

DRAFT
MINUTES
SCIENTIFIC STATISTICAL COMMITTEE
April 4-6, 2005

The Scientific and Statistical Committee met during April 4-6, 2005 at the Hilton Hotel in Anchorage, AK. Members present were:

Gordon Kruse, Chair
University of Alaska Fairbanks

Pat Livingston, Vice Chair
NOAA Fisheries—AFSC

Keith Criddle
Utah State University

Steven Hare
International Pacific Halibut Commission

Mark Herrmann
University of Alaska Fairbanks

Sue Hills
University of Alaska Fairbanks

Anne Hollowed
NOAA Fisheries—AFSC

George Hunt
University of California, Irvine

Seth Macinko
University of Rhode Island

Franz Mueter
University of Washington

Terry Quinn
University of Alaska Fairbanks

Farron Wallace
Washington Dept of Fish and Wildlife

Doug Woodby
Alaska Department of Fish and Game

Members absent:

Ken Pitcher
Alaska Department of Fish and Game

David Sampson
Oregon State University

B-2 Data Quality Act

Bubba Cook (NMFS Alaska Region) gave a clear and detailed presentation about a new procedure that will be required for scientific peer review of scientific information used in the Council process. This procedure applies to “influential scientific information” (defined as *scientific information that the agency can determine will have or does have a clear and substantial impact on important public policies or private sector decisions*) and “highly influential scientific assessments” (defined as *(i) having a potential impact of more than \$500 million in any year, or (ii) is novel, controversial, or precedent-setting or has significant interagency interest*). Depending on one’s interpretation, a few Council actions or **all** Council actions could fall into the categories of influential or highly influential scientific information. It is unclear at present who will make the determination or how it will be undertaken. The SSC made detailed comments and requests for clarification in December 2003, comments and questions that were reflected in a letter written by the Council to the Office of Information and Regulatory Affairs (OIRA), Office of Management and Budget (OMB). NOAA Fisheries still has not made key decisions about the peer review process, which will be required for highly influential scientific assessments as of June 16, 2005 and for influential scientific assessments as of December 16, 2005.

The SSC reiterates that the peer review requirement has the potential to have significant ramifications on the Council process and could result in major delays in management actions. The more formalized process could strengthen the level of peer review (requiring documents to be fully prepared and released ahead of time), but additional required steps (peer review agenda, peer review plan, public comment at all stages) could require significant additional time and personnel commitments. It is impossible at this time to determine exactly what modifications are necessary

due to the ambiguities in specifications for the peer review process. It is possible that a call for outside peer review could be made at any step of the way from the Council, NMFS region, NMFS headquarters, Department of Commerce, and OMB review of actions. It is also not clear how the peer review requirement will interact with litigation activity and threats of litigation.

If a consequence of the Data Quality Act is to move the review of influential scientific information and highly influential scientific assessments from the SSC to ad hoc peer review panels, this will reduce the influence of the SSC in regional fisheries management. While this change is unlikely to be noticeable in some management regions, it would be a radical change in the North Pacific region. Moreover, we note that, if the decision regarding whether an analysis involves influential or highly influential information is made at the level of the regional or national office of NOAA Fisheries, or at the level of the Secretary of Commerce or a OMB functionary, then the result will be a deregionalization of fisheries management.

It is also unclear whether the SSC would pass muster to handle parts of the review process consistent with the OMB Bulletin. While NOAA Fisheries has not yet developed a final position on the structure of review processes, it has suggested that the SSC might be sufficient for influential scientific information but not for highly influential scientific assessments. NOAA Fisheries is concerned that there may be a perception of problems with conflict of interest (due to lack of a formal policy to reveal such conflicts or to recuse SSC members from commenting on agenda items where they have a conflict of interest), independence (there appears to be a concern that federal and state employees serve on the SSC and may participate in the review of analyses that were prepared by their agency), and rotation (there appears to be a concern that long-serving members of the SSC may unduly influence the review of scientific information brought before the Council). One solution is to use the National Academy of Sciences or Council of Independent Experts for highly influential assessments. This diminishes the role of the SSC and prominent scientists may not want to continue being on the SSC.

It should be noted that the Council has used the NRC and other specially convened review panels for several issues in recent years and that, in each instance, the Council has asked the SSC to provide a peer review and assessment of the reports prepared by these special review panels. In addition, AFSC has requested periodic reviews of their stock assessments by Council of Independent Experts (CIE) panels. Likewise, AKR requested a CIE review of Appendix B of the EFH EIS. The results of these reviews have also been presented to the SSC. Continued use of these periodic and special reviews can also contribute to satisfying requirements of the Data Quality Act.

As noted in our December 2003 minutes,

From the perspective of the SSC, a body of nationally and internationally prominent research scientists, the existing processes for the review of information and analyses prepared in support of Council decision-making constitute a rigorous peer review with excellent opportunity for public review and comment. Indeed, the *raison d'être* for the SSC and Plan Teams is to provide independent peer review of information and analyses prepared in support of Council decision-making. If the review of information and analyses provided by the SSC and Plan Teams is judged to be non-compliant with guidelines in the proposed OMB bulletin, there may be little benefit in continuing the existence of the SSC or Plan Teams. In defense of the continuation of the SSC and Plan Teams, we note that: 1) SSC and Plan Team members are selected through an annual nomination process; 2) members are selected for their expertise; 3) members are active in the research community and often serve as peer reviewers for scientific journals and as reviewers of fishery programs elsewhere in the US and internationally; 4) the review process is public; 5) during the review process, the SSC and Plan Teams regularly solicit participation of interested public and other researchers; and 6) that the input of these participants is often reflected in the recommendations that emerge from the SSC and Plan Team meetings.

If the Council wishes the SSC to remain as the main scientific peer review body, one possible action that the Council could take would be to “employ an alternative scientific procedure or process, specifically approved by the Administrator of OIRA...”^a The SSC is willing to work with the Council to draft such an alternative policy that would essentially document the existing review process, which includes additional outside peer review when appropriate. Dave Witherell’s report on SSCs presented at the Managing Our Nations Fisheries II Conference contains most of the necessary details. Other elements of the alternative policy could include (1) a conflict of interest (COI) review process for SSC members patterned after the COI procedures used by the National Academies and National Research Council^b, (2) curriculum vitae of SSC members could be posted on the Council web site to document scientific credentials of the body, (3) a statement from the Council that additional peer review will be obtained for highly controversial assessments and documents, but that this determination would rest with the Council, not NOAA Fisheries or OMB. The goal would be to submit this alternative process as soon as possible to avoid the chaos that could easily result from adopting the formal OMB Peer Review Bulletin. **Another possible action would be the inclusion of language in the reauthorization of MSFCMA that would stipulate that a properly constituted SSC could serve as the peer review panel for influential scientific information and highly influential scientific assessments related to the management of fisheries in the US EEZ.**

C-3 Central GOA Pelagic Shelf Rockfish Demonstration Program

Mark Fina (Council staff) provided an overview of the draft EA/RIR/IRFA. Public testimony was provided by Julie Bonney (Alaska Groundfish Databank).

This is the SSC’s first review of this program and the EA/RIR/IRFA. We note that it has a remarkably complicated design for a program that is intended to sunset after two years. Moreover, because a majority of the revenues associated with this fishery are generated from catches of the secondary species, this program is not so much a rationalization of pelagic rockfish catches as it is a rationalization of catches of the secondary species. In addition, we note that this program has a strong potential to pre-configure the GOA comprehensive rationalization. **Consequently, the importance of this analysis goes well beyond the evaluation of a pilot program involving Central GOA pelagic shelf rockfish fisheries; it represents a preliminary framing of the issues and analytic approach to be applied to the analysis of options and alternatives for comprehensive rationalization of the GOA groundfish fisheries.** In reality, the program under consideration potentially involves disposition of a public resource; such an action deserves full transparency in the public policy process. It is therefore particularly important that this analysis be comprehensive and done well. **The draft EA/RIR/IRFA is incomplete in a number of important areas. In as much as possible, the following issues should be addressed before the analysis is released for review.**

1. **The design of monitoring and enforcement programs needs to be described in greater detail.** As a pilot program involving a mix of small and medium sized catcher vessels and catcher processors, this program provides an interesting opportunity to explore the relative effectiveness and pitfalls of different monitoring systems (video, electronic logbook, observer) and the feasibility of applying information from various monitoring systems in the enforcement of multi-species sector allocations in fisheries with cooperative and limited access fishing. The analysis should be expanded to provide enough information for readers to judge whether the monitoring program can be expected to ensure that sector allocations are not exceeded. The current observer program is designed to yield fishery-

^a OMB 2004. Memorandum regarding issuance of OMB’s Final Information Quality Bulletin for Peer Review.

^b Consistent with NAS/NRC procedures, the COI disclosure process could include an annual review of COI disclosure statements. Consistent with the NAS/NRC COI review process, the SSC COI review could take place in executive session with representation from NOAA-GC, or, the process could be made more transparent by holding the SSC COI review in executive session of the Council, or in public session.

scale estimates of catch and bycatch. Implementation of individual vessel or sector (vessel pool) allocations in a multi-species fishery requires a more precise accounting of target, secondary target, and incidental catches by employing additional observers or coupling observers with other monitoring systems. While there is consensus that fishery-level estimates of catch and bycatch are sufficiently precise to stay within prescribed TAC levels, experience with the BSAI Vessel Incentive Program (salmon bycatch reduction) suggests vessel-level estimates of bycatch may not satisfy evidentiary standards required for enforcement of individual vessel or sector allocations for target, secondary-target, and incidental catches of species that represent small fractions of the catch. Alternatively, precision of the estimates can be increased by pooling observer samples across vessels (e.g., sector allocations). However, these alternatives involve tradeoffs in cost and feasibility of implementation, precision of the estimates, and degree of individual accountability.^c Based on consultations with the observer program, NMFS-enforcement, and the US Coast Guard, the draft EA/RIR/IRFA should be expanded to include additional detail regarding the monitoring and enforcement plan for each of the CV and CP alternatives.

2. **The draft EA/RIR/IRFA should include additional discussion about the potential changes in bargaining power between CVs and processors.** Although catches in the Central GOA pelagic shelf rockfish fishery are sufficiently small that they are unlikely to affect market prices, the proposed alternatives can be expected to affect the relative bargaining power of CVs and processors. The effect of the various alternatives can also be expected to depend on the extent of vertical integration in ownership or through formal or informal long-term contracts involving CVs and processors. While it may not be feasible to fully trace ownership and contractual relationships, the analysis should include at least a conceptual discussion of these issues. This discussion could draw heavily on analyses referenced in the BSAI Crab Rationalization EA/RIR, especially the Halvorsen, Wilen, and Milon and Hamilton white papers and the journal articles by Matulich et al. This discussion should be cognizant of concerns raised about the limitations of these analyses in the SSC minutes of February 2002 and April 2002. While theoretical examinations can help characterize the potential shifts in negotiating power, they cannot provide definitive predictions. Nevertheless, it seems likely that, for example, the cooperative program with processor associations will provide vastly superior bargaining power to processors relative to harvesters. This problem is exacerbated if CVs are coerced to join a cooperative to avoid losing 20% of their harvest, instead of opting to participate in a limited access fishery. This leaves CVs with very few options. It is not unreasonable to expect that a vessel may join a cooperative with processor association as long as it expects to take no more than a 20% reduction in revenue. The document needs to discuss if a similar loss of CV harvests has been imposed in other rationalized fisheries. Similar to the cooperative program with processor association, processors would likely have similar bargaining power under a cooperative program with license limitation for processors, if there is vertical integration in ownership or through formal or informal long-term contracts. Conversely, if there is horizontal integration through ownership or cooperation among CVs, their relative bargaining power will be increased relative to processors. Also of concern is the possibility that processor-CV relationships, under either cooperative option, may change once comprehensive rationalization of the GOA groundfish fisheries is undertaken. It would not be surprising if processors were willing to pay favorable exvessel prices in anticipation of developing contracts that were more favorable under the GOA rationalization program. Once GOA groundfish

^c Preliminary research on these tradeoffs is reported in, for example,

Criddle, K.R. 2002. Precision of prohibited species bycatch estimates for pooled and individual bycatch quotas. Final Report, Alaska Sea Grant project no. RR/33-01.

Furniss, A.L. 2001. Data analysis and bootstrap simulation: understanding observer catch data for accurate and economic simulation of North Pacific fisheries. Applied Mathematics, Utah State University.

Jensen, L. 2000. Pool size versus precision of prohibited species bycatch estimates for pooled and individual bycatch quotas. MS thesis in Applied Mathematics, Utah State University.

rationalization takes place this incentive will be eliminated and therefore it will be difficult to use the rockfish rationalization to predict behavior under a GOA groundfish rationalization.

3. **The draft EA/RIR/IRFA should include a brief discussion about the extent to which the net national benefits of the alternatives could be overstated if foreign ownership exists.**
4. **The EA needs to include additional discussion about the changes in fishery duration that may result in seasonal shifts of target catch and bycatch and potential effects on reproductive success and other population dynamics.** If this program is to serve as a template for comprehensive rationalization of GOA fisheries, there will also be need for a mechanism to accommodate long-term changes (e.g., regime shifts and decadal scale cycles) in the relative abundance of species assemblages. This is particularly important for determination of MRAs.
5. **The revised RIR should include additional tables that reflect the combined value of target and secondary target catches to CVs and CPs.**

Mandatory Data Reporting Program

There is insufficient information for the analysts to ascertain the current magnitude or distribution of net economic benefits and social well-being associated with this fishery. Projections of the consequences of the alternatives are, at best, highly uncertain. While it is proposed that the program be reviewed after two years, there is no provision to require the beneficiaries of the program to submit information needed to assess changes in the magnitude or distribution of net economic benefits or social well-being consequent to the implementation of this program. The purpose of authorizing a pilot project is to learn about the consequences of alternative actions before adopting them on a larger scale. To learn, we must gather information that may be sensitive to individuals and firms that they are unlikely to provide unless required to do so. **As we did in the case of crab rationalization, the SSC strongly encourages the Council to incorporate mandatory data reporting as a condition of participation in this program as a member of a harvester cooperative, as a limited entry processor, as a member of a processor association, as a beneficiary of a sector allocation, or as a participant in the entry-level fishery.** The following information represents the minimum information needed to fulfill the Council's desire to assess the economic consequences of this program:

- Annual information about ownership of catcher vessels, catcher-processors, and processors, including information about firm organization, vertical and horizontal linkages, and the extent of foreign held equity.
- Prices and quantities of landed product by vessel and species by individual landing.
- Prices and quantities of wholesale product, by firm, including quality variables and products by week and product inventories.
- Information about crew and labor working on catcher vessels, catcher-processors, and processors, including unique identifiers and name and address data for each employee, information to indicate state of residency and whether the employee is a citizen or resident alien, or if they are a nonresident alien, hours worked, and payments to labor.
- Periodic information about fixed and variable costs for catcher vessels, catcher-processors, and processors.
- Transaction prices for vessel and processing plants or catching and processing history sold or leased.
- Tax payments to State, Borough, and Community governments.

Additionally, the SSC again expresses extreme concern regarding the decision of the NOAA-Fisheries to discontinue the collection and reporting of data on cold storage holdings as of 2002. Without inventory data, development of market models for rockfish and, more importantly, groundfish, is

not possible. This lack of basic data all but ends the opportunity to develop market models, which can be used to estimate statistically the revenue gains from fishery rationalization.

C-5 BSAI Salmon Bycatch

The SSC received a briefing from Diana Stram (NPFMC staff) concerning salmon bycatch issues. John Gruver (United Catcher Boats; Inter-Cooperative manager) and Karl Haflinger (SeaState) reported on implementation of the system to date and proposed additions to the AFA Pollock Inter-Cooperative Agreement program.

Bycatch of chinook and chum salmon in 2003 and 2004 increased dramatically over past levels triggering closure of the Salmon Savings area. This situation continues into 2005. There is evidence that the closures may not be effective at reducing salmon bycatch. Therefore, at the December 2004 Council meeting, a problem statement was drafted along with a number of alternatives. At that meeting, the SSC recommended that a full analysis be conducted to establish whether the fixed closed areas are contributing to the high bycatch levels. Although this analysis is not yet available, information available so far indicates that salmon bycatch rates were lower inside closed areas compared to areas fished outside during the same time period. A full analysis will be incorporated into the final EA.

Alternatives drafted in December were bifurcated into two Amendment packages with package A to be set on a fast track for analysis, and package B on a slower pace pending developments in package A. Elements of these two packages were contained in a Staff Discussion Paper and SSC comment was requested on the proposed analyses. Most of the staff briefing and the salmon bycatch presentation concerned the fast track Amendment package, and SSC comments are restricted to this package as amendment package B lacks even a problem statement at this time. Three alternatives are included in amendment package A: a no action alternative, an alternative to eliminate the Salmon Savings Area closures, and an alternative to suspend the Salmon Savings Area closures on a year by year basis so long as the pollock cooperatives have a system in place that displaces fleet effort from “hot spots”. The SSC was informed that the third alternative was not feasible since regulatory requirements (i.e., EA/RIR/IRFA preparation followed by initial and final review) could not be met to suspend or re-open the closed areas on an annual basis. Thus, the issue at hand is whether to eliminate the current closed areas and replace them with an industry-designed (and implemented) hot spot closure system.

The key components of the hot spot closure system are as follows:

1. The current salmon savings area closures will not be triggered.
2. New closed areas, up to a maximum total area of 2000 mi² (for Chinook) and 3000 mi² (for chum) are established based on bycatch rates.
3. Closure areas are rolling and can change weekly.
4. A “base rate” for salmon bycatch is established that determines when and where areas are closed.
5. Depending on individual coop vessel tier level, vessels may still fish in the closed areas; if they are at or below 75% of the base rate there is no closure, >75% and <125% they are excluded from fishing for 3 or 4 days, and >125% they are excluded for 7 days.
6. There is no hard cap on salmon bycatch.
7. Monitoring of compliance to closures is the responsibility of the cooperatives.

The SSC notes that a great deal of analysis is required to support implementation of such a system and that the current hot spot closure system likely requires additional protection measures, such as a cap. The foremost mandate guiding the Council in this matter is National Standard 9, which requires that conservation and management measures must, to the extent practicable, minimize bycatch (or at least

bycatch mortality); it is unclear that National Standard 9 can be satisfied without the protection of a hard cap.

The analysis of this alternative should address the following questions posed by the SSC:

- What data will be analyzed to evaluate the effectiveness of this program? Historical bycatch data from the CDQ fisheries after the Salmon Savings Area closes could be compared to concurrent bycatch data outside the Savings Area from the rest of the fleet. Also, time series of bycatch data could be examined for shifts in bycatch rates in response to Salmon Savings Area closures, as well as shifts in fishing patterns associated with the SeaState program.
- How will the base rate be determined? Set high enough, this might result in no closed areas. For example, if the base rate is set on the previous year when abundance was high, the base rate may never be reached in a low abundance year when conservation is paramount.
- What is the rationale for allowing for self-policing of closed area violations? If penalties are imposed, where do these monies go? Should fines be directed towards salmon conservation efforts?
- When vessels move out of the high salmon bycatch areas, what are the effects on bycatch rates of other species?
- How will penalties be enacted for non-compliance?
- What is the spatial distribution of high bycatch rate vessels compared to vessels with low bycatch rates?
- Why not consider hard caps to limit total bycatch mortality as implemented for other protected species. For example, herring bycatch is limited to 1% of total herring spawning biomass in the eastern Bering Sea. The SSC recommends investigating a range of alternative hard caps in conjunction with rolling closures.
- What are the factors behind the increased bycatch rate? There are several potential explanations, including increased salmon abundance, shifts in distribution due to environmental factors, and/or changes in fishing patterns. For example, changes in bycatch CPUE can be correlated with lagged salmon run size. It would be of considerable interest to go back and revisit the original analysis that resulted in the current closure areas and examine how conditions differ today.
- What is the geographic origin of the salmon? To address salmon conservation concerns it is imperative that efforts be made to determine stock origin, at least to region (Asia, Alaska or other). A good start would be to identify current efforts and their results.

As a basis for understanding some of these issues, the SSC requests that Council staff consider arranging for presentations on two topics:

- 1) the BASIS salmon program, emphasizing new information on the distribution of chum and chinook salmon in the eastern Bering Sea, and
- 2) recent genetic stock ID of chum and chinook salmon in the eastern Bering Sea.

These presentations might be made by staff of the Auke Bay lab and the ADF&G genetics lab.

D-1(a) Non-target species and rockfish management

The SSC received a report from Jane DiCosimo (Council Staff) on a recent meeting of the Non-target Species Committee. The SSC received public testimony from Dorothy Childers (Alaska Marine Conservation Council) and Ed Richardson (Pollock Conservation Cooperative). The Committee provided a problem statement, goals and objectives and draft alternatives for revising management of non-target species. The Committee developed a three step approach to address non-target species management:

Action 1 (called Alternative 2 in the committee report): Provide an interim tool for management of GOA Other Species by allowing the Other Species TAC to be less than 5%,

Action 2 (called Alternative 3 in the committee report): Amend the BSAI and GOA FMPs to break the Other Species category into species assemblages,

Action 3 (called Alternative 4 in the committee report): Develop a comprehensive approach to non-target species management.

The SSC endorses this three-step approach, because it is a logical progression of management measures. Our specific comments on Action 1 appear in D-1(b) below. **Regarding Action 2, the SSC recommends moving forward with an amendment package containing the alternatives listed in the committee report.**

We note that Action 3 is on hold, pending publication of the revised National Standard 1 Guidelines (NS1). Regardless, the SSC believes that further progress can be made by development of a discussion paper for GOA and BSAI rockfish to provide an outline for non-target species management. This discussion paper should include: (1) detailed analysis of spatial and temporal distribution by species (or species groups), (2) a summary of current rockfish management, (3) a case study in which Alternative 4 in the committee report is applied to all rockfish species.

The SSC discussed the difficulties associated with evaluating the significance of commercial harvest on populations at the edge of their range. When considering the significance of populations that are at the edge of their range, the SSC recommends that there should be some consideration of what is an evolutionary significant unit (ESU) of a species to evaluate which species are edge populations and which constitute an ESU.

When Action 3 (the overall non-target species management amendment) goes forward, the inevitable problem of small, unmanageable TACs must be addressed. In particular, the SSC requests a thorough evaluation of the strengths and weaknesses of management under an alternative system which might include MRAs, time-area closures, or other measures, as opposed to a TAC. Any system may require increased observer coverage or video monitoring to achieve the goals for management of non-target species. The SSC requests that the EA include an estimate of additional personnel and observer coverage that would be required to ensure catch accounting of non-target species.

D-1(b) TAC calculation of other species complex for GOA

The SSC received a report from Diana Stram (Council Staff) and Tom Pearson (NMFS AK Region) on the draft EA/RIR/IRFA on a proposed amendment to modify the TAC for the Other Species complex in the GOA. Three alternatives are considered: (1) status quo in which TAC for Other Species is set at 5% of the total groundfish TAC, (2) TAC for Other Species can be set less than 5% of the total, (3) TAC for Other Species is set to provide only for bycatch in other fisheries. The SSC received public testimony from Gerry Merrigan (Prowler Fisheries).

The SSC recommends that the draft be released for public comment with the following minor revisions. The SSC recommends that the rationale for limiting the range of alternatives should be more clearly articulated. For example, the document should acknowledge that one reason for not breaking out species in the Other Species group at this time is that catch estimates for 2003 and 2004 by species will not be available in time for this decision. Hence, the EA needs to be placed in its broader context – that this is an interim measure, not a stand-alone action.

The EA makes extensive use of the 1999 Other Species appendix to the GOA SAFE. This was the last full assessment where both reliable catch estimates and biomass estimates were available. While updates to shark assessments have been provided, no annual assessment for Other Species has been done for the GOA. The SSC recommends that more recent data be brought into the document. For example, the 2001 and 2003 bottom trawl survey biomass estimates should be added to the analysis, with the caveat that in

2001 only part of the GOA was surveyed. It appears that Other Species catch estimates are available for fish delivered to Kodiak processors, such as squid and sculpins. The SSC requests adding this information to the EA/RIR/IRFA.

Staff noted that considerable shark bycatch occurs in the halibut fishery. No estimates of mortality for discarded fish are available but high mortality is likely. The SSC recommends that the EA include a discussion of the importance of total catch accounting for Other Species, including recreational catch and bycatch in the halibut fishery. Attempts should be made to estimate total catch.

The SSC requests that the analysis consider the potential impacts of target fisheries on predators of Steller sea lions and prey of seabirds. The SSC also noted that shifts in offal and discard production should be considered as an impact on seabirds.

The SSC notes that if a target fishery developed for some species in the Other Species complex, then disproportionately large catches of a single species could create conservation concerns. The conclusion in the document, however, is that the impacts of the status quo option would be insignificant. The SSC requests elaboration on how the insignificant rating was determined. Perhaps it comes from the history of Council action, in that when a directed fishery develops, the Council tends to act quickly to break that species out of the other species category. Thus, the implicit assumption under status quo is that this type of response would protect against long-term negative impacts.

D-1(c) Exempted Fishing Permit for testing Integrated Weight Groundline (IWG) longline gear

The SSC received a report from Thorn Smith (North Pacific Longline Association (NPLA)) and Kim Rivera (NMFS Alaska Region) on the request for an Exempted Fishing Permit (EFP) to test IWG as a seabird avoidance measure. A previous request for an EFP in 2004 was not issued because a vessel to conduct the research could not be secured. The current request includes four new provisions not included in the 2004 EFP to offer incentives to vessel owners to participate in the proposed study:

- Starting experimental fishing a month earlier (July 15, 2005 instead of August 15)
- Allocating specific amounts of Pacific cod and bycatch species to participating vessels
- Harvesting Pacific cod beyond the TAC and ABC amounts specified for 2005
- Exemption from IR/IU regulations (50 CFR 679.27)

The SSC supports the proposed research and the sampling design as outlined, particularly the addition of treatment 4 (which evaluates potential interactions and additive effects of using both IWG and streamer lines simultaneously). NOAA Fisheries completed a Draft Environmental Assessment and concluded that environmental effects from issuing the EFP would be insignificant. There is a need to check with the International Pacific Halibut Commission concerning the expected take of halibut associated with this project. **The SSC commends NPLA for their pro-active and innovative approach to reducing seabird bycatch in the longline fishery and recommends releasing the Draft Environmental Assessment for public review.**

D-1(d) Exempted Fishing Permit for testing a salmon excluder device

The SSC received a report from Diana Stram (Council Staff) on the request for an EFP for research on a salmon excluder device. She noted that the EFP request includes four specific provisions:

- the ability to conduct the EFP testing within the Bering Sea Salmon Savings Areas and Catcher Vessel operational Area (CVOA) regardless of whether they are closed to pollock fishing.
- an exemption from AFA observer requirements for catcher processors conducting the paired testing experiment.

- an allocation of 5000 mt of pollock catch above the TAC for Sept. 2005 -March 2006 period for two concurrent experiments (recapture net and paired tows). They also request an additional 2500 mt of pollock catch above the TAC for the period September 2006-March 2007.
- a bycatch allowance of up to 5000 chum salmon and 2000 chinook (500 chinook for the recapture experiment and 1500 chinook for the paired tows).

The EA concluded that the impact of the EFP on salmon and marine mammals was insignificant.

The SSC received a report from John Gauvin (Groundfish Forum) and John Gruver (United Catcher Boats) on the results of their 2004 and winter 2005 experiments and the activities planned for 2006-2007. The experiment involves two parts. Part one will focus on net design and development work. Part two will focus on paired trawl experiments to evaluate the efficacy of the trawl relative to capture of pollock and exclusion of salmon. The investigators explained that they are requesting a bycatch allowance above the PSC cap because they must target regions with high bycatch to conduct their experiment. They anticipated that support for the research would dissolve if this action negatively impacted the fleets' ability to catch their target species.

The SSC inquired about the condition of fish that escape from the net. The PIs indicated that video monitoring indicates that salmon seldom come in contact with the net during escapement. The SSC also inquired about the size of pollock escaping from the net. The PIs indicated that the pollock escaping from the net appear to be a random representation of the size range of fish captured. **The SSC applauds the investigators for developing innovative techniques to avoiding unintended catch and recommends release of this EA for public review.**

D-2 Scallop SAFE and FMP

Revised versions of the scallop SAFE and FMP were presented by Diana Stram (Council staff) and Jeff Barnhart (scallop plan team chair, ADF&G). Changes to the SAFE include substantial improvements to the organization and readability, including tables of survey abundance estimates and graphs of shell height frequency distributions, using consistent units in presentations of survey biomass and catch, and providing a graph (Figure 20) showing catch history relative to OY for the state as a whole.

The SSC requests that further attention be given to the following stock assessment issues for future improvements to the SAFE document:

1. Efforts should be made to design surveys such that areas surveyed are representative of available scallop habitat, both fished and not fished, and that these areas are surveyed in a consistent and statistically valid manner. The goal is to develop a time series of biomass estimates that will be useful in establishing harvest control rules and for evaluating stock status.
2. Given budget limitations for surveys, the SSC recommends exploring the usefulness of existing NMFS and ADF&G trawl survey data as sources of abundance indices and information on spatial distribution.
3. Given the availability of excellent observer data, the SSC recommends further exploratory analysis of depletion estimators as well as new efforts using length-based methods to estimate biomass.
4. The treatment of Alaskan scallops as a single stock for overfishing determinations needs further evaluation. In particular, the SSC recommends an evaluation of larval advection in relation to the potential genetic relationships of spatially discrete beds.
5. The SSC encourages updating the age-structured analysis for the estimation of population biomass for the Kamishak Bay scallop population. Once updated, the SSC requests a

presentation of the model, including full specification of parameters, identification of free versus fixed parameters, and a distinction between data and parameters.

The SSC strongly supports the development of a video-based method for fishery independent stock assessments. Recognizing the potential for this method to eventually provide biomass estimates for management, the SSC requests that Council staff schedule a presentation to the SSC on this method along with a description of the present survey methodology. Items that the SSC would like to see in such a presentation include survey design concerns, such as how the area swept is to be estimated, how live scallops are to be distinguished from dead scallops, and how size composition is to be estimated.

As the new video survey method is developed, the SSC would like to emphasize the importance of continuing prior dredge surveys and conducting comparisons of old with new methods in side by side comparisons. If new methods are to replace old methods, the dredge methods should not be abandoned until a quantitative conversion function is estimated.

The SSC commends the staff and the plan team for substantially revising and improving the SAFE report and for addressing many of the points made in our minutes of February 2004. The SSC recommends Council approval of the SAFE document.

The SSC commented on the Scallop FMP revision and noted that the document provides a more complete and clear description of scallop management than the previous document. Recognizing that considerations of the OY definition were outside the scope of the present revision, the SSC looks forward to the review by the scallop plan team of the OY definition once the new National Standard Guidelines are published. In particular, the SSC would like to see a consideration of applying the OY definition to smaller spatial scales, such as registration areas or individual beds, in contrast to the current statewide approach.

In regards to the scallop observer program, the SSC strongly supports continuation of 100% observer coverage. Observer data are an important part of the conservation and management program, particularly due to the scarcity of survey data, and reductions in coverage could be particularly severe given the small number of vessels and the long periods for which observers are deployed.

The SSC applauds the staff for their highly readable and well organized revision of the scallop FMP and recommends approval of the FMP subject to minor editorial fixes.