North Pacific Fishery Management Council

Richard B. Lauber, Chairman Clarence G. Pautzke, Executive Director

Telephone: (907) 271-2809



605 West 4th Avenue, Suite 306 Anchorage, AK 99501-2252

Fax: (907) 271-2817

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MINUTES Scientific and Statistical Committee June 16-18, 1997

The Scientific and Statistical Committee of the North Pacific Fishery Management Council met June 16-18, 1997 at the Fishermen's Hall in Kodiak, AK. All members were present except Marc Miller:

Keith Criddle, Chair

Jack Tagart, Vice-Chair Doug Larson

Harold Weeks
Phil Rigby (Alt.)
Terry Quinn

Jim Balsiger Sue Hills Al Tyler Steve Klosiewski Richard Marasco Seth Macinko

C-1 Inshore/Offshore

Council staff members Marcus Hartley and Chris Oliver described for the SSC the analysis anticipated for the new Inshore/Offshore amendment. Public testimony was also received from Rebecca Baldwin, Ed Richardson, Paul McGregor and Ken Stump.

The SSC suggests that care be taken to craft a focused problem statement. The problem statement will determine the scope and complexity of the socioeconomic analysis required for the EA/RIR. The analysis of alternative actions to address the problem statement will be constrained by continuing limitations in our knowledge of industry economics. Although the magnitude of impacts resulting from any change to the current allocation is likely to be proportional to the magnitude of change, data limitations preclude a thorough assessment of the net benefits generated by the current fishery, let alone how the benefits will change under alternative allocations. The SSC noted these same data limitations hampered analysis of the second Inshore-Offshore amendment. While it is unlikely that data limitations can be addressed in time for the current analysis, there is a need to initiate ongoing data collection and modeling efforts focused on the demand for and supply of fisheries products (costs of operation and production, market structure, trade patterns, etc.). Progress on these efforts is critically dependent on support for this work by the Council, industry, the National Marine Fisheries Service, and the State of Alaska.

In the development of the analysis, the SSC recommends that attention be given to a description of the current state of the fishery, analyses of how changes in the allocation percentages will affect net economic benefits (efficiency), distributional impacts (equity), and conservation issues, and the possible effects on participants in the Community Development Quota (CDQ) pollock fishery. The SSC notes that "no action" alternative potentially represents a large change from the status quo.

Current State of the Fishery

The description of the current state of the fishery should address: 1) the status of the pollock resource; 2) catch by community, sector, fishing area, and gear type; 3) product mix, markets and values; 4) employment by sector and residency; and, 5) industrial organization (i.e. concentration, product differentiation, barriers to entry, and

vertical integration). This should not be a lengthy discussion but substantive enough to reveal essential features of the fishery.

Net Economic Benefits (efficiency)

Rigorous examination of how the changes contemplated will affect net economic benefits requires quantifying producer's surplus and consumer's surplus associated with each alternative the Council proposes. Given the ongoing lack of basic data on costs in the industry, and the lack of models to predict changes in costs with different regulatory alternatives, a rigorous benefit-cost analysis cannot be performed. These deficiencies have been noted by the SSC numerous times in the past. Although a data collection effort will soon be initiated by NMFS, the results are unlikely to be available in time to be incorporated into this analysis.

Short of conducting a benefit-cost analysis, it should be possible to obtain some useful insights into the directional nature of impacts by examining changes in the pattern of harvesting (by species mix, gear, operation type, and region) and processing activity (by product form, market, sector) associated with the Council's alternatives.

It is essential that whatever quantitative analysis is done be based on documented information, that assumptions be stated clearly and labeled as such, and that the effect of uncertainty over parameters on the harvest or gross revenue as well as cost measures be addressed. It is highly desirable to identify, based on the sensitivity analysis, the key factors or assumptions that appear to be most influential to the magnitude and distribution of "benefits."

Distributional Impacts (equity)

Among other issues, the evaluation of distributional impacts should identify changes in the distributions of employment opportunities and net economic benefits among the major affected parties, for each regulatory alternative. Although this cannot be done rigorously, because of the difficulties noted above, it can be approximated by identifying probable changes in distribution of gross revenues between sectors, harvest areas, and (where possible) by homeport of vessels. The SSC encourages staff to develop this information because it is easily and directly linked to the regulatory alternatives.

Other Analytical Issues

The spatial and temporal distribution of fishing activity is affected by oceanographic conditions, fish abundance, and management regimes. Provisions of the new Inshore/Offshore amendment that change the distribution of fishing activity will affect target stocks and other marine resources. In particular, the present suite of options includes adjustments to the existing Catcher Vessel Operational Area (CVOA). An attempt should be made to examine the potential conservation impacts of changes in the structure of the fishery. Variations on the existing Inshore/Offshore allocation may also have an effect on participants in the CDQ pollock fishery and in other fisheries. An attempt should be made to characterize the operational linkages between the open access and CDQ pollock fisheries, other fisheries, and potential changes in these linkages that may arise following Council action.

C-8 Observer Program

Chris Oliver gave a presentation summarizing action required by the Council at this meeting. The SSC received presentations also from Bill Karp and Sue Salveson. Chris Blackburn reported on activities of the Observer Advisory Committee. A representative of the Association of Professional Observers, Theresa Turk, provided comments on efforts to increase professionalism. Other members of the public commenting were: Bob Storrs, Jude Henzler, and Tom Okey.

While a wide range of issues were discussed, data quality, complexity of data, and the numerous sources of error were of primary concern to the SSC. The presentation given by Bill Karp indicated that significant amount of error is being devoted to examine coverage levels and associated error levels. The SSC recommends that these efforts be continued.

To clarify current data collection and estimation procedures, the SSC recommends that a work session held in conjunction with its February 1998 meeting to discuss these issues.

C-9(a) (c) Magnuson-Stevens Act Requirements and Essential Fish Habitat

Dave Witherell reported on Magnuson-Stevens Act requirements and Council progress in addressing these tasks.

Cindy Hartman (NMFS-AKR) provided a progress report on Essential Fish Habitat identification and description. Technical teams for each Council FMP have been formed; these groups will work with stock assessment authors to compile and summarize species distribution and habitat requirements for EFH assessments, which will be analogous to SAFE document chapters. The NMFS core team will then use these assessments to prepare draft plan amendments for Council consideration. The SSC supports the staffs' proposal to framework the requirements of EFH into the plan amendment to the extent possible to minimize the number of subsequent amendments required as new data become available.

While this is a daunting task given the short timelines mandated by the MSFCMA, it also represents a significant opportunity to move in the direction of placing our fishery-based knowledge into an ecological context. The challenges of incorporating traditional knowledge and the natural dynamic variability of ecological systems and fish distributions into EFH definitions will necessitate that this be an ongoing, iterative process.

The SSC will look forward to receiving the draft EFH Assessments at its September meeting.

The SSC also received an informal report from Dave Witherell that the guidelines for overfishing definitions are undergoing further changes. We would like to have the opportunity to comment on these changes as they may affect the Council's specification process. The SSC is willing to meet by teleconference in advance of our September meeting to review the proposed changes.

C-10 Groundfish SEIS

The SSC received an informational report from Ron Berg who described the new initiative by NMFS to develop an updated Supplemental Environmental Impact Statement (SEIS) for groundfish fishery management. The work will be led by the Regional Office with contributions from other NMFS groups. The purpose is to develop a full documentation of the known effects of fishing and fishery management. The SSC commented that the work necessary to meet EIS requirements seemed very extensive. As described, the NMFS effort will assess the environmental impacts of both the Bering Sea and Gulf of Alaska groundfish fisheries. The SSC believes it will be difficult to set the bounds for the investigation, and will involve months of review of primary documentation in order to produce the SEIS volume. Ken Stump (Greenpeace) and Tom Okey (CMC) presented public testimony.

D-1(b) Sablefish Rolling Closures

Jane DiCosimo (NPFMC) and Dr. Mike Sigler (NMFS-Auke Bay) presented an environmental assessment on measures to re-order the sablefish longline survey and to pursue voluntary and/or regulatory measures to avoid fishery interference with the survey. The problem addressed is that fishing near survey stations shortly before

the survey may cause a downward bias in the survey indices. Although depression of survey indices has been documented at some stations, the magnitude of this effect for the survey as a whole is unknown.

The SSC notes that changes in survey timing of up to one month have been made in the past. The changes in survey order as presented in the EA/RIR will impose slightly larger timing changes. We expect the effect of these timing changes to be minimal, but encourage the analysts to test for timing effects by repeating selected stations on the survey track. Moving the survey entirely out of the summer period would likely increase costs substantially and could reduce our confidence in the index because the survey may be affected by distributional and behavioral changes (e.g. spawning behavior).

Chris Blackburn (AGDB) and John Gauvin (Groundfish Forum) presented public testimony. Their proposal for re-ordering the survey to minimize the potential for fishery interference is essentially the same as that presented in the EA. They also presented a scheme for voluntary box-like closures to trawl fishing that they feel will be effective in preventing trawl interference with the survey.

The SSC recommends that the EA be released for public review after clarification that the reported financial impacts of avoiding survey bias are examples for illustration only and are not intended as an estimate of the actual overall benefits of eliminating bias.

D-2(c) Shortraker/rougheye (SRRE) rockfish bycatch

Ron Berg (NMFS) provided a report to the SSC on this issue. The SSC interprets the ABC as a maximum harvest level, and we are concerned that the SRRE rockfish ABC was exceeded. The SSC notes that exceeding the ABC early in the year explicitly allocates fishery resources. Changes in fishing season and/or reductions in the maximum retainable bycatches (MRBs) could slow the catch of SRRE making it less likely to exceed catch limits in the future.

D-2(d) Halibut Discard Mortality

In line with standard operating procedures, the best estimate of the halibut discard mortality rate for the BSAI Pacific cod fishery is 12%, based on the report by Gregg Williams (May 23, 1997). This rate is based on recent analysis of 1996 observer data.

Plan Team Appointments

The SSC reviewed credentials for Thomas Pearson, candidate for appointment to the GOA Plan Team. We find Mr. Pearson qualified and recommend his appointment.