

North Pacific Fishery Management Council

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Date: 6/10/97

MINUTES Scientific and Statistical Committee April 14-16, 1997

The Scientific and Statistical Committee of the North Pacific Fishery Management Council met April 14-16, 1997 at the Anchorage Hilton Hotel. All members were present except Al Tyler and Richard Marasco:

Keith Criddle, Chair
Harold Weeks
Phil Rigby (Alt.)
Terry Quinn

Jack Tagart, Vice-Chair
Jim Balsiger
Sue Hills
Seth Macinko

Doug Larson
Steve Klosiewski
Marc Miller

C-1 HALIBUT CHARTER BOAT ANALYSIS

The SSC heard presentations from Chris Oliver, Marcus Hartley, and Scott Goldsmith.

The SSC notes that the majority of topics identified in its February minutes have received attention. The document now has a consistent accounting stance, uses the same benefits concept for both sport and commercial fisheries, and uses the same input-output methodology to measure economic impacts for both sectors. The exposition and documentation of sources has improved. Useful discussions of the valuation approaches, previous literature on valuing sportfishing, and other regional Council approaches to allocating sport and commercial fisheries have been included.

Nevertheless, the SSC recommends against releasing the EA/RIR for public review at this time. The SSC's economic subcommittee met with the analysts via teleconference in March and suggested that the analysis be simplified to focus on the key elements that affect the direction of economic impact. The substantial enlargement of the EA/RIR is contrary to this recommendation. The SSC is supportive of efforts to conduct quantitative analyses where their use assists in understanding the impacts of Council actions and can be supported by the underlying data. However, in this case it has been clear from the outset that the underlying data will not support comprehensive quantitative analysis. In April 1996, we noted that "... the draft RFP calls for an overly ambitious effort given the time and funding which may be available." The current document continues to overemphasize the results of a quantitative analysis that does not adequately acknowledge the effects of uncertainties. These uncertainties arise from arbitrary assumptions made about many important model parameters (for example, elasticities of demand for both sport trips and commercially caught halibut) and are due in part to a poor underlying database. In addition, estimates of consumer surplus in the recreational fishery

presented in chapter 4 are calculated incorrectly. Consequently, the public may be misled. The model output cannot be relied on to accurately represent the magnitude or direction of impacts.

The SSC recommends the document be substantially reduced in length to focus on the qualitative discussion of impacts that already is present in the document. No additional economic analysis is needed, instead, a reworking to remove undue emphasis on quantitative estimates is needed. The document would be improved by including a short qualitative discussion of social impacts. The SSC strongly endorses efforts to collect systematic data on the halibut sport fisheries to help fill the large data gaps that currently exist.

The SSC reiterates two observations from its February minutes: (1) the context of the problem facing the Council appears to have changed considerably since initial formulation of the problem statement; (2) as Chapter 7 of the document notes, there is a large degree of mismatch between the alternatives under review and the elements of the problem statement concerning local depletion.

The late delivery of this enormous document seriously compromised the ability of the Council's advisory bodies to undertake credible reviews. The Council should revise its Standard Operating Procedures to automatically defer to the next meeting any agenda item based on a substantial document (e.g., 50 pages or more) not sent out a minimum of two weeks before the meeting.

C-2(c) HALIBUT SUBSISTENCE

The SSC received a presentation of the draft EA from Jane DiCosimo. Public testimony was heard from Ron Somerville representing the Alaska Legislature.

The SSC commends the staff on the draft EA and recommends that the document be released for public review. The SSC suggests that the discussion of critical definitions (e.g., "personal use," and "subsistence") be moved to the front of the document. A disparity between estimates of rural non-commercial harvests presented in the document was noted. Public testimony suggested that the alternatives under consideration might conflict with the Alaska constitution. The SSC requests inclusion of some discussion of alternative legal definitions of subsistence. The SSC is concerned about putting dollar limits on the amount of halibut that can be bartered or traded because of difficulties in defining relevant prices and enforcement; quantity limits may pose less problems. Finally, the SSC notes that as various alternatives potentially increase the expansion of existing subsistence harvests, the ability of the analysis to assess economic and social impacts is lessened.

C-2(e) HALIBUT STOCK ASSESSMENT MODEL

Pat Sullivan of IPHC gave an overview of Pacific halibut stock assessment procedures. Over the last two years the assessment model has been revised, especially to account for recent decreases in size with age. A consequence of this phenomenon is that longline selectivity as a function of age varies over time, was not included in previous assessments. The new assessment increases the estimated number of fish over previous assessments, because it adjusts for lower catches at particular ages during periods of slow growth rather than interpreting reduced catch-at-age as evidence of reduced recruitment. To be consistent with the new assessment model, the IPHC has revised all aspects of the stock assessment. These revisions have led to a reduction in the optimal harvest rate from approximately 30% to 20-25%. Several other technical improvements have also been made.

The SSC notes that the same type of assessment approach is now being used for Bering Sea pollock and expects that some other groundfish assessments will follow suit. The SSC believes that this approach is state-of-the-art and commends IPHC staff for their excellent work.

C-5 GULF OF ALASKA IMPROVED RETENTION AND UTILIZATION PROGRAM

The SSC heard a staff presentation from Lew Queirolo and IR/IU Committee Chair Joe Kyle. The issues in this analysis are substantially parallel to those for the BSAI IR/IU initiative passed by the Council in September 1996, though some new issues arise. Caution is needed in interpreting the discard savings estimates because they don't address changes in operating costs to the industry, costs of adjustment and compliance, or price responses in new product markets. Further, these savings are highly dependent upon the relative levels of economic versus regulatory discards. A benefit may result from slowing the pace of the fishery down if it increases opportunity for operators to process previously discarded sizes or species. Testimony from the Industry Working Group also indicated that there may be benefits to the industry from improved public perception of North Pacific fishing practices. Smaller, less mobile vessels are most likely to be severely affected; catcher vessels in the smallest category (<60 feet) are much more prevalent in the GOA than in the BSAI. The SSC notes that the interplay between the IR/IU program and the expanding state waters Pacific cod fishery has not been addressed.

The SSC has a concern that observer coverage is low for many components of the GOA fleet because vessels are smaller there. It would be useful to explore what can be done to enhance observer coverage levels.

C-6 VESSEL BYCATCH ALLOWANCES

The SSC received a briefing from Joe Terry. At this point the SSC can only provide limited feedback regarding the eventual analysis. The SSC requests that Dr. Terry and the Council staff continue to keep the SSC informed as the analytical outline develops.

The Council has not provided a clear statement of objectives that would serve to organize the analysis. The SSC encourages the Council to formulate a statement of objectives as early as possible. As the analysis develops, a host of issues are likely to warrant consideration, such as pooled versus individually based programs, pool size, industry cost data limitations, enforcement and observer program demands, feasibility on boats with 30% or no observer coverage, and distributional aspects of allocation alternatives.

C-8 EXPERIMENTAL FISHING PERMIT

John Gauvin and Dan Waldeck (Groundfish Forum) discussed their application for an Experimental Fishing Permit to test experimental trawl designs in the Bering Sea yellowfin sole fishery this summer. The SSC commends the applicants for presenting an experimental design that is well conceived and clearly presented. The inclusion of a power analysis is an especially positive feature.

The proposed experiment would test the efficacy of new net designs to reduce pollock and cod catch in Bering Sea flatfish fisheries. This represents the type of gear and behavioral change envisioned by the Council's IR/IU amendment.

If approved, fishing under the EFP would take place outside the normal fishery specifications. We do not expect the additional catch of yellowfin sole to lead to the Council's ABC for this species to be exceeded. The applicants expected range of prohibited species take is estimated based on past performance of the yellowfin sole fishery.

D-1(b) ROLLING CLOSURE NEAR SABLEFISH LONGLINE SURVEY STATIONS

Dr. Mike Sigler (NMFS-Auke Bay) presented a discussion paper addressing two possible measures to reduce fishery interference with sablefish longline surveys. Implementation of ITQ management has extended the length of the sablefish fishery. Efforts to work cooperatively with commercial fleets to avoid survey site stations have only been partially successful. While survey avoidance by most fishery participants appears to have been good, fixed gear fishing took place within 7 days of sampling at or very close to 11 of the 65 survey sites used to estimate relative exploitable abundance in 1996. For comparison, there were three instances of mobile gear fishing at or very close to a survey site in 1996. Dr. Sigler presented examples of apparent fishery biases to survey results; however, it is not possible to relate these observations to the quantity of fishery removals.

One measure discussed involved a series of rolling closures to preclude fishing at survey sites for seven days prior to, and during, the survey. Seven days has been identified as an appropriate "rest" time for grounds after fishing based on informal discussions with fishers. While the scheme of rolling closures would be expected to lead to very small disruptions in fixed gear fishing opportunities, it would likely involve more significant impacts to the sequence and balance of mobile gear opportunities.

A second measure discussed would re-order the sequence of the survey (also linked to associated rolling closures) to avoid most of the disruption to the existing sequence of trawl fishery openings. A possible additional benefit to a change in survey sequence would be to stabilize the expected future of survey data series. A disadvantage to changing the survey sequence is the possible impact to time series integrity; no information is available to evaluate possible biases from these changes.

John Gauvin (Groundfish Forum) and Chris Blackburn (Alaska Groundfish Data Bank) provided testimony supporting changes to the survey order, and pointed out that the efficacy of mobile gear efforts to avoid survey interference made rolling closures applicable to mobile gear unnecessary.

Should the Council choose to analyze the need for and benefits from regulatory measures to prevent fishery interference with the sablefish longline survey, the SSC recommends that the analysis include an evaluation of (1) the impacts due to conservation bias (as may result from depressed survey indices if interference takes place), versus the possible economic impacts from rolling closures, and (2) whether rolling closures should extend to mobile gear as well as fixed gear. The views of NMFS and Coast Guard enforcement personnel should also be sought and incorporated in the analysis.

D-1(c) ROCKFISH FISHERIES BYCATCH

The SSC heard a presentation by Jon Heifetz on bycatch rates within the GOA trawl rockfish fisheries. Public comments and recommendation were received from Chris Blackburn and John Gauvin. The analysts presented both observer data (1993 through 1995) and NMFS Triennial survey species composition data (1990, 1993, and 1996). The survey data, although restricted to the summer period, provided fishery independent estimates of bycatch rates. Target species for surveys were based on the most abundant species within each level, while the target by haul for the fishery analysis was assigned using the NMFS observer program algorithm. As noted by the analyst, target assignment was the most critical step in the analysis. Actual fishery targets may have been different than those assigned with this method. This limitation should be kept in mind if the bycatch rates presented in the report are used to project bycatches within specific fisheries.

The estimated bycatch rates by target species were calculated on a Gulf-wide basis. Bycatch associated with target species was variable as measured by the coefficient of variation. However, based on the examples of sablefish bycatch, the highest variation in bycatch rates were found in fisheries with the lowest bycatch rates.

For example, for the thornyhead target, an estimate of a 40% bycatch rate for sablefish had a CV in the range of 20%, while for northern rockfish target bycatch rates of less than 5% had CVs of 40% for the observer data to almost 100% for the survey data.

Bycatch standards establish default trip limits (weekly limits for CPs). An analysis of individual rockfish vessels indicate that selective targeting for sablefish does occur. Recommendations for further analysis depend upon the objectives or expected use of the analysis and should be further clarified.

Regardless of the objectives the SSC recommend that any future analysis include:

1. major geographic and seasonal differences,
2. sensitivity of results to the target algorithm,
3. the same target algorithm for both survey and observer data
4. the 1996 observer data,
5. in the tables: total tonnage, besides total number of hauls.

If fishing behavior relative to management restrictions is an objective of further work, the analysts should consider:

1. changes in bycatch related to trips/weeks,
2. bycatch before and after species are restricted as prohibited species including frequency of trips reaching PSC limits.

D-2(b) ATKA MACKEREL JIG ALLOCATION

The SSC received a report on the draft EA/RIR from Sue Salvesson. The SSC also heard public testimony on the issue from Bob Storrs of the Unalaska Fishing Association, the original proposers of the amendment.

Although the author is correct that the total harvest will not change under this amendment, the timing and location of the harvesting probably will change. The SSC recommends that the draft EA/RIR be released for public review after the following issues have been qualitatively addressed: seasonality of harvest, location of harvest, salmon bycatch, sea lion trawl closure zones, and localized depletion concerns. Inclusions of a discussion of cost of alternate baits, extending the maps to include the anticipated jig fishery area, and a discussion of the impacts of approval of Amendment 39 (CDQ allocations) would be helpful.

The statement of alternatives needs some clarification. If the percentage of TAC for jig gear is taken from all subareas, does it remain allocated by subarea? What are the management possibilities under status quo?

D-3 Scallop SAFE document and Specifications

Dave Witherell provided the staff report summarizing the initial scallop SAFE document and harvest specifications. There was no public testimony on this topic. The SAFE document is a compilation of reports reflecting area specific catch histories and limited surveys representing the best available biological and economic information. Specifications for guideline harvest levels (GHLs) are recommended by ADF&G management area; with the exception of the Bering Sea (Area Q), these are based on past harvest histories. Crab bycatch caps are specified based on a percentage of the most recent crab population estimates in most areas. For Areas R (Adak) the cap is based on a bycatch projection which would allow some exploratory scallop fishing.

The SSC cautions that this resource is poorly understood, and recruitment is apparently highly variable. There are several worldwide examples of scallop overfishing noted in the scallop FMP. With our present understanding, we cannot state that the GHs are appropriately conservative or overly optimistic. This uncertainty underscores the importance of ADF&G monitoring and in-season management. The GH is not a fixed quantity like a TAC, but is a maximum level; ADF&G has the authority to close the fishery short of attainment based on monitoring of CPUE in-season.

The SSC stresses the importance of developing an information base from resource surveys and analytic modeling to provide confidence to the public and fishers that this fishery is managed in a conservative fashion to ensure long-term sustainability. Pete Probasco, ADF&G, commented that such data are being collected and modeling work is planned.