

SUMMARY MINUTES
Scientific and Statistical Committee

Pacific Fishery Management Council
San Mateo Marriott
Synergy 1 Room
1770 South Amphlett Boulevard
San Mateo, CA 94402
Telephone: 650-653-6000
April 8-9, 2011

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

The meeting was called to order at 8 a.m. on Friday, April 8, 2011. Council Executive Director, Dr. Don McIsaac briefed the SSC on priority agenda items.

Members in Attendance

Mr. Robert Conrad, Northwest Indian Fisheries Commission, Olympia, WA
Dr. Ramon Conser, National Marine Fisheries Service, La Jolla, CA
Dr. Martin Dorn, SSC Chair, National Marine Fisheries Service, Seattle, WA
Dr. Carlos Garza, National Marine Fisheries Service, Santa Cruz, CA
Dr. Vladlena Gertseva, National Marine Fisheries Service, Newport, OR
Dr. Owen Hamel, SSC-Vice Chair, National Marine Fisheries Service, Seattle, WA
Dr. Selina Heppell, Oregon State University, Corvallis, OR
Mr. Tom Jagielo, Oregon Department of Fish and Wildlife
Ms. Meisha Key, California Department of Fish and Game, Santa Cruz, CA
Dr. Peter Lawson, National Marine Fisheries Service, Newport, OR
Dr. Todd Lee, National Marine Fisheries Service, Seattle, WA
Dr. Charles Petrosky, Idaho Department of Fish and Game, Boise, ID
Dr. André Punt, University of Washington, Seattle, WA
Ms. Cindy Thomson, National Marine Fisheries Service, Santa Cruz, CA
Dr. Theresa Tsou, Washington Department of Fish and Wildlife, Olympia, WA
Dr. Vidar Wespestad, Research Analysts International, Seattle, WA

Members Absent

Dr. Louis Botsford, University of California, Davis, CA

SSC Recusals for the April 2011 Meeting.		
SSC Member	Issue	Reason
Mr. Tom Jagielo	2011 Pacific Sardine Exempted Fishing Permit (EFP)	SSC Independence, Mr. Jagielo served as a science advisor for the West Coast Aerial Sardine Survey, a potential EFP applicant.
SSC members of External Review Panels for items considered at the April 2011 Meeting. <i>SSC members of external review panels are noted below for the record. SSC members of External Review Panels may participate in SSC deliberations, but they are expected to remain neutral if the SSC is being asked to arbitrate differences between review panels and technical teams.</i>		
SSC Member	External Panel Membership	
Dr. Andre Punt	2011 CPS Methodology Review Panel Chair	
Dr. Martin Dorn	2011 CPS Methodology Review Panel SSC Representative	

Scientific and Statistical Committee Comments to the Council

The following is a compilation of April 2011 SSC reports to the Pacific Fishery Management Council (Council) in the order they were discussed by the SSC. (Related SSC discussion not included in written comment to the Council is provided in *italicized text*).

Coastal Pelagic Species Management

C.2 2011 Pacific Sardine Exempted Fishing Permits

The Scientific and Statistical Committee (SSC) discussed the West Coast Aerial Sardine Survey Exempted Fishing Permit (EFP) application (Agenda Item C.2.a, Attachment 1) for 2011. The SSC reviewed an earlier draft of the EFP application in March 2011. SSC discussion at the current meeting focused on the EFP modifications made since March, and to what extent the March SSC recommendations have been incorporated. Mr. Tom Jagielo and Mr. Mike Okoniewski of the Northwest Sardine Survey (NWSS) briefed the SSC on the revised EFP. Ms. Brianna Brady (California Department of Fish and Game, Coastal Pelagic Species Management Team (CPSMT) Vice-Chair) and Mr. Kerry Griffin (Council Staff) summarized the ongoing CPSMT discussions on the EFP.

The EFP would continue research conducted in 2009 and 2010 (and a non-EFP pilot project in 2008). The proposed survey follows essentially the same methodology as in previous years. The survey area is reduced in extent from the 2009 and 2010 surveys, covering the region off the coasts of Washington and Oregon, but not extending into California. The key revisions to the EFP (from that proposed in March) included: (i) an increase in the allocation from 2,100 to 2,700 mt; and (ii) an increase in the number of point sets from 56 to 76. Although not formally a part of the EFP, the NWSS representatives informed the SSC of their intent to improve point set sampling north of the Columbia River by landing part of the catch in Westport, Washington.

In March 2011 and in earlier reviews, the SSC raised concerns about the lack of explicit protocols for the spatial distribution of point sets, which are needed to address the concern that the sets tended to be geographically clustered in the 2009 and 2010 surveys, and therefore might not have captured possible spatial variability in the relationship between school size and biomass. Since length composition and other biological data are also collected from the point sets, spatial variation in the biological characteristics might also have been missed. The SSC further notes that a substantial portion of the available point set data was not used in the last stock assessment because of the spatial mismatch between many point set locations and the key areas of sardine abundance (as inferred from the transects).

The SSC notes that the non-EFP pilot project was reviewed by a Stock Assessment Review panel and the SSC in 2009. Those reviews of the aerial survey were generally positive, based on the results from the pilot year, and the SSC recommended going forward with EFPs in the subsequent years. However, the 2009 review also recommended a series of analyses and re-evaluation of issues that could only be addressed once a sufficient number of years of data had been collected, e.g. "double reads" of estimates of surface area of schools from the point sets; calculation of measurement error from these double reads; tradeoffs between the number of transects vs. the number of point sets; etc. Upon completion of the 2011 field season and sardine assessment, it would be advisable to carry out this work and have it reviewed by a Council methodology review panel.

The EFP proposal has been improved but it has not been modified sufficiently to address the earlier SSC concerns about the spatial distribution of pointsets. The potential cost of not updating the design is twofold: (i) as with the 2010 stock assessment, a good deal of the point set data collected via the 2011 EFP may not be used in the 2011 assessment because of a mismatch between abundance and point set locations; or (ii) if the mismatch is severe, the aerial survey may not be used at all in the 2011 assessment.

Although there have been implementation issues and cost-based limitations, there is a sufficiently strong scientific basis for the EFP proposal. The continuation of the time series and an additional year of data should contribute to the upcoming and future sardine stock assessments. Notwithstanding these concerns, the SSC endorses the EFP proposal for implementation in 2011.

Coastal Pelagic Species Management, continued

C.3 CPS Survey Methodology Review

An acoustic-trawl survey methodology review took place in February, 2011, at the Southwest Fisheries Science Center (SWFSC) in La Jolla, California. The review Panel, made up of two Scientific and Statistical Committee (SSC) members and three reviewers from the Center for Independent Experts (CIE), provided a report (Agenda Item C.3.a, Attachment 1) with several recommendations to be implemented prior to use of the methodology in a stock assessment. Overall, the Panel concluded that the design of the acoustic-trawl survey is satisfactory and could be used to estimate abundance for CPS species.

For Pacific sardine, the Panel concluded that estimates from the acoustic-trawl survey can be included in the 2011 stock assessment as ‘absolute estimates’ if the following two tasks are completed:

- 1) Analyses be conducted using auxiliary information (e.g. trends in density along transects, information from ichthyoplankton surveys south of the survey area, catch information) to provide best estimates for the biomass outside of the survey area as well as the range of possible biomass levels.
- 2) The coefficient of variation for the estimates needs to be modified to fully account for the uncertainty of the trawl data.

The Panel also recommended that the results of the acoustic-trawl survey could be used to estimate the biomass of jack mackerel in U.S. waters (even though the survey does not cover the entire distribution of the stock). The estimates of abundance for Pacific mackerel are more uncertain as measures of absolute abundance than for jack mackerel or Pacific sardine. The present survey cannot provide estimates of abundance for the northern anchovy stocks without an increase in the density of survey transects in certain areas.

The SSC endorses the conclusion of the Panel’s report that the survey estimates can be used in the 2011 sardine stock assessment, but has concerns whether the survey should be used as an estimate of absolute abundance. Instead, the SSC recommends that logic used in the whiting assessment be applied, where the acoustic survey is used as a relative abundance index absent strong evidence that the survey provides an estimate of absolute abundance. The SSC encourages further research to evaluate vessel avoidance and the spatial distribution of sardine relative to survey transects. Some of this research may be possible in the near term, but it is unlikely to be completed by the Pacific sardine Stock Assessment Review Panel in October.

The SSC agrees with and recommends the following when considering the use of the acoustic-trawl survey data: (a) examine the sensitivity of the results to alternative acoustic-trawl abundance estimates; (b) determine if use of the acoustic-trawl results as absolute estimates of abundance leads to patterns in the residuals; (c) examine the implications of ignoring some or all of the acoustic trawl estimates [e.g., the estimates from the summer 2008 and spring 2006 surveys.

Lastly, the SSC would like to note that having the CIE reports available for this discussion was valuable. We also compliment the technical team and the review panel for their hard work and thorough review.

Coastal Pelagic Species Management, continued

C Environmental Parameters in Pacific Sardine Harvest Control Rules (SSC discussion, not on the Council agenda, no report to the Council.

The SSC reviewed and discussed the use of sea surface temperature (SST) in the harvest control rule and when computing OFLs / ABCs for Pacific sardine, focusing specifically on a peer-reviewed paper by McClatchie et al. (2010) that recommends abandoning the current method for determining an F_{msy} proxy used in the calculation of one component of the HG control rule (FRACTION). SST measurements at the Scripps pier in La Jolla have been used as an indicator

of sardine productivity, based on a positive correlation observed for years prior to 1991. This correlation breaks down if data are included for 1991-2008, when temperatures have been much higher. The SSC and other researchers agree that there is likely an effect of temperature on sardine recruitment, but note that this relationship is likely not stationary in time and may be overwhelmed in some periods by inter-specific interactions such as predation.

The current F_{msy} proxy is a quadratic function of average temperature. The SSC agrees that the harvest control rule and OFL/ABC should be revised using a Management Strategy Evaluation which includes the relationship between recruits/spawner and environmental covariates, as well as management objectives for this fishery. Ecosystem considerations could also be included in such an evaluation. This will require further investigation of temperature and other environmental effects on sardine dynamics.

For this year, the SSC recommends that the SSC CPS Subcommittee work with the assessment author to examine the sensitivity of F_{MSY} to alternative model assumptions and how estimates of F_{MSY} have changed over the last 3 assessments. Ideally, this should be completed prior to the June SSC meeting. If the estimates of F_{MSY} are 'robust', an interim approach to setting F_{MSY} for the purposes of calculating OFLs and ABCs would be to use the base-model estimate of F_{MSY} while a thorough analysis of the recruitment-environment relationship and alternative control rules are explored. The SSC notes that this is not general endorsement of basing OFLs and ABCs on estimates of F_{MSY} because F_{MSY} estimates are often not robust.

Groundfish Management

I.3 Periodic Groundfish EFH Review Process

In September 2010, the Council directed the ad hoc Groundfish Essential Fish Habitat Review Committee (EFHRC) to develop recommendations for a review of groundfish essential fish habitat (EFH) established in 2006. Mr. Kerry Griffin briefed the Scientific and Statistical Committee (SSC) on a revised Council Operating Procedure (COP) 22 and requests for information.

The SSC supports the efforts by the National Marine Fisheries Service, Northwest and Southwest Fisheries Science Centers and the EFHRC to gather new and updated information or data in support of the groundfish EFH review process. The SSC recommends the EFHRC also request research results on the impacts of fishing gears on groundfish EFH.

Salmon Management

G.3 2011 Methodology Review - Preliminary Topic Selection

The Scientific and Statistical Committee (SSC) met with the Salmon Technical Team (STT) and Mr. Chuck Tracy to discuss possible methodology review topics for 2011. The following items were identified for potential SSC review this fall. The lead entity for each work product is identified at the end of the item.

- 1) A multi-year review of preseason and postseason Council North of Falcon ocean mark-selective fisheries for coho salmon – Model Evaluation Workgroup.

- 2) Proposed methods for bias correction and possible effects on coho Fishery Regulation Assessment Model (FRAM) estimates of total mortality for unmarked stocks - Model Evaluation Workgroup.
- 3) Forecast methodology for Lower Columbia River (LCR) tule fall Chinook – Tule Chinook Workgroup.
- 4) Abundance-based management options for LCR tule fall Chinook – Tule Chinook Workgroup.
- 5) Revisions to Amendment 13 matrix control rules for Oregon coastal natural (OCN) coho stocks – Oregon Department of Fish and Wildlife.

The SSC requires proper documentation and ample review time to make efficient use of the SSC Salmon Subcommittee’s time. Materials for review should be submitted at least two weeks prior to the scheduled review. Agencies should be responsible for ensuring that materials submitted to the SSC are technically sound, comprehensive, clearly documented, and identified by author.

Groundfish Management, continued

I.2 Proposed Process and Schedule for Completing the 2013-2014 Groundfish Biennial Fishery Specifications and Management Measures

The Scientific and Statistical Committee (SSC) discussed the schedule and process for the 2013-2014 groundfish biennial specifications and management measures, as proposed by the Process Improvement Committee (PIC) (Agenda Items I.2.b.). The PIC developed a timetable for tasks that should be accomplished to achieve implementation of 2013-2014 harvest specifications and management measures on January 1, 2013.

Mr. John Devore, Ms. Kelly Ames and Dr. Kit Dahl were present to discuss SSC science tasks related to the harvest specification process and their deadlines. In September 2011, the SSC will need to determine overfishing limits (OFLs) and scientific uncertainty (σ) associated with those OFLs, provide consideration for the probability of overfishing (P^*) decision, as well as adopt assessments (except for mop-up assessments) and economic impact assessment models. In November 2011, the SSC will need to adopt mop-up assessment and rebuilding analyses.

Harvest Specification and Stock Assessment Considerations

For the 2013-2014 management cycle, the SSC recommends using the current value of σ derived from meta-analysis of groundfish and CPS species. This value will be updated for the 2015-2016 cycle. The SSC encourages further exploration of methods for estimating scientific uncertainty associated with OFLs, which could be done for individual stocks during the current assessment cycle, as well as more comprehensive analysis during off years.

The SSC discussed what information could be provided to the Council to assist with P^* decision-making. The choice of P^* could reflect both the vulnerability of the species and socioeconomic factors associated with the fishery. The choice of P^* results in different types and levels of impacts over time, and the SSC is willing to provide to the Council qualitative examples of the trade-offs associated with different values of P^* .

The SSC also discussed the need to re-structure groundfish stock complexes. The GMT identified a specific concern with the “Other species” and “Other rockfish” complexes as they

include both high and low vulnerability species. The SSC agrees with the GMT that these complexes should be re-examined based on productivity-susceptibility analysis as well as information on species co-occurrence. The SSC will review any analyses that restructure stock complexes during September 2011.

Finally, the SSC discussed the Northwest Fisheries Science Center (NWFSC) proposal to conduct several “enhanced” data-poor assessments this summer. The review of assessment methods for data-poor stocks will be held on April 25-29, 2011, and the report from this review will be considered by the SSC at the June Council meeting. The viability of the NWFSC proposal depends on an “enhanced” data-poor method being endorsed by the review panel and the SSC. The SSC discussed two approaches to select species for “trial” data-poor assessments. One approach is to select stocks that have not been previously assessed, while the other is to select stocks for which full assessments already exist. The SSC will provide further evaluation of both approaches at the June Council meeting. The SSC would be prepared to review these “enhanced” data-poor assessments, potentially at a meeting of the Groundfish Subcommittee of the SSC prior to the September Council meeting, and would provide terms of reference for their review at the June Council meeting.

Socioeconomic Considerations

The SSC proposes a review of data and methodologies that will be used to evaluate socioeconomic effects of management alternatives in the 2013-14 groundfish harvest specification process. There are a large number of analyses, data and inputs that could potentially be reviewed by the SSC this year. The SSC has attempted to compile a comprehensive list of these analyses and information, provided below. Given time and resource constraints, the SSC has made a recommendation for each, regarding whether a review by the SSC should be completed this year.

- Commercial and recreational fishery harvest projections developed by the Groundfish Management Team (GMT) and Council staff are important inputs into the Council process and almost all of the socioeconomic analyses. These models are:
 - California Recreational Model
 - Oregon Recreational Model
 - Washington Recreational Model
 - Non-nearshore Fixed Gear Model
 - Limited Entry Fixed Gear Sablefish Daily Trip Limit Model north of 36 N. latitude
 - Open Access DTL Sablefish north and south of 36 N. latitude
 - Limited Entry Fixed Gear Sablefish Daily Trip Limit Model South of 36 N. Latitude
 - Commercial Nearshore Fixed Gear Model
 - Commercial harvest projections to port regions
 - Trawl rationalization model (will be developed this year by the GMT).

Recommendation: The SSC would review the three recreational harvest and effort projection models (California, Oregon and Washington), the commercial geographic harvest allocation model, and the new trawl rationalization model. These models have not been previously reviewed by the SSC. The review would require the availability of documentation that fully specifies the methodologies and the data used for both projection and allocation. The Economics Subcommittee would also expect to see the

results of model validation runs (such as applications to past years) as well as measures of uncertainty in the predictions.

- GMT harvest and effort projections are used by the NWFSC to project recreational angler expenditures and commercial harvesting cost, revenue and operating profit. The recreational angler expenditures and harvesting costs are also key inputs into IO-PAC. Recommendation: The SSC recommends that it is not necessary to review this data update for the 2013-2014 harvest specifications, given that the data collection was reviewed previously.
- IO-PAC – a model developed by the NWFSC using the software package IMPLAN – was reviewed by reviewers from the Center for Independent Experts (CIE) and the SSC in 2009. The model was used in the 2011-12 groundfish harvest specification process to estimate regional economic impacts (i.e., impacts on fishery region-level employment and income) of management alternatives that affect commercial harvesting and processing sectors. The data for the commercial impacts is expected to be updated in two ways. First, the vessel cost of operations data will rely on the NWFSC’s most recent 2008 data, rather than the 2004 data used previously. Second, the base IMPLAN data will also be updated from 2004 to 2008. IO-PAC capability is also currently being expanded to include regional economic impacts as they relate to the charter vessel and recreational angler sectors. The ability to estimate charter vessel impacts is due to the availability of new charter vessel survey data and creation of a charter sector module within IO-PAC that closely follows the general methodology of the existing module for the commercial harvesting sector (as reviewed by the CIE and SSC in 2009). The ability to estimate recreational angler impacts is due to the availability of new angler expenditure data and does not require any changes to IO-PAC, as the IMPLAN software that forms the basis of IO-PAC already allows for the estimation of recreational impacts. Recommendation: Because the expanded capabilities of IO-PAC reflect the availability of new data rather than fundamental changes to the model, review of IO-PAC is best characterized as an update. The SSC recommends that it is not necessary to review the IO-PAC model for the 2013-2014 harvest specification process, given that it is an update and it was reviewed in 2009.
- In addition to considering regional economic impacts on fishing communities (as derived from IO-PAC), the 2011-2012 harvest specification EIS also includes a description of fishing communities in terms of community vulnerability – measured in terms of community engagement in fishing, dependence on groundfish fisheries, and socioeconomic resilience. Recommendation: The lack of guidance or even common understanding of concepts such as community vulnerability and resilience, how to measure them, and how to predict the effects of management alternatives on communities would make it difficult for the Economics Subcommittee to consider community effects according to any commonly accepted standard. Nevertheless, the SSC would like to include community effects in the review, with a primary focus being the extent to which the community indicators used can be directly related to Council actions.

All model reviews would be conducted by members of the Economics and Groundfish Subcommittees at a two-day meeting immediately preceding the September 2011 SSC meeting. The timing of the review is intended to be congruent with the expected timing of SSC recommendations regarding assessment models and rebuilding analyses for the 2013-14 harvest

specifications. Complete documentation of data and methods that would be reviewed would need to be received at least two weeks in advance of the meeting. Terms of reference for the review would be provided by the SSC at the June Council meeting.

The SSC also recognizes the need for further guidance on socioeconomic analysis beyond the 2013-2014 groundfish harvest specifications. The need is particularly great for evaluation of community effects. To this end, the Economics Subcommittee would like to prepare a white paper that provides such guidance for socioeconomic analysis for all Fishery Management Plans (FMPs). Topics that would be addressed in the white paper include:

- Community impact assessment: The Economics Subcommittee will work with Council staff to get a clearer idea of the ways in which community analysis are or could be useful to the Council. The white paper would include a review of the literature on community effects and how such effects (e.g., resilience, vulnerability) are commonly characterized, provide examples of how community effects have been evaluated by various Regional Fishery Management Councils, consider the feasibility of devising measurable and replicable methods for predicting community effects associated with Council actions, and identify types of data needed to apply such methods.
- Regional economic impacts: The Council relies on IO-PAC to assess regional economic impacts for the commercial groundfish fishery. IO-PAC capabilities are currently being expanded to include charter and recreational groundfish fisheries and will eventually be expanded to cover all fisheries associated with the Council's four FMPs. Among other things, the white paper would provide guidance regarding what constitutes an update versus a major change to IO-PAC and the level of review needed for each.
- Net economic value: Net economic value is measured as the difference between economic benefits and costs. The white paper would specify procedures for reviewing the specialized models and data used to assess benefits and costs of management alternatives – as well as guidance regarding what constitutes an update versus a major change to such models and data.

In preparing the community impact section of the white paper, the Economics Subcommittee may find it helpful to consult intermittently with experts in areas such as economic geography, sociology, and port management. Work on the white paper would begin in September 2011 (after the socioeconomic review for the groundfish harvest specifications) and be completed by March 2012.

Salmon Management, continued

G.5 Salmon Essential Fish Habitat Review Final Report

Mr. Kerry Griffin provided the Scientific and Statistical Committee (SSC) with an overview of the final report on the 5 year review of Essential Fish Habitat (EFH). The SSC reviewed an earlier version of this document in September 2010. The Oversight Panel has addressed most of the SSC concerns: The five potential habitat areas of particular concern (HAPCs) are now each evaluated in terms of the four defining criteria. Threats which have been added to the list are fully described and documented.

The report highlights several areas of the existing EFH designation that need to be updated:

- New information on the range of salmon is not consistent with current designations.
- Some habitat units have been redefined, and EFH designations in these areas need to be reexamined.
- The status of some dams and other impassable barriers has changed, or errors have been identified.

The SSC notes a few shortcomings of the Final Report:

- In the current document there is an imbalance in the level of detail for fishery-related and non-fishery-related threats. Descriptions of fishery-related threats should be more fully developed.
- Criteria for designation of EFH above impassable barriers needs to be clarified.

The Final Report is a thorough and detailed document that highlights a number of discrepancies in the current EFH designation, provides descriptions of potential HAPCs, expands and documents the list of threats, and identifies (but does not solve) the problem of defining EFH above impassable barriers. It could serve as a solid basis for the process of implementing a new FMP amendment.

SSC Administrative Matters, SSC discussion not reported to the Council

A.7 SSC Review of Assessments for Species Under International Agreements

The Council has domestic management responsibility for several species which are under international agreements, including Pacific halibut and a variety of HMS species. Pacific hake will become one of these species once the Treaty is fully implemented. The Council has, in the past, requested SSC review of the assessments for some of these species. However, to date, the review process has been somewhat unsatisfactory because the SSC has only been able to review assessments after they have been conducted and there is no formal process for SSC comments to be taken into account.

The SSC notes that there are two potential ways for it to review assessments for species under international management. The current way is for the SSC to review completed assessments at the request of the Council. However, there are several weaknesses of this approach including: (a) the assessment author is usually not available to answer SSC questions, (b) the publicly-available reports tend to be summaries rather than at the level of detail common in the assessments typically available to the Council, (c) there is no opportunity for additional analyses to be conducted as is part of normal STAR-type assessment reviews, and (d) even if flaws are found, there is no mechanism to ensure that they are corrected prior to the assessments being used for management decision making. A further potential problem with this way of reviewing assessments is that each country involved in the international body concerned could, in principle, conduct its own independent review of the assessment resulting in many, probably conflicting, reviews.

The second way of conducting these reviews would be to assign an SSC member to be a formal participant in the assessment process (the relevant working group for HMS species). This would allow more direct involvement in the assessment and hence a greater ability to ensure the

assessment is conducted as best as possible, but could involve a substantial, and potentially costly, commitment because assessments of, for example, HMS species can occur through a sequence of 10-14 day meetings over multiple years. This is, however, not how the SSC normally reviews material.

There are roles for the SSC other than reviewing stock assessments. In particular, the SSC could review definitions for the biological reference points on which status determination would be based.

The SSC recommends that Council Staff co-ordinate more closely with SWFSC scientists working on HMS assessments because this would allow key issues which warrant SSC review to be identified as early as is feasible. Early identification and review of issues by the SSC will maximize the chance that SSC comments will be taken into account in assessment rather than being relegated to recommendations for future work. Finally, continued involvement of Council Staff in the management meetings will also allow early identification of issues which could benefit from SSC review.

Adjournment: The SSC adjourned at approximately 6:00 p.m., Saturday, April 9, 2011.

SSC Subcommittee Assignments, April 2011

Salmon	Groundfish	CPS	HMS	Economic	Ecosystem-Based Management
Robert Conrad	Vidar Westpestad	André Punt	Ray Conser	Cindy Thomson	Selina Heppell
Loo Botsford	Loo Botsford	Ray Conser	Robert Conrad	Vlada Gertseva	Ray Conser
Carlos Garza	Ray Conser	Carlos Garza	Selina Heppell	Todd Lee	Martin Dorn
Owen Hamel	Martin Dorn	Owen Hamel	Tom Jagielo	André Punt	Vlada Gertseva
Meisha Key	Vlada Gertseva	Selina Heppell	André Punt		Pete Lawson
Pete Lawson	Owen Hamel	Tom Jagielo	Vidar Westpestad		Todd Lee
Charlie Petrosky	Tom Jagielo	Meisha Key			André Punt
	André Punt				Cindy Thomson
	Theresa Tsou				Theresa Tsou

Bold denotes Subcommittee Chairperson

2011 Review Panels

As of 03/28/2011	Dates	Location	Species 1 (STAT Lead)	Species 2 (STAT Lead)	SSC Reprs.	Additional Reviewers
<u>CPS Panel 1</u>	Feb 2-5	La Jolla	Methodology Review	N/A	Punt – Chair Dorn – 2nd	CIE1: Gerlotto, CIE 2: Rune Godø, CIE 3: Simmonds
Whiting	Feb. 7-11	Seattle, WA	Pacific hake / Whiting	N/A	Jagielo	CIE 1: Jiao CIE 2: Wheeler CIE3: Cardinale
GF Panel 1	Apr 25-29/	SWFSC Santa Cruz Lab	Data Poor Methods / Examples	N/A	Dorn – Chair Punt – 2nd	CIE 1: Stokes CIE 2: Hernan Roa-Ureta Add.: Berkson
<u>CPS Panel 2</u>	May 2-6	SWFSC La Jolla	Pacific Mackerel (Crone)	N/A	Punt – Chair Key – 2nd	TBD
Updates	June 6	June Council Meeting Spokane, WA	bocaccio (Field), canary (Wallace), cowcod (Dick, data report only),	darkblotched (Stephens), yelloweye (Taylor)	SSC GF Sub.	TBD
GF Panel 2	June 20-24	Hotel Deca Seattle	Pacific ocean perch (Hamel)	Petrале sole (Haltuch)	Conser	CIE 1: Stokes CIE 2: TBD Add.: Ianelli
GF Panel 3	July 11-15	Hotel Deca Seattle	Widow rockfish (He)	Spiny dogfish (Gertseva)	Tsou	CIE 1: Stokes CIE 2: TBD
GF Panel 4	July 25-29	NWFSC Newport Research Station	Sablefish (Stewart)	Dover sole (Hicks)	Wespestad	CIE 1: Stokes CIE 2: TBD
GF Panel 5	August 8-12	SWFSC Santa Cruz Lab	Greenspotted rockfish (Dick)	Blackgill rockfish (Field)	Gertseva	CIE 1: Stokes CIE 2: TBD
Mop-up	Sept. 26-30	Seattle, WA	Assigned, as needed		GF Sub.	
<u>CPS Panel 3</u>	October 4-7	SWFSC La Jolla	Pacific Sardine (Hill)	N/A	Punt – Chair Conser – 2nd	TBD

DRAFT Tentative Council and SSC Meeting Dates for 2011

Council Meeting Dates	Location	Likely SSC Mtg Dates	Major Topics
March 5-10, 2011 Advisory Bodies may begin Thu, March 3 Council Session begins Sat, March 5	Hilton Vancouver Washington 301 W. 6th Street Vancouver, WA 98660 Phone: 360-993-4500	o Day Session Fri, March 4 – Sat, March 5	Pacific Hake Assessment Salmon Review/Pre I Salmon EFH Final SFCH Overfishing Report
April 9-14, 2011 Advisory Bodies may begin Thu, April 7 Council Session begins Sat, April 9	San Mateo Marriott 1770 South Amphlett Boulevard San Mateo, CA 94402 Phone: 650-653-6000	Two Day Session Fri, April 8 – Sat, April 9	Final CPS EFPs CPS Method. Rev.
June 8-13, 2011 Advisory Bodies may begin Tue, June 7 Council Session begins Wed, June 8	DoubleTree Hotel Spokane City Center 322 N. Spokane Falls Court Spokane, WA 99201 Phone: 509-455-9600	GF – Sub Monday June 6 Three Day SSC Session Tues, June 7 – Thurs, June 9	GF Assessment Review P. Mackerel Assessment
September 14-19, 2011 Advisory Bodies may begin Tue, Sept 13 Council Session begins Wed, Sept 14	San Mateo Marriott 1770 South Amphlett Boulevard San Mateo, CA 94402 Phone: 650-653-6000	Three Day SSC Session Tues, Sept 13 – Thurs, Sept 15	GF Assessment Review GF Econ Model Review GF Fishery Model Review OFL/ABC Recs.
November 2-7, 2011 Advisory Bodies may begin Tue, Nov 1 Council Session begins Wed, Nov 2	Hilton Orange County/Costa Mesa 3050 Bristol Street Costa Mesa, CA 92626 Phone: 714-540-7000	Three Day SSC Session Tues, Nov 1 – Thurs, Nov 3	GF Assessment Review Final Salmon Method. Rev Pacific Sardine Assessment

SSC Meeting Dates and Durations are tentative and are subject to change in response to Council meeting dates and agendas, workload, etc.