. Mr. Culver stated that this was instrumental in the development of the Washington arrowtooth EFP. Dr. Hastie mentioned that developing and proposing EFPs

were a state-initiated process. Mr. DeVore mentioned that bycatch reduction was consistent with the Groundfish Strategic Plan (GFSP) and that the Strategic Plan Oversight Committee was promoting a pilot full retention program, permit stacking, etc. to accomplish bycatch reduction as part of GFSP objectives. Dr. Ralston stated that initiatives to reduce capacity would also achieve bycatch and discard reduction. Dr. Dalton asked about ITQs and whether the Council was promoting these management measures? Ms. deReynier explained the Congressional moratorium and that this would not be an efficacious path to follow until the implementation ban is lifted.

There was a general discussion on the methodology for bycatch and discard analyses. Dr. Hastie and Mr. Wallace debated the stratifications that should be used and data needed to complete bycatch and discard estimation for the NEPA analysis of 2002 management measures. Dr. Hastie wanted to consider the question more tonight and provide feedback to Mr. Wallace tomorrow.

WEDNESDAY, SEPTEMBER 26, 2001 - 8 A.M.

Members Present:

Dr. Jim Hastie, National Marine Fisheries Service Northwest Fisheries Science Center
Mr. Brian Culver, Washington Department of Fish and Wildlife
Dr. Alec MacCall, National Marine Fisheries Service Southwest Fisheries Science Center
Mr. Dave Thomas, California Department of Fish and Game
Mr. Mark Saelens, Oregon Department of Fish and Wildlife

Others present:

Mr. Phil Anderson, Washington Department of Fish and Wildlife, Council member
Mr. Rod Moore, West Coast Seafood Processors Association, GAP chair
Ms. Jamie Goen, National Marine Fisheries Service Northwest Region
Mr. Farron Wallace, Washington Department of Fish and Wildlife
Mr. Steve Bodnar, Coos Bay Trawlers
Mr. Steve Joner, Makah Indian Tribe
Ms. Kathy Fosmark, GAP
Mr. Andrew Protz
Mr. Peter Huhtula, Pacific Marine Conservation Council
Mr. Rob Jones, Northwest Indian Fisheries Commission
Mr. Jesus Ruiz
Mr. Jim Seger, Council staff officer, Pacific Fishery Management Council
Mr. John DeVore, Council staff officer, Pacific Fishery Management Council

F. EA and Annual Specifications for 2002 Management Measures

The meeting was called to order at 0828. The GMT constructed a final table of the alternative ABC and OY options (as adopted as the September Council meeting) (Table 2.0 - attached). This table will be included in the Environmental Assessment. Comments pertaining to this table (and embedded within the respective cells of the Excel table: Alt2002 ABC_OY.xls or Table 2.0) include: 1) Council can select the F_{45} ABC with the F_{50} OY in the sablefish alternatives, 2) Council can select the F_{40} ABC with the F_{50} OY in the Dover sole alternatives, and 3) the northern boundary changed from 36° N latitude to Pt. Conception for sablefish and shortspine thornyhead. The GMT noted that the boundary change for sablefish and shortspine thornyhead was due to the fact that stock assessments were extended south to Pt. Conception for those species. It was further noted that the fixed gear sablefish permit stacking regulation (Amendment 14) would probably not be extended to Pt. Conception without an amendment to the FMP. It was stated that NMFS needs to determine whether a boundary change can be made for affected fisheries in time for 2002. It is recommended that interested persons should check final regulations with NMFS-Northwest Region (or within the specifications for 2002 fisheries that will be published in the Federal Register) for the final decision on this.

The GMT worked on the trip limit tables for the GMT-recommended year round fishery option. The following tables were constructed for final consideration and will be included in the Environmental Assessment that will guide the Council decision on 2002 Management Measures at the November Council meeting: Table

2.1.a. (limited entry trawl), Table 2.1.b. (limited entry fixed gear), and Table 2.1.c. (open access)- (all tables attached and in the Excel table: limits2002 GMT year round.xls).

The following discussion occurred during the construction of the above tables. The group considered the appropriateness of depicting a range of alternative ABCs/OYs for only a select number of species. Mr. Moore stated that the Council set these ranges and adding other alternatives at this point would confuse the process. The group agreed.

Regarding the year-round and seasonal options to be analyzed in the EA, Dr. Hastie thought, based on time constraints, that we should analyze only those options the Council adopted. Mr. DeVore stated that, if a reasonable range of options were analyzed and presented in the EA, the Council could consider other measures not specifically analyzed in the EA. Dr. Hastie mentioned that some of the industry-proposed options with the specified trip limits would probably not be supported by the GMT because bycatch/discard rates would not be within specified OYs for some stocks. The group agreed that we had little choice to tweak the options adopted, but that the EA analyses should underscore any shortcomings. It was also agreed that the GMT should footnote any specifications that don't make sense in any of the options in the analyses. There was some debate on frontloading Dover sole in the year round alternative since this was a factor that led to early attainment this year. Mr. Moore stated that there was no consensus in the GAP on this issue- industry was divided. Dr. Hastie envisioned a GMT analysis of annual total catch given the landing limits industry proposed. The analysis would project catch based on past participation. He suspected that the industry-proposed limits would come out above specified OYs. Mr. Culver stated he favored a period approach where seasons were set for different fishing strategies. He said this approach had been analyzed before but not at the Council level. Mr. Moore said that the Coos Bay Trawlers have an opinion regarding a flexible season approach. He mentioned that other trawl factions and processors favor a year round fishery.

Dr. Hastie summarized the Council-adopted options and those alternatives he thought should be analyzed for the EA. Those options include: 1) a year round fishery recommended to the Council by the GMT. This option will be analyzed with trip limits that vary with bycatch rate alternatives. There are also suboptions within this structure; 2) a Council-adopted season option with trip limits that vary with bycatch rate alternatives; 3) a GAP-recommended year round option with two structures that vary by total catch OYs (from the Council-adopted range). This option will be analyzed with trip limits that vary with bycatch rate alternatives; and 4) status quo (2001 management specifications). Mr. Moore asked if there were plans for further analysis after the November Council meeting or will all reasonable alternatives be in the EA? Mr. DeVore stated the intent of the EA was to analyze a reasonably broad range so that the Council had flexibility in shaping and adopting final management measures. These measures do not necessarily have to be specifically analyzed to be adopted. Dr. Hastie elaborated the strategy for doing the economic analysis. He expected to look at changes in permit revenue on a per vessel basis and then extend the analysis to a broader fleet revenue level. Mr. Culver was concerned about the economic impacts (and how to analyze them) relative to a season structure where sectors of the fishery would be closed for part of the year. The year round option, given concerns for the QSM (quota species monitoring) stocks, is also problematic because trip limits would be so low. He thought an intermediate alternative might be best where some sectors would have a year round fishing opportunity and others would have staggered seasons. For instance, moving some limited entry trawl opportunity to the summer months (which is contrary to the Council-adopted season option) allows a higher limit of Pacific ocean perch because of less bycatch. Mr. Moore brought up the yellowtail/widow rockfish issue and the question of potential conflicts between the midwater trawl fishery and the whiting fishery. If the whiting OY goes down next year (pending a new stock assessment), will the presumed groundfish bycatch in the primary whiting fishery go down? How will this dynamic affect the midwater trawl fishery? In the past the midwater fishery took their limits in January-February and then moved north. Should there be consideration to direct this fishery to the March-April timeframe? Dr. Hastie said that might be a good option since many fishermen prefer to take crab in January-February. Mr. Moore mentioned that weather in January affected all fisheries this year. He asked how many vessels landed 20,000lbs/2 months of yellowtail as bycatch? He anticipates a push to directed yellowtail effort because it is the most consistently available stock in the midwater trawl fishery. Dr. Hastie said he would look at the logbook data to determine actual landings of yellowtail so he can consider ratcheting back the 20,000 lbs/2 months landing limit. He doesn't want to encourage target bottom trawl effort where bycatch of canary and yelloweye would be a concern.

Mr. Culver mentioned that fishermen in the north tend to target arrowtooth and Petrale. He also stated that it is hard to separate darkblotched rockfish from other north slope rockfish. The WDFW logbooks don't separate darkblotched from other slope rockfish. Dr. Hastie thought that information was critical since it directly influences trip limits. Mr. Saelens requested we pursue uniformity between the states in logbook requirements. Mr. Culver mentioned that observer data will be available soon with a tow by tow record. He is concerned that observers may only record market categories rather than individual species. Dr. Hastie thought that setting a separate trip limit for darkblotched might get that data in the logbook. He said we are getting information on a trip limit level but that we need it on a species/tow level. Mr. Saelens thought recommended changes to the logbook should be discussed at the next PacFIN Data Committee meeting. Dr. Hastie stated that we need to know how darkblotched are being caught. Should we consider a sublimit of darkblotched in the minor slope complex? Mr. Culver thought we should rely on observer data to figure out if darkblotched are targetable. He expressed a concern that setting a sublimit for darkblotched would lead to bycatch and discard problems. He supports adding a data requirement in the logbooks. He thought we should mandate logbooks coastwide. He said he would recommend a data requirement for WDFW if ODFW was onboard as well. Mr. Saelens said he would support that.

The question was raised whether, in the limited entry trawl fishery for whiting, the widow/yellowtail limit was 2,000 lb/month for both species combined or for each species separately. Mr. Culver answered the limit was for each species separately.

Dr. Hastie, referring once again to the need to acquire additional information on the separability of darkblotched rockfish from the minor slope complex, asked if the states could commit to requiring sorting of darkblotched. He explained that we need a darkblotched hail in logbooks. If this commitment could be made, he would forego recommending a sublimit on darkblotched. Mr. Culver reiterated the need to make logbooks mandatory. It was decided to capture the need to track darkblotched separately from the northern minor slope rockfish complex and the difficulties involved with how this is done in a GMT statement at the November Council meeting. Dr. Hastie asked if the small footrope limit for yellowtail in the midwater trawl fishery was additive? The answer was no- it is explicit in the regulations.

The GMT then worked on the limited entry fixed gear table. Mr. Culver stated that he couldn't find darkblotched in the minor slope rockfish catches in his logbook data. He explained that it appeared that darkblotched appear to be rarely caught with line and pot gear. Mr. Moore asked about the sablefish season length options. Why is there no retention of bocaccio? He assumed that it was because of bocaccio bycatch, but the group explained it was because of yelloweye bycatch. Mr. Moore asked why bocaccio isn't included in the minor shelf rockfish complex south of Cape Mendocino? Dr. Hastie said it would not be a problem to merge bocaccio into the southern minor shelf rockfish complex. The table was modified accordingly. Dr. Hastie calculated the sablefish tier limits which Mr. DeVore added to the limited entry fixed gear table. Regarding trip limits for flatfish species for the limited entry fixed gear fleet, Mr. Culver stated that Dover and rex sole don't bite hooks, yet arrowtooth flounder do as well as Petrale sole. Mr. Ghio thought Petrale sole were aggressive biters and mentioned that they are often found between rocks (this explains the canary/Petrable co-occurrence on the shelf).

The GMT continued to fill out the limited entry fixed gear and open access tables under the year round GMT season option. Mr. Ghio asked about the 1,000 lb/month limit for "other flatfish" in the limited entry fixed gear table. Dr. Hastie explained the rationale was to provide an incidental bycatch limit for other line gear strategies. This limit doesn't constrain other fisheries. Mr. Moore requested that trip limit tables in Federal Register notices and Council documents stay with either the same or similar format.

Dr. Hastie reminded the group that nearshore rockfish limits will change after recreational options are discussed. He explained that by tomorrow a range of nearshore rockfish limits will be available that is consistent with the range of options determined for the recreational fishery. Other critical questions remain. With the distinct seasons outlined for other gear types, should the Daily Trip Limit (DTL) sablefish fishery be opened or closed outside of the primary season? If the six month sablefish and rockfish season is adopted for the limited entry fixed gear fleet, does this imply everything should be closed for fixed gear outside of this season? What about the DTL fishery?

The discussion turned to the season options proposed by the Coos Bay Trawlers (CBT). Mr. Bodnar reviewed the proposal which was discussed by the GMT. He explained that the CBT proposed season options over a concern of high discards with the small trip limits proposed for the year round fishery options. Mr. Bodnar mentioned that he also talked with Dave Cleary, Oregon State Police and chair of the Enforcement Consultants, about the ability to enforce the fishery under the CBT proposal. There are three season options in the CBT proposal: 1) a status quo year round season, 2) a four month option where the fisherman would choose 2 two month periods to get his yearly catch, and 3) a six month option where the fisherman would choose 3 two month periods to get his yearly catch. The GMT would calculate the trip limits for each option (with the expectation that the truncated season options would have higher trip limits). This would allow fishermen to plan their fishing activities at the beginning of the year and declare whether they would participate in the 12, 6, or 4 month period ahead of time. Different fishermen could strategize how and when they pursue groundfish around other fishing opportunities such as crab, shrimp, or salmon. All three options would be available to each fisherman. Mr. DeVore asked whether the option picked would carry across all species and groundfish fishing strategies. Mr. Bodnar thought whiting should be left out so those fishermen that participate in that fishery wouldn't be locked into the year round fishery. Dr. Hastie stated that a preseason declaration would not be possible for 2002 because the Paperwork Reduction Act (PRA) requires a six month amendment process. He did hold out that it was a viable option for the future. Mr. Culver mentioned that states had declarations before but agreed that would not be possible for next year. He wondered what information we have to justify increasing or decreasing trip limits with respect to trip limits. There is a general problem with predicting the relative effort for each option which would be needed to set trip limits. Mr. Bodnar thought that fishermen could self-declare which option they choose based on when they first land groundfish during the year. Fish tickets could be used to enforce fidelity to the chosen season option. Dr. Hastie agreed but stated that inability to predict fishing times or bycatch was problematic. The GMT agreed that the CBT option couldn't be considered for 2002 but had merit for 2003 and beyond. Mr. Bodnar was encouraged to present the CBT concept to the Council in November and formally ask to have the option analyzed and cleared through the PRA process so that it can be considered for 2003.

Mr. Culver said the Council would need industry support to adopt season options. Dr. MacCall mentioned there was room in the Dover/thornyhead/sablefish fishery for season options. Dr. Hastie said he could look at logbook data to get tow size/duration information for a season analysis but otherwise he would focus on bycatch rates of overfished species. The analysis of season options would only be qualitative as to effects on other target species. He explained that it is difficult to analyze the dynamics of season options and hard to develop programming to do the analysis. Mr. Anderson brought up the concept of staggering seasons by gear type/fishing strategy as another season alternative. Similar to Mr. Bodnar's option 3 (three 2 month periods), this option would have a self-declaration tool where the first landing in a period defines the fisherman's allowable season.

The GMT adjourned at 1615.

THURSDAY, SEPTEMBER 27, 2001 - 8 A.M.

Members Present:

Dr. Jim Hastie, National Marine Fisheries Service Northwest Fisheries Science Center
Mr. Brian Culver, Washington Department of Fish and Wildlife
Dr. Alec MacCall, National Marine Fisheries Service Southwest Fisheries Science Center
Mr. Dave Thomas, California Department of Fish and Game
Mr. Mark Saelens, Oregon Department of Fish and Wildlife

Others present:

Mr. Phil Anderson, Washington Department of Fish and Wildlife, Council member
Mr. Rod Moore, West Coast Seafood Processors Association, GAP chair
Ms. Jamie Goen, National Marine Fisheries Service Northwest Region
Mr. Steve Joner, Makah Indian Tribe
Mr. Peter Huhtula, Pacific Marine Conservation Council
Mr. Rob Jones, Northwest Indian Fisheries Commission
Mr. Tom Ghio, GAP

Mr. Jim Seger, Council staff officer, Pacific Fishery Management Council
Mr. John DeVore, Council staff officer, Pacific Fishery Management Council

F. EA and Annual Specifications for 2002 Management Measures

The meeting was called to order at 0838. Yesterday's discussion of the Coos Bay Trawler season option was continued. Mr. Saelens thought self declaration would work through the states' processes. The problem is how well we can predict which season option fishermen will choose. This could choke off product flow for processors. Mr. Culver said that, instead of focusing on the negatives of management alternatives, we should focus some on the negatives of status quo. Dr. Hastie stated that, if California cannot statutorily allow self declaration, then we need to model a suite of possible season options. Mr. Saelens said we could design a set of seasons that make intuitive sense and let fishermen choose. Mr. Culver stated this was similar to the daily and weekly Daily Trip Limit sablefish fishery options open to participating fishermen. Dr. Hastie warned that there isn't much time to develop and model options in time for the EA/RIR and the November Council meeting. Mr. Culver thought we could work backwards in designing seasons. He suggested we could "allocate" amounts of sensitive species for each fishing sector/strategy and then estimate season length. Dr. Hastie stated that shortening season length and increasing trip limits doesn't necessarily reduce bycatch rate. Effort shifts within a season structure could still lead to early attainment due to bycatch of overfished species. Mr. Culver asked how small do trip limits have to get before the fishery is no longer economically viable? Mr. Moore suggested that Mr. Culver call processors and fishermen and ask them that question. Dr. Hastie thought we could model and eventually implement a portion of the Coos Bay Trawler season proposal. Mr. Anderson stated that a choice of season periods was not something we could realistically implement for 2002. He has received comments from trawl fishermen stating that they are close to bust because of low trip limits. Therefore, a season option seemed reasonable. Mr. Anderson conceptualized the following strawman proposal where seasons for primary fishing strategies are staggered:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Midwater												
Slope												
Flatfish												
Line/Pot												
Whiting												
Pink Shrimp												

Explaining the above table, Mr. Anderson indicated that the slope strategy included fisheries targeting the Dover/thornyhead/sablefish complex and line/pot fisheries represented the limited entry fixed gear sector. There was some continuing discussion on priorities for developing models for the Environmental Assessment and Council consideration for 2002 fisheries. Dr. Hastie thought we could thoroughly develop and model season options for 2003 fisheries this winter. He suggested we develop and model one season option for immediate consideration.

There was a general discussion on inseason management again. Ms. Goen explained that some of the NMFS folks in the Northwest Region were troubled by the midwater trawl closure in October. There was confusion relative to Council action on whether the action of October "remains" closed refers to the default regulations where October reopens or whether the inseason closure adopted starting in June where the fishery was closed from July 1 through September 30 was extended through October. Mr. Culver and the rest of the GMT said it was the latter where October would be closed for midwater trawl opportunity for widow and yellowtail rockfish. Ms. Goen called the Northwest Region and came back to the GMT with the final decision that October would be closed, but the small footrope allowance of 1,000 lb/month of widow and 1,500 lb/month of yellowtail would still occur in October. No one in the GMT had trouble with that.

The GMT then shaped the Washington, Oregon, and California recreational groundfish fishery options for 2002. The following table (Table 2.6, Excel file: Rec2002.xls) captured the options to the satisfaction of the state representatives (Mr. Culver, Mr. Saelens, and Mr. Thomas) as well as the rest of the GMT. The GMT estimated the catches of canary, yelloweye, widow, yellowtail, bocaccio, minor shelf rockfish, lingcod, and

minor nearshore rockfish for each of these options based on RecFIN catch data trends and projections provided by the GMT state representatives.

The GMT discussed the fixed gear sablefish options first to take advantage of Mr. Ghio's presence and expertise. Mr. Ghio was not in favor of the sablefish season options. Mr. Seger thought it wouldn't be the best use of time to struggle with these sablefish season options given the efforts last year to shape and adopt the fixed gear sablefish primary season. Dr. Hastie and Mr. Ghio agreed. Dr. Hastie asked Mr. Ghio about the Daily Trip Limit sablefish fishery and his recommendations for that fishery. Mr. Ghio explained, relative to the summer small fish discard problem, that pots and traps fish more cleanly than line gear (i.e. less mortality and more selective to market sized fish). He also recommended, to reduce total mortality of unmarketable sablefish, that the use of crucifiers be prohibited in the line gear fishery and a larger mesh (4.5 inches) be mandated for pot/trap gear.

An "allocation" table was developed to aid in the modeling of season options. Catches of key stocks were apportioned between target fisheries and other fisheries that require an incidental bycatch of these stocks to be prosecuted. Dr. Hastie explained that this table probably wouldn't be completed this week since he had to do some more logbook data crunching to estimate catches of Dover, sablefish, and shortspine thornyheads in shelf flatfish fisheries. That was clearly needed before the target DTS fisheries were modeled in a season structure.

Mr. Ghio questioned some of the trip limits for the limited entry trawl and fixed gear sectors. He thought the limits for chilipepper and yellowtail were inordinately high in the Monterey area for trawl fisheries and too low in the fixed gear fishery. Dr. Hastie explained the difference was due to high incidental catches of canary, bocaccio, and yelloweye in the fixed gear sector for that area. Mr. Ghio believed that chilipepper were segregated and wouldn't be a problem. Dr. Hastie didn't have confidence that this was so. Mr. Thomas said the CDFG-sponsored EFP should provide additional information of the separability of bocaccio and chilipepper. Mr. Ghio stated that chilipepper target line gear fisheries are clean with little bycatch since they inhabit unique habitats. Mr. Thomas replied that lingcod bycatch is an issue as well. Dr. Hastie wondered if the species composition logbook observations would illuminate this. If Mr. Ghio's contention was born out in the data, we could conceivably recommend a chilipepper trip limit specifically for the fixed gear sector north of Pt. Conception.

Tomorrow's schedule will be mostly dedicated to assignments and data analysis to complete the EA. We'll work off Mr. Seger's outline to do this. Dr. Hastie thought we could refine the whiting numbers and the expected bycatch. Other than that, there may be little more to add numerically to model the seasonal trip limit option. Mr. Seger mentioned that we could organize and further develop the economic analyses. Mr. Culver asked Mr. Joner if he had catch projections of overfished stocks for 2002 tribal fisheries. Mr. Joner brought some information to share for the Makah and other tribal fisheries:

Tribal catch projections for 2002 groundfish fisheries:

- lingcod: 4-5 mt (all tribes)
- yelloweye: ~1 mt (Makah only- competitive fisheries same as 2001)
~1.5-2 mt (all tribes- high end of range unlikely)
- widow: 27 mt (Makah only ~95% of all tribes; June-July closed in 2001 but expected to be open in 2002- projection factors this in)
- canary: 2.5 mt (all tribes)
- POP: trace
- db: ?- probably minimal (need better species composition from sampling)

The Makah Tribe will decrease trip limits if groundfish effort increases to >4 boats. Some minor shelf rockfish are caught in halibut longline fisheries. This fishery accounts for 67% of all non-trawl canary rockfish catch (only 82 lb. in 2001 line fisheries). Mr. Joner said he would provide Dr. Hastie with minor shelf and nearshore rockfish projections next week (October 1-5). The Makah Tribes will do some bottom trawling in 2002 using small footropes. This effort is expected to be 3-4 boats.

The meeting was adjourned at 1710.

FRIDAY, SEPTEMBER 28, 2001 - 8 A.M.

Members Present:

Dr. Jim Hastie, National Marine Fisheries Service Northwest Fisheries Science Center
Mr. Brian Culver, Washington Department of Fish and Wildlife
Dr. Alec MacCall, National Marine Fisheries Service Southwest Fisheries Science Center
Mr. Dave Thomas, California Department of Fish and Game
Mr. Mark Saelens, Oregon Department of Fish and Wildlife

Others present:

Mr. Rod Moore, West Coast Seafood Processors Association, GAP chair
Ms. Jamie Goen, National Marine Fisheries Service Northwest Region
Mr. Peter Huhtula, Pacific Marine Conservation Council
Mr. Rob Jones, Northwest Indian Fisheries Commission
Mr. Tom Ghio, GAP
Mr. Steve Fitz
Mr. Frank Ealy
Mr. Jim Seger, Council staff officer, Pacific Fishery Management Council
Mr. John DeVore, Council staff officer, Pacific Fishery Management Council

F. EA and Annual Specifications for 2002 Management Measures

Dr. Hastie produced two tables of data summaries from PacFIN in answer to Mr. Ghio's assertion yesterday that chilipepper could be targeted cleanly in California with line gear. The tables, "Summary of rockfish species included in line-gear landings where chilipepper exceeded selected thresholds total rockfish, and in landings where more than 100 lb of sanddabs were landed" and "Largest monthly chilipepper landings, including all individual landings where chilipepper comprised at least 60% of rockfish pounds" (Attached-Excel file: CAchillipepper.xls). Dr. Hastie recommended a 2,500 lb/month trip limit for chilipepper in Monterey. There may still be a relatively high catch of widow and bocaccio. Mr. Thomas explained that chilipepper are especially targetable with troll gear. Dr. Hastie pointed out that troll gear can be specified for the open access fishery, but is not a limited entry gear. However, the GMT is comfortable recommending the 2,500 lb/month chilipepper limit for both limited entry fixed gear and open access with troll gear specified for open access.

The GMT deliberated on sanddabs. Mr. Fitz explained that he can target sanddabs effectively with Scottish seine gear. He can catch 5,000 lb/set cleanly with small sets working on the edge of the schools. The inseason adjustments this year really hurt him and his markets. Dr. Hastie thanked him for sharing his insights. Mr. Culver suggested he develop an EFP for Scottish seine gear. Mr. Moore asked Mr. Fitz if he fished year round. Mr. Fitz replied yes, except that he spends one month fishing crab. He expressed concern for the big trawlers taking too many sanddabs for large volume, small economic return overseas markets. They take up to 60,000 lb/tow and he's worried about the future of the stock. He suggested a regulation for sanddabs such as 6,000 lb/trip to avoid the problem of large boats taking too many in a tow. His fishing effort is clean with about 98% of his catch being targeted sanddabs and a small incidental catch of chilipepper and other rockfish. He thought they should be saved for the small boats with specialty markets such as the ones he has developed in the Bay Area. Mr. Saelens said that when special fisheries such as the Pacific City dory fishery are allowed, there is concern that requests for these exemptions would proliferate. Dr. Hastie said that this is the reason for the EFP process and is the likely future of the fishery. Mr. Moore suggested that the logbook data should be summarized north and south of Cape Mendocino to avoid coastwide gear/allocation conflicts.

Mr. Ghio asked about limited entry fixed gear flatfish limits. He wanted to go to 8,000 lb/month to access sanddabs (from the previously recommended monthly limit of 1,000 lbs). Mr. Culver suggested that we break out sanddabs as a separate stock and specify a limit. Dr. Hastie agreed and said he could crunch more data to come up with a suitable limit structure. Bumping up the other flatfish limit could otherwise exacerbate canary bycatch. Dr. Hastie specified the other flatfish limit as 5,000 lb/month (as a placeholder) with a note to look at a specific sanddab limit. Mr. Culver noted that he will ask Mr. Farron Wallace look at sanddabs in the California logbook data.

The GMT discussed development of the EA. Dr. Hastie reviewed the sections that will need to be delayed pending further analysis. Specifically, further development of the bycatch/discard alternatives and the season structure alternatives require analyses that will be done next week by Dr. Hastie. Mr. Seger explained the need to identify and prioritize alternatives. Alternatives that may be considered include not only options adopted by the Council, but those proposed by others (i.e. Coos Bay Trawlers) and those that might reasonably be anticipated. One issue brought up earlier by Mr. Moore was the need by processors of a continuous flow of rockfish through the year to stay open. Otherwise, specialty workers such as filleters will be lost and processing potential for other portions of the year will be irrevocably lost. This point doesn't even address the economic potential lost with a seasonal groundfish fishery structure. Dr. Hastie and Mr. Seger discussed details of the economic analyses that they recommend be incorporated in the EA to address these types of issues. Mr. Seger asked the state representatives (Thomas, Saelens, and Culver) how to inventory the fillet stations at each port and plant within each port. He wondered if port samplers could document and report this information. Dr. Hastie thought this could be disseminated from the distribution of landings of different stocks by port. Dr. MacCall also suggested there might be overcapitalization in the processing sector as well. He suggested the number of processors in each port also be documented. Mr. Saelens and Mr. Culver thought they could provide this. Dr. Radtke had done such an economic analysis. Mr. Seger said that was about five years ago and is somewhat obsolete now. Mr. Seger explained that, with good documentation of the number of plants by port, seasonal product flow could be tracked. Dr. Hastie suggested that one would need to know the landings by plant and the number of individual vessels supplying each plant to effectively analyze product flow. Mr. Seger explained his plan to interview 9 processors coastwide to develop an economic profile of that sector. Mr. Seger continued to run through the EA outline. Dr. MacCall recommended that a sensitivity analysis of alternative ABCs/OYs could be done by running scenarios through the Puntalyzer assuming different levels of overfishing. However, in the case of sablefish and yelloweye, for instance, stocks cannot be modeled to rebuild from current biomass size with current levels of recruitment and mortality. The alternative assumptions for those stocks with variable ABCs and OYs can be analyzed for biological and economic impacts by going to stock assessments and rebuilding analyses. Annual specifications for recruitment/rebuilding trajectories may require model runs through the Puntalyzer. Dr. Hastie said there was a problem with undocumented assumptions in many of the assessments. Dr. MacCall agreed and expressed frustration with many of the recent assessments. He thought the DTS stock assessments were especially plagued with uncertain and/or faulty assumptions. There will be further discussion next week on outside input into the EA.

The meeting was adjourned at 1215.

PFMC
09/24-28/01

Attachment from Rod Moore (09/24/01):

**West Coast Seafood Processors Association
P.O. Box 1477
Portland, OR 97207
September 21, 2001**

**COMPARISON OF COST VS. PRICES FOR SELECTED MAJOR GROUND FISH
SPECIES**

In order to provide some economic data that would be useful for analysis of 2002 management options, we surveyed processing plants to determine their cost per pound of producing Dover sole and rockfish fillets and then determined the range of prices for which those fillets were sold. We chose Dover sole because it is the most common, most available, and most valuable (other than petrale sole at certain times of the year) of the flatfish species. We did not specify which species of rockfish we were collecting data on but instead asked the plants to give us the most common values.

The table below shows aggregated data from seven plants located in California and Oregon (we were unable to obtain data from Washington in time to provide the information). In 2000, these plants processed 55% of the non-whiting groundfish landed on the west coast (plant data from WCSPA records; total groundfish landings from PacFIN); thus we believe they can provide a representative sample.

We did not try to distinguish between trawl and fixed gear landings, but the prices and costs shown are from trawl-caught fish.

Because the values used in the table (price, recovery rate, etc.) vary among plants, we used an average. Prices for the two product types are expressed as a range, which was averaged over the ranges provided by the plants.

Discussion

As the data show, plants make more money on rockfish than on Dover sole and lose money (especially when fixed costs are included) on frozen product. This suggests that, to maximize economic benefits within the bounds of this fishery, there is a need for rockfish supplies year round to offset losses (or at best minimal profits) on Dover sole. It also suggests that management measures which result in product gluts at plants (and hence a requirement to freeze fillets) will result in economic losses.

DOVER SOLE

Avg Price	Avg Recovery %	Avg Raw Cost	Avg Other Cost	TOTAL	Avg Price Frozen	Avg Price Fresh
\$.36	25	\$1.44	\$.72	\$2.16	\$1.73- \$1.98	\$2.58- \$2.76

ROCKFISH

Avg Price	Avg Recovery %	Avg Raw Cost	Avg Other Cost	TOTAL	Avg Price Frozen	Avg Price Fresh
\$.47	34	\$1.38	\$.59	\$1.97	\$1.43- \$1.78	\$2.35- \$2.70

NOTE:

“Other Cost” does *not* include fixed costs such as overhead, utilities, taxes, etc. It *does* include labor, packaging, and shipping. If fixed costs are included, the total cost would increase by an estimated \$.36, based on fixed cost data obtained from some of the sources.

Table 2.0. Alternative acceptable biological catch (ABC) and total catch optimum yield (OY) recommendations for 2002 for the Washington, Oregon, and California region (metric tons). (Overfished stocks in CAPS).

Species/Group	Alternative 1 2001 ABCs and OYs		Alternative 2 2002 Low OYs		Alternative 3 2002 High OYs		Alternative 4 2002 Preferred OYs	
	ABC	OY	ABC	OY	ABC	OY	ABC	OY
LINGCOD	1,119	611					745	577
Pacific cod	3,200	3,200					3,200	3,200
Whiting	238,000	190,400					238,000	190,400
Sablefish	7,661	6,895	4,062	3,200	4,786	4,500	4,786	4,000
S. of Pt. Conception	191	96					191	96
PACIFIC OCEAN PERCH	1,541	303	640	290	640	410	640	350
Shortbelly	13,900	13,900					13,900	13,900
WIDOW	3,727	2,300	3,727	726	3,727	856	3,727	856
CANARY	228	93					228	93
Chilipepper	2,700	2,000					2,700	2,000
BOCACCIO	122	100					122	100
Splitnose	615	461					615	461
Yellowtail	3,146	3,146					3,146	3,146
Shortspine Thornyhead	880	751	880	751	1,004	955		
Longspine Thornyhead	2,461	2,461					2,461	2,461
Conception area	390	195					390	195
COWCOD - Conception	2.4	2.4					2.4	2.4
Monterey	19	2.4					19	2.4
DARKBLOTCHED	349	130	187	157	187	181	187	168
YELLOWEYE - coastwide							27	11
Monterey							5	2-3
N of 40 10	29	22					22	8-9
Minor Rockfish N	4,823	3,137					4,794	3,115
Minor Rockfish S	3,556	2,040					3,506	2,015
Remaining rockfish North	2,755						2,755	
black	1,115						1,115	
bocaccio	318						318	
chilipepper - Eureka	32						32	
redstripe	576						576	
sharpchin	307						307	
silvergrey	38						38	
splitnose	242						242	
yellowmouth	99						99	
Remaining rockfish South	854						854	
bank	350						350	
blackgill	343						343	
sharpchin	45						45	
yellowtail	116						116	
Other rockfish North	2,068						2,068	
South	2,702						2,652	
Dover sole	8,204	7,677	6,142	5,520	8,510	7,440	7,221	6,410
English sole	3,100						3,100	
Petrale sole	2,740						2,740	
Arrowtooth flounder	5,800						5,800	
Other flatfish	7,700						7,700	
Other Fish	14,700						14,700	

Table 2.1.a. Trip limits for limited entry trawl for 2002 under the GMT year round fishery season alternative.

Species/groups	Landed catch	JAN-FEB	MAR-APR	MAY-JUN	JUL-AUG	SEP-OCT	NOV-DEC
Minor slope rockfish							
North of Cape Mend.					1,500 lb/2 months		
South of Cape Mend.					25,000 lb/2 months		
Splitnose-South					25,000 lb/2 months		
POP	244	1,500 lb/month			3,500 lb/month		1,500 lb/month
	294	2,000 lb/month			4,000 lb/month		2,000 lb/month
	344	2,500 lb/month			4,000 lb/month		2,500 lb/month
DTS							
Dover sole	5,244				14,000 lb/2 months		
	6,090				16,000 lb/2 months		
	7,068				18,000 lb/2 months		
Sablefish	1,180				3,000 lb/2 months		
	1,476				4,000 lb/2 months		
	1,660				5,000 lb/2 months		
Shortspine	614				1,400 lb/2 months		
	759				1,700 lb/2 months		
Longspine					6,000-7,000 lb/2 months		
Arrowtooth		20,000 lb/trip			Sm. Footrope: 7,500 lb/trip, up to 30,000 lb/mo		20,000 lb/trip
Petrale sole		No restriction					No restriction
Rex sole		No limit					No limit
All other flatfish		Small Footrope range: 30,000 lb/mo -to- no limit Large footrope: 1,000 lb/trip			Small footrope range: 30,000-60,000 lb/mo for all non-Dover flatfish species combined using small footrope, no more than 10,000-20,000 lb of which may be petrale		Small Footrope range: 30,000 lb/mo -to- no limit Large footrope: 1,000 lb/trip
Shoreside whiting ^{a)}		20,000 lb/trip			Open		20,000 lb/trip
Use of small footrope required for landing all shelf and near-shore rockfish							
Minor Shelf rockfish							
North of Cape Mend.		300 lb/month			1,000 lb/month		300 lb/month
South of Cape Mend.		500 lb/month			1,000 lb/month		500 lb/month
Canary-Coastwide		100 lb/month			300 lb/month		100 lb/month
Widow-Coastwide							
(mid-water only)		10,000 lb/2 months	Closed	with >=10,000 lb whiting, 2,000 lb/mo;	combined		Evaluate remaining widow OY
Small footrope				widow+yellowtail of 500 lb/trip			
					1,000 lb/month		
Yellowtail-North							
(mid-water only)		20,000 lb/2 months	Closed	with >=10,000 lb whiting, 2,000 lb/mo;	combined		Evaluate remaining widow OY
Small footrope				widow+yellowtail of 500 lb/trip			
as flatfish bycatch					1,500 lb/month		
		Up to 33% of all flatfish (excluding arrowtooth) plus 10% of weight of Arrowtooth not to exceed:					
		2,500 lbs/trip			7,500 lb/trip		2,500 lb/trip
		<----- and 20,000 lb/2 months ----->					
Bocaccio-South		300 lb/month			500 lb/month		300 lb/month
Chilipepper-South							
(mid-water only)					25,000 lb/2 months		
Small footrope					7,500 lb/2 months		
Cowcod					No retention		
Minor Nearshore rockfish							
North of Cape Mend.					200 lb/month		
South of Cape Mend.					200 lb/month		
Lingcod		No retention			400 lb/month		No retention

^{a)} Whiting limit in the Eureka area for catch inside 100 fathoms is 10,000 lb/trip throughout the year.

Table 2.1.b. Trip limits for limited entry fixed gear for 2002 under the GMT year round fishery season alternative.

Species/groups	Landed catch	JAN-FEB	MAR	APR	MAY-JUN	JUL-AUG	SEP	OCT	NOV	DEC
Minor slope rockfish										
North of Cape Mend.		1,500 lb/2 months ^{a)}								
South of Cape Mend.		25,000 lb/2 months								
Splitnose-South		25,000 lb/2 months								
POP	244	1,500 lb/month			3,500 lb/month			1,500 lb/month		
	294	2,000 lb/month			4,000 lb/month			2,000 lb/month		
	344	2,500 lb/month			4,000 lb/month			2,500 lb/month		
Sablefish: Primary Season	1,008				Tier 1: 26,600 lb; Tier 2: 12,100 lb; Tier 3: 6,900 lb					
	1,260				Tier 1: 33,300 lb; Tier 2: 15,100 lb; Tier 3: 8,600 lb					
	1,418				Tier 1: 37,400 lb; Tier 2: 17,000 lb; Tier 3: 9,700 lb					
Sablefish: Daily-Trip-Limit fishery options ^{b)}	139	300 lb/day, or 1 landing per week up to 900 lb, not to exceed 1,800 lb/2 months								
	174	300 lb/day, or 1 landing per week up to 1,000 lb, not to exceed 2,000 lb/2 months								
	196	300 lb/day, or 1 landing per week up to 1,100 lb, not to exceed 2,200 lb/2 months								
Longspine		6,000-7,000 lb/2 months								
Shortspine	614	1,400 lb/2 months								
	759	1,700 lb/2 months								
Dover sole	5,244	14,000 lb/2 months								
	6,090	16,000 lb/2 months								
	7,068	18,000 lb/2 months								
Arrowtooth		Included in other flatfish								
Petrale sole		Included in other flatfish								
Rex sole		Included in other flatfish								
Other flatfish		1,000 lb/month								
Shoreside whiting		20,000 lb/trip			Open			20,000 lb/trip		
Canary		No retention								
Lingcod		No retention			400 lb/month				No retention	
Widow		Included in minor shelf rockfish limit								
Yellowtail-North		Included in minor shelf rockfish limit								
North of Cape Mend. Minor Shelf rockfish + widow + yellowtail		200 lb/month (No yelloweye retention)								
Minor Nearshore rockfish options ^{c)}		1,000 lb/month			2,000 lb/month			1,000 lb/month		
		5,500 lb/month								
South of Cape Mend. ^{d)} Minor Shelf rockfish + widow + bocaccio		200 lb/month (No yelloweye retention)								
Minor Nearshore rockfish		1,600 lb/2 months								
Bocaccio-South		Included in minor shelf rockfish limit								
Chilipepper-South		No retention								
Cowcod-South		No retention								
Option for South of Pt. Conception, during periods when the recreational fishery is open										
Minor Shelf rockfish		1,000 lb/month								
Bocaccio		500 lb/month								
Chilipepper		2,500 lb/month								

^{a)} Potentially higher limits during the sablefish fishery.

^{b)} South of Pt. Conception, sablefish DTL limit is 350 lb/day, or 1 landing per week of up to 1,050 lb.

^{c)} Sublimit on species other than black or blue rockfish <= 40% of monthly total.

^{d)} Nearshore and shelf fishing opportunities will be closed in the Monterey and Conception areas when the recreational fisheries are closed in those areas.

Table 2.1.c. Trip limits for open access (other than exempted trawl ^{a)}) for 2002 under the GMT year round fishery season alternative.

Species/groups	Landed catch	JAN-FEB	MAR-APR	MAY-JUN	JUL-AUG	SEP-OCT	NOV	DEC
Minor slope rockfish								
North of Cape Mend.		500 lb/2 months						
South of Cape Mend.		10,000 lb/2 months						
Splitnose-South		200 lb/month						
POP		100 lb/month						
Sablefish: Daily-	229	300 lb/day, or 1 landing per week up to 900 lb, not to exceed 1,800 lb/2 months						
Trip-Limit fishery ^{a)}	286	300 lb/day, or 1 landing per week up to 1,000 lb, not to exceed 2,000 lb/2 months						
options	322	300 lb/day, or 1 landing per week up to 1,100 lb, not to exceed 2,200 lb/2 months						
Longspine		No retention (North of Pt. Conception) \			S. of Pt. Conception, 50 lb/day for both			
Shortspine		No retention (North of Pt. Conception) /			species combined, up to 2,000 lb/2 months			
Arrowtooth		200 lb/month						
Dover sole		Included in other flatfish						
Petrale sole		Included in other flatfish						
Near-shore flatfish		Included in other flatfish						
Other flatfish		300 lb/month						
Shoreside whiting		300 lb/month						
Canary		No retention						
Lingcod		No retention		300 lb/month			No retention	
Widow		Included in minor shelf rockfish limit						
Yellowtail-North		Included in minor shelf rockfish limit						
North of Cape Mend.								
Minor Shelf rockfish + widow + yellowtail		200 lb/month (No yelloweye retention)						
Minor Nearshore rockfish options ^{b)}		1,000 lb/month		2,000 lb/month		1,000 lb/month		
				5,500 lb/month				
South of Cape Mend. ^{c)}								
Minor Shelf rockfish + widow + bocaccio		200 lb/month (No yelloweye retention)						
Minor Nearshore rockfish		1,600 lb/2 months						
Bocaccio-South		Included in minor shelf rockfish limit						
Chilipepper-South		No retention						
Cowcod		No retention						
Option for South of Pt. Conception, during periods when the recreational fishery is open								
Minor Shelf rockfish		1,000 lb/month						
Bocaccio		500 lb/month						
Chilipepper		2,500 lb/month						

^{a)} Exempted trawl - Spot/ridgeback prawn, California halibut, sea cucumber fisheries:

GMT recommended: 300 lb. of groundfish per trip, not to exceed the poundage of target species, or any other open-access species limit. Spiny dogfish poundage can exceed target poundage but not the 300 lb per trip limit.

^{b)} Sublimit on species other than black or blue rockfish <= 40% of monthly total.

^{c)} Nearshore and shelf fishing opportunities will be closed in the Monterey and Conception areas when the recreational fisheries are closed in those areas.

Table 2.6. Recreational groundfish fishery options for 2002.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Washington Rockfish												
a) b) c) d) a)-d)												
Lingcod												
Oregon Rockfish												
a)												
Lingcod												
a)												
Rockfish												
b)												
Lingcod												
b)												
California North of 40°10'												
a) b)												
South of 40°10' bag limits Rockfish												
Lingcod												
Pt. Conception to 40°10' season options												
a)												
b)												
c)												
Mexican border to Pt. Conception season options												
a)												
b)												

Year-round: 10 rockfish daily bag; no more than **one** canary **AND one** yelloweye
 Year-round: 10 rockfish daily bag; no more than **one** canary **OR one** yelloweye
 Same as a), but no retention of yelloweye and Pacific halibut on the same trip
 Same as b), but no retention of yelloweye and Pacific halibut on the same trip
 Possible inseason closure of groundfish fishing outside 25 fm, subject to yelloweye attainment

March 15-Oct. 15: 2 fish daily bag, 24" size limit

April 1-Oct. 31: 10 rockfish daily bag; no more than **one** canary **AND one** yelloweye
 May-June 18
 Open only inside 20 fm

April 1-Oct. 31: 2 fish daily bag, 24" size limit
 May-June 18
 Open only inside 20 fm

Year-round: 10 rockfish daily bag; no more than **one** canary **AND one** yelloweye
 May
 Open < 20 fm

Year-round: 1 fish daily bag, 24" size limit
 May
 Open < 20 fm

Same as option selected for Oregon, except for lingcod size limit (26") and potentially bag limit

During main season: 10 rockfish daily bag; no more than 2 bocaccio, 1 canary, 1 yelloweye (2 per vessel), no cowcod
 cabezon, greenlings, lingcod, and ocean whitefish; not to exceed main season limits for individual species; possible retention of 2 shelf rockfish, excluding bocaccio, canary, cowcod, and yelloweye.

During main season: 2 fish daily bag, 26" size limit
Outside of main season: see rockfish

Pt. Conception to 40°10' season options

a)
b)
c)

Alternate nearshore provisions
 Alternate nearshore provisions
 Main season

Main season
 Alternate nearshore provisions
 Alternate nearshore provisions

nearshore
 Main season
 Main season

Main season
 nearshore
 Main season

Mexican border to Pt. Conception season options

a)
b)

Alternate nearshore provisions
 Alternate nearshore provisions
 Main season

Main season
 Alternate nearshore provisions
 Alternate nearshore provisions

nearshore
 Main season
 Main season

Main season
 nearshore
 Main season

Table 2.6. Recreational groundfish fishery options for 2002 (continued).

		Projected recreational catches in 2002						
		Canary	Yelloweye	Widow	Yellowtail	Bocaccio	Minor shelf	Lingcod
		Landings (need to assess discard)						
Washington	Rockfish							
	a)	3	13		6		1	150
	b)	2	11		6		1	150
	c)	3	3		6		1	150
	d)	2	2		6		1	150
	a)-d)							
Lingcod								50
Oregon	Rockfish							
	a)	9	4	2	8		5	385
	Lingcod a)							70
	Rockfish							
	b)	12	4	3	9			455
	Lingcod b)							76
California								
North of 40°10'								
	a)	6	0.6					
	b)	7	0.6					
South of 40°10' bag limits								
Rockfish								
Lingcod								
Pt. Conception to 40°10' season options								
	a)	23	0.5					
	b)	20	0.5					
	c)	23	0.5					
Mexican border to Pt. Conception season options								
	a)					47		
	b)					59		

Summary of rockfish species included in landings where chilipepper exceeded selected thresholds total rockfish, and in landings where more than 100 lb of sanddabs were landed.

Species	2000						2001					
	Chilipepper composition			Sanddabs			Chilipepper composition			Sanddabs		
	> 60%		> 70%		> 80%		> 60%		> 70%		> 80%	
	lb	% of roc	lb	% of roc	lb	% of roc	lb	% of roc	lb	% of roc	lb	% of all
SDAB	22						4,403		4,403		4,403	
WDW1	4,018	3.9%	2,322	2.5%	897	1.1%	1,099	2.4%	373	1.0%	373	1.1%
YTR1	564	0.5%	373	0.4%	159	0.2%	185	0.4%	100	0.3%	31	0.1%
CNR1	225	0.2%	86	0.1%	36	0.0%	74	0.2%	6	0.0%	6	0.0%
BCC1	2,503	2.4%	2,028	2.2%	1,108	1.4%	1,648	3.6%	939	2.5%	741	2.2%
CLP1	93,435	90.0%	86,739	92.8%	75,671	96.1%	40,641	88.2%	35,360	92.9%	31,853	95.7%
BGL1	105	0.1%	105	0.1%	1	0.0%	117	0.3%	117	0.3%	14	0.0%
BNK1	0	0.0%	0	0.0%	0	0.0%	820	1.8%	820	2.2%	0	0.0%
COP1	656	0.6%	487	0.5%	221	0.3%	315	0.7%	217	0.6%	169	0.5%
CWC1	81	0.1%	26	0.0%	5	0.0%	0	0.0%	0	0.0%	0	0.0%
DBR1	10	0.0%	10	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
GSP1	37	0.0%	37	0.0%	12	0.0%	0	0.0%	0	0.0%	0	0.0%
RCK4	886	0.9%	549	0.6%	251	0.3%	46	0.1%	39	0.1%	32	0.1%
RST1	39	0.0%	22	0.0%	15	0.0%	15	0.0%	5	0.0%	5	0.0%
SNS1	133	0.1%	107	0.1%	0	0.0%	8	0.0%	8	0.0%	8	0.0%
USLF	450	0.4%	121	0.1%	30	0.0%	82	0.2%	41	0.1%	28	0.1%
USLP	197	0.2%	197	0.2%	197	0.3%	849	1.8%	0	0.0%	0	0.0%
VRM1	232	0.2%	106	0.1%	56	0.1%	16	0.0%	12	0.0%	0	0.0%
YEY1	114	0.1%	72	0.1%	45	0.1%	17	0.0%	9	0.0%	9	0.0%
All rockfish	103,799		93,453		78,710		46,086		38,045		33,268	
Rockfish + sanddabs												5,095

Largest monthly chillipepper landings, including all individual landings where chillipepper comprised at least 60% of rockfish pounds.

	2000		2001	
# of monthly periods	106		29	
Species	Monthly vessel poundage			
	90th p'tile	Highest	90th p'tile	Highest
SDAB	22	22	4,403	4,403
WDW1	105	611	83	893
YTR1	8	113	33	70
CNR1	0	103	0	64
RCK8	0	0	0	0
BCC1	75	205	200	302
CLP1	1,988	13,493	2,500	12,545
BGL1	0	94	0	103
BNK1	0	7	0	820
BRZ1	0	37	0	0
COP1	27	50	50	50
CWC1	0	19	0	0
DBR1	0	10	0	0
RCK4	28	177	5	31
RCK5	0	41	0	0
SNS1	0	93	0	8
USLF	16	134	18	26
USLP	0	197	0	637
VRM1	0	172	0	12
YEY1	0	35	4	5

PROPOSED AGENDA
Groundfish Advisory Subpanel

Pacific Fishery Management Council
Clarion Hotel San Francisco Airport
Embarcadero A Room
401 East Millbrae Avenue
Millbrae, CA 94030
(650) 692-6363
October 29 - November 2, 2001

NOTE: This agenda is subject to change based on potential changes in the Council agenda.

MONDAY, OCTOBER 29, 2001 - 8 A.M.

A. Call to Order

Rod Moore, Chair

1. Introductions
2. Announcements
3. Approve GAP Agenda
4. Council Agenda Overview

John DeVore

C. Groundfish Management

C.3 Final Harvest Levels for 2002

Jim Hastie

NOTE: The informational briefing for this agenda item will be given to the GAP, GMT, and the SSC at 8:30 A.M. in the Sausalito B Room. Further discussion of this agenda item will occur after lunch when Dr. Hastie will be available to assist GAP deliberations.

C.2 Marine Recreational Fisheries Statistics Survey Update

Russell Porter

C.5 Groundfish Strategic Plan Implementation
Ecotrust/Pacific Marine Conservation Council
Capacity Reduction Analysis Proposal

Astrid Scholz

C.6 Rebuilding Plans

John DeVore

C.7 Groundfish Fishery Management Plan
Environmental Impact Statement

Jim Glock

C.3 Final Harvest Levels for 2002 (continued)

Jim Hastie

C.4 Management Measures for 2002 and
Environmental Assessment - Initial Guidance

John DeVore, Jim Hastie

TUESDAY, OCTOBER 30, 2001 - 8 A.M.

NOTE: The GAP will recess when the Council takes up Final Harvest Levels for 2002 (agenda item C.3) and Management Measures for 2002 and Environmental Assessment (agenda item C.4).

Review Draft Groundfish Advisory Subpanel Statements

F. Marine Reserves

F.1 Status of Marine Reserves Proposals for Channel Island National Marine Sanctuary (CINMS) Jim Seger, Patty Wolf, Sean Hastings

C. *Groundfish Management (continued)*

C.8 Exempted Fishing Permits (EFPs) Brian Culver, Dave Thomas

C.9 Status of Fisheries and Inseason Adjustments John DeVore, Jim Hastie

C.4 Management Measures for 2002 and Environmental Assessment - Further Guidance John DeVore, Jim Hastie

WEDNESDAY, OCTOBER 31, 2001 - 8 A.M.

Review Draft Groundfish Advisory Subpanel Statements, Complete Unfinished Agenda Items

C. *Groundfish Management (continued)*

C.4 Management Measures for 2002 and Environmental Assessment - Clarification and Guidance John DeVore, Jim Hastie

THURSDAY, NOVEMBER 1, 2001 - (if needed)

Review Draft Groundfish Advisory Subpanel Statements, Complete Unfinished Agenda Items

C. *Groundfish Management (continued)*

C.4 Management Measures for 2002 and Environmental Assessment (continued) John DeVore, Jim Hastie

ADJOURN

PFMC
10/15/01

PROPOSED AGENDA
Scientific and Statistical Committee

Pacific Fishery Management Council
Clarion Hotel San Francisco Airport
Sausalito B Room
401 East Millbrae Avenue
Millbrae, CA 94030
(650) 692-6363
October 29 - 30, 2001

MONDAY, OCTOBER 29, 2001 - 8 A.M.

A. Call to Order and Scientific and Statistical Committee (SSC) Administrative Matters

1. Report of the Executive Director Don McIsaac
2. Approve Agenda
3. Approve September 2001 Minutes
4. Open Discussion (.5 hours)

A suggestion for the duration of each topic is provided. When the agenda is approved, these durations may be revised. Discussion leaders should determine if this is necessary. Work assignments are noted in parentheses, the first name is the discussion leader and second the rapporteur.

GENERAL SESSION
8:30 A.M.

C. Groundfish Management

3. Final Harvest Levels for 2002 Jim Hastie
(8:30 A.M., 2 hours; Ralston, Conser) *Council Agenda – Tuesday, October 30, late morning.*
4. Management Measures for 2002 and Environmental Assessment Jim Hastie
(10:30 A.M., 1.5 hours; Jagielo, Punt) *Council Agenda – Tuesday, October 30, early afternoon.*

LUNCH

A. SSC Administrative and Other Matters (continued)

5. Review Statements C.3 and C.4.
(1 P.M., 1 hour)

D. Salmon Management

5. Results of SSC Methodology Review
(2 P.M., 1.5 hours; Lawson, Allee) *Council Agenda – Wednesday, October 31, morning.*

F. Marine Reserves

1. Status of Marine Reserves Proposals for Channel Island National Marine Sanctuary
(3:30 P.M., 1 hour; Thomson, Ralston) *Council Agenda – Wednesday, October 31, afternoon.*

A. SSC Administrative and Other Matters (continued)

6. Finalize Statements C.3 and C.4.
(4:30 P.M.)

TUESDAY, OCTOBER 30, 2001 - 8 A.M.

A. SSC Administrative and Other Matters (continued)

7. Review Statements D.5 and F.1.
(8 A.M., 1 hour)

D. Salmon Management (continued)

6. Queets River Coho Status Review Dell Simmons
(9 A.M., 1 hour; Zhou, Byrne) *Council Agenda – Wednesday, October 31, morning.*

G. Highly Migratory Species Management

2. Draft Highly Migratory Species Fishery Management Plan (FMP) Steve Crooke, Dale Squires
(10 A.M., 2 hours; Hill, Conrad) *Council Agenda – Thursday, November 1, morning.*

LUNCH

G. Highly Migratory Species Management (continued, if necessary)

2. Draft Highly Migratory Species FMP (continued, if necessary)
(1 P.M., 1 hour)

H. Coastal Pelagic Species Management

2. Amendment 10 to the Coastal Pelagic Species FMP
(Review of Squid Maximum Sustainable Yield Methodology Workshop)
(2 P.M., .5 hours; Jagielo) *SSC report completed September 2001*
3. Pacific Sardine Harvest Guideline for 2002 Kevin Hill
(2:30 P.M., 1 hour; Francis, Stauffer) *Council Agenda – Thursday, November 1, afternoon.*

C. Groundfish Management (continued)

5. Groundfish Strategic Plan Implementation
 - c. Ecotrust/Pacific Marine Conservation Council Capacity Reduction
Analysis Proposal PMCC
- (3:30 P.M., 1 hour; Thomson, Dalton) *Council Agenda – Wednesday, October 31, late morning.*

A. SSC Administrative and Other Matters (continued)

8. Finalize Statements D.5, F.1; Review and Finalize D.6, G.2, H.2, H.3, and C.5.
(4:30 P.M.)

ADJOURN

PFMC
10/12/01

DRAFT SUMMARY MINUTES
Scientific and Statistical Committee

Pacific Fishery Management Council
Double Tree Hotel - Columbia River
Umatilla Room
1401 N Hayden Island Drive
Portland, OR 97217
(503) 283-2111
September 10-11, 2001

Call to Order

The meeting was called to order at 8 a.m. by Chair Cynthia Thomson. Dr. Donald McIsaac, Executive Director, provided opening comments and discussed the priority of items on the Scientific and Statistical Committee (SSC) agenda. The agenda was approved.

Members in Attendance

Dr. Brian Allee, Columbia Basin Fish and Wildlife Authority, Portland, OR
Mr. Alan Byrne, Idaho Department of Fish and Game, Nampa, ID
Mr. Robert Conrad, Northwest Indian Fisheries Commission, Olympia, WA
Dr. Ramon Conser, National Marine Fisheries Service, La Jolla, CA
Dr. Michael Dalton, California State University, Monterey Bay, CA
Dr. Robert Francis, University of Washington, Seattle, WA
Dr. Kevin Hill, California Department of Fish and Game, La Jolla, CA
Mr. Tom Jagielo, Washington Department of Fish and Wildlife, Olympia, WA
Dr. Peter Lawson, National Marine Fisheries Service, Newport, OR
Dr. Stephen Ralston, National Marine Fisheries Service, Santa Cruz, CA
Dr. Gary Stauffer, National Marine Fisheries Service, Seattle, WA
Ms. Cynthia Thomson, National Marine Fisheries Service, Santa Cruz, CA
Dr. Shijie Zhou, Oregon Department of Fish and Wildlife, Portland, OR

Members Absent

Dr. Andre Punt, University of Washington, Seattle, WA

SSC Reports to the Council

Pacific Halibut

STATUS OF BYCATCH ESTIMATE

Dr. Rick Methot gave a brief summary to the SSC on the National Marine Fisheries Service (NMFS) document entitled "Estimates of Pacific Halibut Bycatch and Mortality of International Pacific Halibut Commission (IPHC) Area 2A in 2000." Even though the document was not distributed to the majority of the SSC members until the meeting, the SSC provides the following comments. These latest estimates are based on a new method using the data from Enhanced Data Collection Program (EDCP). This method was reviewed in detail by the SSC in 2000. For this latest estimate, the authors used the same stratification for bycatch rates and proportion of legal-size halibut as last year, but updated the bottom trawl effort for years 1999 and 2000. These updates were summarized from the PacFIN logbook data base rather than from state logbook data sets as in the past. A comparison of the two methods for deriving effort gave nearly identical results (two estimates were within 1% of each other). This confirms that the PacFIN logbook data base summary can be used in future years, which will expedite the process of updating mortality estimates. The 2000 estimate was not adjusted by any change in halibut abundance

in Area 2A nor by the change in proportion of the stock that is longer than 81 cm, the current minimum size limit. Given the high percentage of sub-legal halibut in the size composition observed in the 1995-1999 EDCP sampling, one would expect a high proportion of the halibut in Area 2A to have grown to legal size by 2000. Assuming the same proportion of legal-size halibut, the 2000 legal bycatch mortality estimate is 222,000 pounds net weight out of a 663,000 pound estimate for all sizes. If growth of the abundant sub-legal fish has increased the number of the legal fish, then biomass mortality estimate would increase dramatically, and could far out weigh the reduction attributed to the decline in 2000 trawl fishing effort, which accounts for a reduction of 47,000 pounds. Results from the new observer program will be very valuable in updating the bycatch rates and the proportion of legal adults. With these comments in mind, we recommend the authors proceed to finalize the report and transmit the report to IPHC.

Groundfish

MARINE RECREATIONAL FISHERIES STATISTICS SURVEY UPDATE

Mr. Russell Porter of the Pacific States Marine Fisheries Commission (PSMFC) and Dr. Dave Van Voorhees of the National Marine Fisheries Service, Fishery Statistics Division briefed the SSC regarding current and potential future efforts to improve estimates of recreational harvest and effort on the West Coast.

The Marine Recreational Fishery Statistics Survey (MRFSS) customarily utilizes a random digit dialing (RDD) procedure to estimate recreational fishing effort. Because of the low prevalence of households that fish in party/charter (PC) mode, the RDD methodology tends to produce very imprecise and perhaps biased estimates of PC effort. This imprecision is accentuated during the winter months, when fishing activity tends to be low anyway. While effort and harvest estimates for Oregon and Washington are based largely on ocean boat sampling programs designed and administered by those states, estimates for California are based largely on the MRFSS.

In an attempt to improve PC effort estimates for California, a weekly effort survey was initiated in that state in March 2001 based on a sampling frame of PC vessels that fish in marine waters. The protocol for this new survey involves drawing a random sample of PC operators each week from the sampling frame, sending these operators a letter requesting that they keep a written log of their effort in a subsequent week, and contacting them at the end of that week to collect their log information. Although this sampling protocol has been used successfully in the southeastern U.S., it is new to the West Coast and work remains to be done with regard to refining the sampling frame and expansion methods and validating the survey against logbook data collected by the California Department of Fish and Game (CDFG). The weekly effort survey holds much promise as a method of providing more precise effort estimates than the MRFSS RDD methodology.

Although the MRFSS is based on a temporal stratification of the year into six two-month sampling periods, the MRFSS is not designed as a tool for inseason monitoring. However, lack of other options has prompted the Council to utilize the MRFSS to serve that function for groundfish. Specifically, two estimates of bocaccio harvest during waves 1-3 of 2001 have been produced from MRFSS data: (1) a 51 mt estimate, based on a two-way stratification of the California fishery, and (2) a 37 mt estimate, based on a five-way stratification of the fishery. The 37 mt estimate is an improvement over the 51 mt estimate, in that it does a better job of ensuring that localized differences in catch-per-unit-effort are reflected in the population estimate.

In addition to the MRFSS-based bocaccio harvest estimates, additional bocaccio estimates based on effort expansions from the PC weekly effort survey for waves 2-3 of 2001 will be made available in October to CDFG for possible consideration by the California Fish and Game Commission. The SSC notes that these effort estimates will represent the first tentative results from a new survey and should therefore be considered preliminary.

The Council is interested in developing a program that would provide inseason estimates of recreational harvest and effort. The SSC recommends that the RecFIN Committee be considered as an appropriate venue for developing such a program. The RecFIN Committee includes representatives from the three

states, Pacific States Marine Fisheries Commission, NMFS, and the Council. RecFIN Committee members have expertise in recreational survey methodologies, as well as specific knowledge and experience regarding the MRFSS and state recreational sampling programs. The RecFIN Statistical Subcommittee – which includes statisticians from NMFS and the three states – should also be actively involved, given the technical contributions they could make to the development of an inseason monitoring program.

Should the RecFIN Committee become involved in assisting the Council in developing a monitoring program, close and regular interaction between the Council and RecFIN Committee will be needed to ensure that the program meets Council needs. This will require that the Council develop program objectives in terms of the fishing modes and species that will need to be covered and the target level of precision for the harvest and effort estimates. The program should be geared to providing such estimates according to the time intervals at which the Council expects to consider inseason adjustments; the time intervals needed by the Council will not necessarily be consistent with the two-month intervals used for the MRFSS. From a statistical standpoint, it is important to note that the target level of precision identified by the Council should pertain to the cumulative harvest and effort estimates from the beginning of the season up to each point of inseason adjustment, as well as to the end-of-season estimates.

Development of an inseason monitoring program will be a major undertaking that will require considerable commitment of time and resources of those involved. The current sense of urgency regarding such a program must be maintained if it is to be developed in a timely manner. The SSC is willing to assist the Council in identifying program objectives and reviewing program elements as they are being developed.

PRELIMINARY HARVEST LEVELS AND OTHER SPECIFICATIONS FOR 2002

Dr. Jim Hastie presented an overview of the Groundfish Management Team (GMT) preliminary acceptable biological catch (ABC) and optimum yield (OY) determinations for 2002 (Exhibit C.3, Attachment 1). We wish to highlight that the new EDCP model-based estimates of discard rates (reviewed by the SSC in Sept 2000) were used to estimate total catch of sablefish, Dover sole, shortspine, and longspine thornyhead. This is a major improvement over the standard Pikitch *et al.* (1988) adjustments which are calculated as a fraction of the landed catch of the species being estimated. All rockfish discard adjustments (16% of landed catch) continue to come from Pikitch *et al.* (1988).

Based on Dr. Hastie's presentation, the Scientific and Statistical Committee (SSC) notes:

Lingcod - The OY is based on a rebuilding analysis and will incorporate a 20% discard rate landing adjustment.

Pacific Whiting - There will be a new stock assessment in winter 2002.

Sablefish - This was a 2001 Stock Assessment Review (STAR) Panel species. Uncertainties in the assessment pivot on density dependent versus environmentally driven recruitment, estimates of current relative to virgin biomass, and the level of F_{MSY} . The bottom line is that the levels of recruitment observed in the 1990s cannot sustain very high harvests. Three OY options were presented. The SSC notes that the low option (3,200 mt) is estimated to prevent the population from falling below the $B_{25\%}$ rebuilding trigger for the next 5 years under 3 out of 4 of the scenarios evaluated. For this reason, the SSC supports this option. In addition, given the low recruitments in the 1990s, it seems prudent to consider moving to a more conservative $F_{50\%}$ harvest strategy. The discard rate landing adjustment was approximately 13% overall based on the EDCP trawl rate of 20%.

Dover Sole - The GMT had the same concerns about Dover sole recruitment as sablefish – that recruitment levels observed in the 1990s cannot sustain high harvest levels. The GMT estimates a downward biomass trajectory in the absence of substantial boosts in recruitment. The discard adjustment was estimated based on EDCP data (~5%).

Shortspine Thornyhead - The discard adjustment was 20% based on EDCP. The ABC/OY has increased marginally from last year.

Longspine Thornyhead - There was no new assessment. The discard adjustment was 17% based on EDCP.

Widow Rockfish - The GMT presented a range of OYs based on 60%, 70%, 80% likelihood of recovery in the allotted time. Dr. Hastie pointed out that a major drop in widow OY could impact yellowtail rockfish management, particularly as regards bycatch rates in the midwater trawl fishery.

Pacific Ocean Perch (POP) - OY estimates are based on a new rebuilding analysis. Concerns were expressed over the magnitudes of recent year classes as well as anticipated downward adjustments of historical foreign POP catches. The latter should reduce estimates of historic biomass and current estimates of OY. The SSC thus recommends adopting the lower OY associated with a higher likelihood (80%) of recovery in the allotted time.

Yellowtail Rockfish - Once again, Dr. Hastie expressed concern about the yellowtail/widow catch ratios in the midwater trawl fishery and how these might affect the yellowtail rockfish fishery.

Chilipepper Rockfish - Recent harvests have been below OY, because of bocaccio bycatch.

Bocaccio - Dr. Hastie expressed concern that the bocaccio harvest may have exceeded the 3 year 100 mt OY due to uncertainties in the recreational catch data. As a result, OY may need to be adjusted downward.

Yelloweye Rockfish - This is a new stock assessment. Dr. Hastie said that the recreational fishery may need additional regulation to protect both bocaccio and yelloweye rebuilding.

Black Rockfish - This was a STAR Panel species. However the Oregon/Northern California assessment had to be retracted after the STAR Panel met, because errors were discovered in the input data provided to the STAR Panel process. The SSC suggests that in the future individuals responsible for the input data to a stock assessment be fully integrated into Stock Assessment Team (STAT) Team activities. If this is not possible, then the raw data and documentation should be supplied to the STAT Team.

Dr. Hastie then presented an overview of his *Sebastes* discard paper (Exhibit C.3, Attachment 4). He pointed out a number of problems associated with using the Pikitch *et al.* (1988) study as a discard baseline.

- 1) The gear has changed substantially since the study was done.
- 2) Stock biomasses have changed substantially since the study was done. For example based on the NMFS survey, the ratios of widow, canary, and yellowtail rockfish to flatfish are much lower now than they were at the time of the study.
- 3) Trip limits today are substantially lower than they were in the late 1980s.

Dr. Mark Powell (The Ocean Conservancy) presented an overview of his groundfish bycatch and discard assessment (Exhibit C.3.e, Public Comment). His major recommendation is that "bycatch must be recognized as resulting from fishing activities that target other species, and bycatch estimates should link bycatch to the level of catch of the target species." He recommends that this be done by using the NMFS triennial survey to estimate species co-occurrence ratios as a baseline. However no explicit estimation algorithm or method is proposed to estimate bycatch and, subsequently, discard. The SSC agrees with his basic premise – that bycatch and discard should be estimated from specific targeted fishing activities and not from landings of the species being estimated. However the estimation process is much more complicated than Dr. Powell suggests and will require a major long-term research effort in order to develop (see item 2 below).

The SSC discussed the whole issue of bycatch and discard estimation and has the following recommendations:

- 1) The SSC groundfish subcommittee will work closely with the GMT in developing and refining short-term discard estimates to be presented at the November 2001 meeting. In addition, the SSC will carefully examine any changes in discard estimates which the GMT presents in November based on their upcoming re-analysis. The GMT will be using Pikitch et al. (1988), EDCP, logbook and the current Washington exempted fishing permit program to attempt to identify discard rates by target fishery, trying to make adjustments for changes in trip limits and stock biomass levels between the time the data were collected and the present. The SSC looks forward to seeing the results of this analysis.
- 2) In our view, simple analyses of co-occurrence (essentially catch ratios) in the NMFS survey will not provide a better discard estimation procedure than that currently used by the GMT. However, over the longer term, this type of analysis – coupled with the more comprehensive development of a multi-species model which incorporates fishery, observer, and survey data – should be encouraged. In order to come to fruition, this process needs to be initiated as soon as possible.
- 3) The SSC expects the new observer data will be used to estimate discards for the 2003 cycle. In addition, as this data set matures we anticipate that it will be used as an aid to inseason management.

REBUILDING PLANS

The SSC reviewed the canary rockfish rebuilding plan and recently completed rebuilding analyses for lingcod, Pacific ocean perch, and darkblotched rockfish.

Mr. John Devore briefed the SSC on the status of the canary rockfish rebuilding plan (Exhibit C.5, Attachment 2). He noted that at the Council's June meeting, adoption of the plan was delayed pending incorporation of new material regarding canary rockfish habitat requirements and estimation of total catch (i.e., landings plus discard). Also, since the SSC had not provided comment on the plan in June, the Council asked the SSC to examine the revised document in its entirety. The SSC reviewed the plan largely with respect to its content, as the format of the document is expected to change if any fishery management plan amendment or regulation is required for adoption.

The canary rebuilding plan is intended to serve as a template for rebuilding plans for other species. SSC comments regarding the plan are as follows:

- The canary plan accurately reflects the technical content of the canary rebuilding analysis. With respect to format, the SSC recommends key results of the rebuilding analysis, with pertinent tables and figures, appear in the main body of the plan, and that the entire rebuilding analysis, including all technical details, be consolidated into a single addendum.
- Section 4.2.2.6 of the plan ("Monitoring Fishing Mortality and Discard Assumptions" - p. 26) does a good job of documenting measures being taken to estimate and reduce canary discards and the rationale for such measures.
- Several important aspects of the plan – including the rebuilding period (p. 31), harvest limits during the rebuilding period (p. 32) and bycatch control strategies (p. 33) – were affected by consideration of impacts on fishing communities. However, other than a reference to the existence of demographic information on the Council's website (p. 19), very little information regarding coastal communities is provided in the plan. The SSC recommends that potential impacts on coastal communities be documented in the plan itself.
- Further work on the rebuilding plan in terms of regulatory analysis of options will be required if the Council intends to submit the plan as an FMP amendment or regulation. Section 3 describes the commercial and recreational fisheries for canary rockfish and documents the effect of regulatory restrictions on those fisheries in recent years. Such information can provide a useful starting point for addressing Regulatory Flexibility Act and other requirements for socioeconomic analysis of rebuilding options.

- While a regulatory analysis of the canary rebuilding plan would pertain only to canary, the number of groundfish stocks in need of rebuilding has a cumulative effect on the industry that would not be reflected in any single rebuilding plan. Mr. Devore indicated the possibility of a “bridging document” that would describe such cumulative effects. The SSC supports preparation of such a document.
- Generally speaking, the resources required to prepare regulatory analyses for all rebuilding plans will make it difficult to complete rebuilding plans for overfished stocks within the required one year time frame.

The SSC also reviewed new rebuilding analyses for lingcod, Pacific ocean perch and darkblotched rockfish, and makes the following observations concerning each:

- Lingcod - Mr. Tom Jagielo presented an updated rebuilding analysis based on the most recent 2000 coastwide stock assessment, which utilized the rebuilding software developed by Dr. Andre Punt (Exhibit C.5, Attachment 6). That computer program was created to standardize rebuilding calculations and to ensure stock projections conform to the SSC’s guidelines for conducting rebuilding analyses. The new lingcod analysis used recruitments from all years to establish the rebuilding biomass target, consistent with B_0 depending on environmental conditions, and recent recruitments for projecting the population forward; both decisions are supported by the SSC. This work represents an update to a pre-existing rebuilding analysis, although the rebuilding time horizon remains unchanged. The stock is expected to rebuild to the target biomass level ($B_{40\%}$) within the remaining allowable time period (7 years). The GMT’s 2002 total catch optimum yield (OY) recommendation (577 mt) is based on a 60% probability of stock rebuilding by the year 2009.
- Pacific ocean perch - Dr. Richard Methot presented results of an updated rebuilding analysis by Drs. Andre Punt and Jim Ianelli (Exhibit C.5, Attachment 5) that is based on the 2000 stock assessment completed by Ianelli et al. As with lingcod, this analysis utilizes the Punt rebuilding software and is framed to ensure that rebuilding is completed within the original time frame allotted (i.e., 2042). The SSC notes that in this instance the rebuilding target ($B_{40\%}$) is based upon spawner-recruit parameter estimates from the assessment model, rather than a time series of recruitments, although recruitments from the period 1965-1998 were used to project the population forward; both decisions are supported by the SSC. The range of 2002 total catch OY recommendations presented by the GMT (290 mt, 350 mt, and 410 mt) is based on probabilities of stock recovery equal to 80%, 70% and 60%, respectively. However, there is concern that revisions to foreign catch estimates of Pacific ocean perch, which should soon be available, will reduce the estimate of stock size and, consequently, the above OY values.
- Darkblotched rockfish - Dr. Richard Methot presented results of a new rebuilding analysis for this species (Exhibit C.5, Attachment 8) that is based on an update of the 2000 stock assessment conducted by Dr. Jean Rogers. At the June 2001 meeting, the SSC recommended the 2000 slope survey data be included in the darkblotched model to incorporate the best available scientific information in the rebuilding analysis of this stock. The new analysis, which did not involve changes to the model’s structure, indicates the stock is more depleted than originally estimated (i.e., 14% of unfished biomass) and that recruitment in recent years has been markedly less than in the 1970s. Like lingcod, the preferred rebuilding analysis utilized all recruitments for establishing the rebuilding target but used recent recruitments for projection purposes. Likewise, all computations were completed using the Punt software package. The range of 2002 total catch OY recommendations presented by the GMT (157 mt, 168 mt, and 181 mt) is based on probabilities of stock recovery equal to 80%, 70%, and 60%, respectively.

The SSC concludes that each of the three rebuilding analyses is technically sound and captures the range of yields that are likely under the various rebuilding scenarios examined.

Marine Reserves

MARINE RESERVE PROPOSALS FOR CHANNEL ISLAND NATIONAL MARINE SANCTUARY

The SSC was briefed by Mr. Sean Hastings, Channel Island National Marine Sanctuary (CINMS), and Ms. Patty Wolf, CDFG, on the current status of the process to develop a network of marine reserves within the Sanctuary's boundaries. The California Fish and Game Commission is currently considering a number of options for the size and placement of reserves at CINMS. They may select an option as early as February 2002. This is ahead of the time frame in which the Council is likely to come to its own conclusions. The process through which consistent state and federal fishery regulations will be developed is not clear.

It will be important that there be close coordination between CINMS and the Council. In accordance with National Environmental Policy Act (NEPA) requirements, it will also be important that the Council receive a full regulatory analysis of reserve size and location alternatives considered by the CINMS. These documents should include a socioeconomic as well as an ecological comparison of options. These analyses are necessary to inform Council deliberations on this issue, and the Council should not be expected to take action without these analyses. The SSC looks forward to reviewing these documents when they become available.

The SSC Ad Hoc Marine Reserves Subcommittee will be meeting with the CINMS Science Panel on October 1 and 2, 2001 in Santa Barbara, California to discuss the Science Panel's findings and recommendations. This meeting will focus on the Science Panel's recommended reserve size and how they determined the potential fishery benefits that would result from a marine reserve network in the CINMS. The SSC will present a statement to the Council at the November meeting on the results of this meeting.

Coastal Pelagic Species

MARKET SQUID MAXIMUM SUSTAINABLE YIELD METHODOLOGY WORKSHOP

At the Council's request, the SSC, in conjunction with the CDFG and the National Marine Fisheries Service (NMFS), held a market squid maximum sustainable yield (MSY) methodology workshop in May of 2001. Dr. Paul Crone of the Coastal Pelagic Species Management Team (CPSMT) presented an overview of the various modeling approaches, and provided considerable detail on the egg escapement approach to assessing the market squid resource. SSC member Dr. Raymond Conser, co-chair of the squid STAR Panel, briefed the SSC on the panel's report.

The squid MSY workshop was a highly successful collaboration among CDFG, NMFS, and the SSC. This collaboration was essential to the assembly and analysis of all available biological and fishery data. The panel provided a thorough review of the data and alternative approaches to the squid MSY problem. All of these efforts resulted in productive and timely completion of the review.

The STAT Team and STAR Panel worked together in refining a yield-per-recruit approach based on egg escapement, and both groups recommend this policy for monitoring status of the squid stocks. There are two parts to the egg escapement approach, 1) eggs produced per female in the catch, and 2) recruitment to the spawning grounds. Squid recruitment is highly variable and probably environmentally driven. The egg escapement approach requires an estimate of remaining eggs per female at the time of capture by the fishery. CDFG port samplers are collecting the specimens needed to make this estimate on a seasonal basis. It will be important to provide continuing support for this sampling and for the laboratory work needed to count the eggs.

The egg escapement approach developed by the STAT Team and further refined during the STAR Panel process provides a sound basis for developing a harvest control rule that is based on biological principles. However, there is a continuing need to address uncertainties in the science that were identified during the workshop. To this end, the SSC supports the idea of a STAR Panel review in 2004. It will also be important that the CPSMT develop precautionary management options that reflect uncertainties in the science. The SSC looks forward to reviewing this work as it is incorporated into Amendment 10 of the Coastal Pelagic Species Fishery Management Plan.

Salmon

UPDATE ON SCIENTIFIC AND STATISTICAL COMMITTEE METHODOLOGY REVIEW

The SSC Salmon Subcommittee and the Salmon Technical Team will hold a joint meeting on October 23 and 24, 2001 to review the Klamath Ocean Harvest Model (KOHM) and the coho Fishery Regulation Assessment Model (FRAM) re-calibrated with data from the coho cohort analysis project. We will not review the chinook FRAM, because no changes were submitted. The SSC requests that authors preparing the KOHM and coho cohort analysis provide all documentation to the Council and directly to the reviewers by October 9, 2001.

The re-calibrated coho FRAM and revised KOHM may be ready for use to set the 2002 seasons. If these models are used in 2002, they must be approved at the November 2001 Council meeting.

Public Comment

There was no formal public comment.

Adjournment

The SSC adjourned at approximately 6 p.m., Tuesday, September 11, 2001.

PFMC
09/22/01

PROPOSED AGENDA
Habitat Steering Group

Pacific Fishery Management Council
Clarion Hotel San Francisco Airport
Embarcadero B Room
401 East Millbrae Avenue
Millbrae, CA 94030
(650) 692-6363
October 29, 2001

MONDAY, OCTOBER 29, 2001 -10 A.M.

A. Call to Order and HSG Administrative Matters

- | | |
|---|--|
| 1. Introductions and Approval of Agenda | Michele Robinson/Jennifer Bloeser, Co-Chairs |
| 2. Election of Chairperson for 2002 | HSG |
| 3. New Members | Chuck Tracy |
| 4. Review of Council Actions/Directions | Chuck Tracy |

GENERAL SESSION
10:30 A.M.

D. Salmon Management

- | | |
|------------------------------|-------------|
| 6. Queets Coho Status Review | Chuck Tracy |
|------------------------------|-------------|

C. Groundfish

- | | |
|--|-----------|
| 6. Rebuilding Plans | HSG |
| 7. Groundfish Fishery Management Plan (FMP) Environmental Impact Statement | Jim Glock |

F. Marine Reserves

- | | |
|---|------------|
| 1. Status of Marine Reserves Proposals for Channel Island National Marine Sanctuary (CINMS) | CDFG/CINMS |
|---|------------|

G. Highly Migratory Species

- | | |
|--|------------------|
| 2. Draft Highly Migratory Species FMP Development Report | Michele Robinson |
|--|------------------|

F. Habitat Issues

- | | |
|---|--------------|
| 1. Draft Federal Energy Regulatory Commission Programmatic Letter | HSG |
| 2. Draft Habitat Areas of Particular Concern Process Document | HSG |
| 3. Essential Fish Habitat/Magnuson-Stevens Act Review | Mark Helvey |
| 4. CalFed EWA Science Review | Mark Helvey |
| 5. Sacramento Winter Chinook Recovery Plan Update | Mark Helvey |
| 6. San Francisco Airport Expansion | Mark Helvey |
| 7. Klamath Flow Issue | Michael Rode |
| 8. Groundfish Research Forum | HSG |
| 9. Fishing Gear Impact Research Work Plan | HSG |
| 10. Council Operating Procedures | Chuck Tracy |

11. HSG Member Briefings

HSG

PUBLIC COMMENT PERIOD

A. HSG Administrative Matters (continued)

5. March Meeting Agenda

HSG

6. Finalize Statements (C.6.c, C.7.b, D.6.c, F.1.d, G.2.c) and HSG Report (E.1.a)

ADJOURN

PFMC

10/16/01

PROPOSED AGENDA
Budget Committee

Pacific Fishery Management Council
Clarion Hotel San Francisco Airport
Peninsula A Room
401 East Millbrae Avenue
Millbrae, CA 94030
(650) 692-6363
October 29, 2001

MONDAY, OCTOBER 29, 2001 - 10 A.M.

A. Call to Order and Approval of Agenda

Jim Harp, Chair

B. Legislative Update

Dave Hanson

C. Executive Director Report

Donald McIsaac

1. Status of 2001 Expenditures and Year End Projection
2. Status of NEPA Grant
3. Status of 2002 Grant Submission
4. Status of Other Funding Opportunities
5. Status of 2003 Meeting Site Selection

D. Other

ADJOURN

PFMC
10/16/01

PROPOSED AGENDA
Enforcement Consultants

Pacific Fishery Management Council
Clarion Hotel San Francisco Airport
Peninsula A Room
401 East Millbrae Avenue
Millbrae, CA 94030
(650) 692-6363
October 30, 2001

TUESDAY, OCTOBER 30, 2001 - 5:30 P.M. (or Immediately Following the Council Meeting)

A. Call to Order

Dave Cleary

1. Introductions
2. Approval of Agenda

B. Council Agenda Items for Comment

C.4 Groundfish Management Measures for 2002

C. New Business

D. Public Comment

ADJOURN

PFMC
10/16/01

PROPOSED AGENDA
Highly Migratory Species Advisory Subpanel

Pacific Fishery Management Council
Clarion Hotel San Francisco Airport
Sausalito A Room
401 East Millbrae Avenue
Millbrae, CA 94030
(650) 692-6363
October 31, 2001

WEDNESDAY, OCTOBER 31, 2001 - 8 A.M.

A. Call to Order

Bob Fletcher, Chair

B. Introductions

C. Approval of Agenda

D. Approval of Summary of August 26-27, 2001 Meeting

**E. Highly Migratory Species Plan Development Team
Summary of Draft Fishery Management Plan (FMP)
and Initial Regulatory Document**

Dale Squires, Steve Crooke

F. Advisor Comments on FMP

Highly Migratory Species Advisory Subpanel comments should focus on the adequacy of the documents for submission to the formal public review process. For example, are there major deficiencies that would prevent adoption of the drafts for public review?

G. Develop Report to the Council

ADJOURN

PFMC
10/11/01

PROPOSED AGENDA
Coastal Pelagic Species Advisory Subpanel

Pacific Fishery Management Council
Clarion Hotel San Francisco Airport
Embarcadero B Room
401 East Millbrae Avenue
Millbrae, CA 94030
(650) 692-6363
October 31, 2001

WEDNESDAY, OCTOBER 31, 2001 - 10 A.M.

A. Coastal Pelagic Species Advisory Subpanel (CPSAS) Administrative Matters

John Royal

1. Call to Order
2. Introductions
3. Review/Approve Agenda
4. Review/Approve May 2001 Minutes

H. Coastal Pelagic Species (CPS) Management

H.2 Amendment 10 to the CPS Fishery Management Plan

Kevin Hill

- Final Report on Squid Maximum Sustainable Yield Methodology Workshop
- Capacity and Permit Transferability Issues

A. CPSAS Matters (continued)

6. Pacific Sardine Allocation
7. Other Business and Schedule
8. Reports to Council

Heather Munro
Dan Waldeck

ADJOURN

PFMC
10/15/01