MINUTES
Scientific and Statistical Committee

Pacific Fishery Management Council
San Mateo Marriott
Inspire 1 Room
1770 South Amphlett Boulevard
San Mateo, CA 94402

June 20-21, 2012

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

The meeting was called to order at 8 a.m. on Wednesday, June 20, 2012. Council Executive Director, Dr. Donald McIsaac briefed the SSC on priority agenda items.

Members in Attendance

Dr. Louis Botsford, University of California, Davis, CA
Dr. Ramon Conser, National Marine Fisheries Service, La Jolla, CA
Mr. Robert Conrad, Northwest Indian Fisheries Commission, Olympia, WA
Dr. Martin Dorn, National Marine Fisheries Service, Seattle, WA
Dr. Carlos Garza, National Marine Fisheries Service, Santa Cruz, CA
Dr. Vladlena Gertseva, National Marine Fisheries Service, Seattle, WA
Dr. Owen Hamel, SSC Chair, National Marine Fisheries Service, Seattle, WA
Dr. Daniel Huppert, University of Washington, Seattle, WA
Ms. Meisha Key, SSC Vice-Chair, California Department of Fish and Game, Santa Cruz, CA
Dr. Todd Lee, National Marine Fisheries Service, Seattle, WA
Dr. David Sampson, Oregon Department of Fish and Wildlife, Newport, OR
Ms. Cindy Thomson, National Marine Fisheries Service, Santa Cruz, CA
Dr. Tien-Shui Tsou, Washington Department of Fish and Wildlife, Olympia, WA

Members Absent

Dr. Selina Heppell, Oregon State University, Corvallis, OR
Dr. Peter Lawson, National Marine Fisheries Service, Newport, OR
Dr. Charles Petrosky, Idaho Department of Fish and Game, Boise, ID
Dr. André Punt, University of Washington, Seattle, WA

SSC Recusals for this Meeting.		
SSC Member	**Issue**	**Reason**
None		.

SSC members of External Review Panels for items considered at this meeting. *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.*	
SSC Member	**External Panel Membership**
None	

Scientific and Statistical Committee Comments to the Council

The following is a compilation of June 2012 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*).

Groundfish Management

D.2 Barotrauma Workshop Report and Potential Use of Recompression Catch -and-Release Survival Estimates

The Scientific and Statistical Committee (SSC) discussed the potential for survival rate credits from the use of recompression methods for reducing the catch-and-release mortality of recreationally caught rockfish, in the context of the recent workshop on barotrauma held in Portland (Agenda Item D.2.a, Attachment 1). The discussion also included the letter to the RecFIN Technical Committee by the California Department of Fish and Game (CDFG) regarding CDFG's intention to use a modified method for calculating release mortality of cowcod caught by anglers on Commercial Passenger Fishing Vessels (CPFV) and released using devices that rapidly descend fish to depth to aid their recompression and survival (Agenda Item D.2.a, Supplemental Attachment 4). Dr. Chris Lowe (California State University, Long Beach) presented information on barotrauma and recompression and Mr. John Budrick (Groundfish Management Team [GMT]) answered questions regarding CDFG plans to apply survival credits for the release of cowcod caught in the CPFV fishery.

There is compelling evidence that rockfish released at depth for recompression have increased survival relative to those released at the surface. Encouraging anglers to use recompression methods could increase the survival of released rockfish. However, available studies indicate that a wide variety of factors influence rockfish catch-and-release survival rates, including the species, the depth of capture, the differential in temperature between the bottom and the surface, the time on deck, and the degree of rough handling. Further, most studies only measured short-term survival (days rather than weeks or months) and the fish were released using very controlled methods. Measuring the effects of barotrauma for fish released under controlled methods is

challenging, but relatively straightforward to accomplish. How to apply survival rates to fish released by anglers, given the diversity of recompression methods they may use, presents an additional challenge for which there is little current information.

Based on data for fish released at the surface, the GMT currently uses depth-dependent mortality rates to estimate the overall catch-and-release mortality of rockfish by species or guild. The available studies on the mortality of rockfish released at depth using recompression devices may contain sufficient information to provide a basis for constructing an additional table of survival estimates that the GMT could apply to rockfish released and returned to depth using recompression devices. However, it is clear that the information available at present is inadequate for some species.

The SSC notes that the Jarvis and Lowe (2008) study, cited by the CDFG letter as providing the basis for the 22 percent surface mortality rate (78 percent survival rate), did not include any observations of cowcod. Nor did the CDFG letter provide justification for using information from other species. Consequently, it is premature at this time to assume that there is an adequate scientific basis to support the depth-dependent mortality rates for cowcod presented in the CDFG letter.

The SSC emphasizes that proposals to the Council for survival credits include a clear and detailed description of the scientific basis supporting all aspects of the survival credit calculations. The SSC could review and recommend a proposal for one or two particular species as early as the September Council meeting provided that it included adequate documentation of the scientific basis and justification for the data and assumptions underlying the survival credit calculations.

In the long-term, the SSC recommends that the Council sponsor a methodology review that would consider the available information on rockfish catch-and-release survival, identify gaps in the information with regard to species effects and other important factors that may not have been adequately covered, determine how available information could be applied to specific fisheries, and develop recommendations for the construction of estimates of rockfish release-survival that could be used in the Council management process. This workshop could occur during the next biennial management cycle.

Groundfish Management, continued

D.3 Stock Assessment Planning

The Scientific and Statistical Committee (SSC) discussed three topics related to stock assessment planning for 2013: the "refreshed" bocaccio analysis, the draft Terms of Reference (TOR) for stock assessment, rebuilding analysis, and methodology reviews, and the proposed list of stocks to be assessed in 2013.

The "refreshed" bocaccio analysis incorporated 2011 length composition data from surveys and recreational fisheries to evaluate the size of 2009 and 2010 year-classes, which were estimated to be relatively strong in the 2011 bocaccio update, but were highly uncertain. The refreshed analysis should not be considered a new update, and should not be the basis for setting the catch limits in

2013-14. The 2011 length information is generally consistent with the update assessment. The estimate of 2009 year class increased from 3.8 million to 4.6 million recruits, and the estimate of the 2010 year class increased from 3.4 million to 8.8 million recruits in the "refreshed" analysis. Strong recruitment will lead to faster rebuilding, but there is a potential for increased encounter rates in recreational fisheries that should be considered in developing inseason management measures.

The SSC groundfish subcommittee revised the TOR for stock assessment, rebuilding analysis and methodology reviews (Agenda Item D.3.a Attachments 2-4). The revisions reflect discussion during the meeting in December 2011 to review the stock assessment process, and the SSC's meeting with the Groundfish Management Team in April on rebuilding analysis. The TOR for stock assessment and methodology reviews were revised to be applicable to both groundfish and coastal pelagic species, thereby achieving some consolidation of TOR. The SSC plans to further revise the section on data reports before final adoption of the stock assessment TOR. The revisions will clarify that data reports should be used only when new information is unlikely to be informative about changes in stock status, and that only catch data need be included in the report. The SSC proposes changing the term "data report" to "catch report" to better reflect the nature of these reports.

With respect to the list of stocks to be assessed in 2013, the SSC discussed bocaccio, sablefish, and Pacific ocean perch. The SSC agrees it would be appropriate for bocaccio to be an update rather than a full assessment. The assessment model showed the expected response to the new information, and should be able to provide acceptable management advice without extensive modification and review. For sablefish, the SSC notes that there will be more information available in September to help inform the decision of whether a full or update sablefish assessment would be more appropriate. For Pacific ocean perch, the SSC suggests a data report be considered rather than an update, since little new information will be available since the last full assessment in 2011.

Highly Migratory Species (HMS) Management

E.2 International Management Activities and Recommendations

The Scientific and Statistical Committee (SSC) met with the Highly Migratory Species Management Team (HMSMT) and the Highly Migratory Species Advisory Subpanel (HMSAS) to discuss (1) the management framework and (2) limit and target reference points for North Pacific albacore tuna. Dr. Kit Dahl (Pacific Fishery Management Council staff) provided context for the various issues related to this agenda item that were pertinent for SSC consideration. Dr. Suzanne Kohin (Southwest Fisheries Science Center) gave a presentation which summarized the issues on which the HMSMT desired SSC input.

The Northern Committee (NC) of the Western and Central Pacific Fisheries Commission has submitted a schedule for developing a precautionary framework for the management of North Pacific albacore tuna (Agenda Item E.2.a, Attachment 1). The Pacific Fishery Management Council (Council) has the opportunity to provide comments on this schedule prior to the upcoming meeting of the NC in September 2012. The SSC recommends that a Management Strategy Evaluation (MSE) should be an integral part of this proposed framework development process and

the Council could provide valuable input on the evaluation criteria used in the MSE process. For example, evaluation criteria could include maximizing long-term yield or stabilizing annual yields depending upon management goals.

As part of the above process, the NC will develop limit and target reference points for North Pacific albacore tuna. The Council has the opportunity to comment on possible approaches for developing these reference points. The SSC supports the conceptual model being proposed by the NC as it closely aligns with the current stock status determination process used in the Council's Groundfish Fishery Management Plan (FMP). The SSC notes, however, that B_{MSY} was proposed as a potential limit reference point in one of the documents associated with this agenda item (Agenda Item E.2.a, Attachment 2). While B_{MSY} may be an appropriate target reference point, it is not an appropriate limit reference point. If used as a limit reference point, one would expect the stock to be overfished approximately half the time due to assessment and management imprecision when fishing at F_{MSY}.

The SSC concurs with the International Scientific Committee (ISC) Albacore Working Group that spawning potential ratio (SPR) reference points (e.g., $F_{40\%}$, $F_{30\%}$) should be considered as potential F_{MSY} proxies for albacore in any MSE sponsored by the NC.

Finally, the SSC notes that it currently gives only a cursory review to stock assessments conducted by Regional Fishery Management Organizations (RFMOs) for HMS species primarily due to the lack of detail that is presented to the SSC for review. These reviews are not comparable to the in-depth reviews that stock assessments receive during the Stock Assessment Review Panel process conducted by this Council. Therefore, the Council must rely on the rigor of the analysis and review process conducted by the RFMOs for assessing stock status.

Groundfish Management, continued

D.4 Exempted Fishing Permits for the 2013-2014 Fisheries

The Scientific and Statistical Committee (SSC) reviewed the revised the Exempted Fishing Permit (EFP) application "Supporting a spatial analysis of the distribution and size of rebuilding stocks in the Rockfish Conservation Area (RCA) through directed fishing surveys" (Agenda Item D.4.a, Attachment 3). The main goal of the proposed project is to synthesize fishery-dependent and fishery-independent information to generate spatial distribution maps of rebuilding stocks within the RCA, in order to help inform bycatch avoidance and increase fishing opportunity for healthy stocks.

The SSC first reviewed this EFP application at its March 2012 meeting, and suggested a number of issues to be addressed. At this meeting, Ms. Mary Gleason and Dr. Rick Starr presented an overview of a revision that was done in accordance with the SSC comments, and answered further questions regarding the application. The revised application addressed issues identified by the SSC at the March meeting to some degree. The application, however, is still lacking a detailed description of methods to be used for compiling species distribution maps.

The SSC supports an effort to build more information on spatial distribution and habitat association of rebuilding stocks, but is concerned with potential challenges in identifying areas of high,

medium, and low catch rates of rebuilding stocks ("hot," "medium," and "cold" spots, as they were referred to in the application), given temporal variability in species occurrence, though it is less of a concern for yelloweye rockfish and cowcod, the most sedentary species out of those listed in the application. The SSC also suggests using results from camera and hook-and-line surveys (to be conducted as part of the proposed project) to not only "ground truth" information synthesized from different sources, but also to quantitatively evaluate predictive power of the species distribution maps, in order to help evaluate usefulness of the results for the Council management process.

Groundfish Management, continued

D.6 Trawl Rationalization Trailing Actions

The Scientific and Statistical Committee (SSC) discussed the electronic monitoring project being conducted with Pacific whiting vessels by the Pacific States Marine Fisheries Commission (PSMFC). Mr. Jim Seger was available to facilitate the discussion.

At the April 2012 meeting, in the absence of any specific details regarding the project, the SSC suggested general design considerations to allow rigorous comparison of data collected from electronic monitoring with on-board observer data. Information regarding the project available to the SSC at this meeting included (1) Pacific States Marine Fisheries Commission Report on Electronic Monitoring (Agenda Item I.4.b, Supplemental PSMFC Report from the April 2012 Council meeting) – which was available to the Council but not the SSC in April, and (2) Electronic Monitoring Update (Agenda Item D.6.a, Supplemental Attachment 2). Both reports consist of bulleted points that identify administrative features of the project.

In order to review the electronic monitoring project, the SSC needs detailed information regarding project design and how data obtained from the project will be compared with observer data; general guidance regarding this is contained in our April 2012 statement. The SSC also notes that electronic monitoring is more straightforward for whiting vessels than for other sectors of the fleet. Design features for other sectors will need to be tailored to monitoring requirements for those sectors.

D.7 Reconsideration of Initial Catch Shares in the Mothership and Shoreside Pacific Whiting Fisheries

The Scientific and Statistical Committee (SSC) met with Mr. Jim Seger to discuss the reconsideration of initial catch shares in the mothership and shoreside Pacific whiting fisheries. Although most of the information presented in the briefing book deals solely with distributional or policy issues, there are several scientific components the SSC wishes to highlight.

The way the fisheries are actually prosecuted (geographic location of fishing and landings, timing of fishing, and participants) will in the long-term tend not to be affected by who receives the initial allocation of catch shares. Over time, the use of the catch shares will likely migrate through leases or sales to the participants who can put them to their most profitable use. This means that the eventual biological, ecological, and economic performance of the fisheries will be relatively independent of the initial allocation of catch shares. It has been the experience of many catch share

programs that such transitions occur rather quickly, often within the first few years. As a consequence, the initial allocation of quota shares is not an effective tool to direct fishing or processing effort to particular geographic locations.

Furthermore, it is not evident whether, and to what degree, changes in fishing effort between the ports would affect the Pacific whiting resource. The harvest control rule for Pacific whiting is robust to changes in the distribution of effort, thus there is unlikely to be a conservation issue. However, the overall yield from the resource may be affected, and a bioeconomic model would need to be developed to answer this question.

A control date for quota share allocation can be an effective tool to discourage excessive resource expenditures intended exclusively to secure additional quota shares. This applies equally to catcher vessels, at-sea processors, and shoreside processors.

Coastal Pelagic Species (CPS) Management

F.2 Methodology Review Process and Preliminary Topic Selection for 2012

Dr. Paul Crone from the National Marine Fisheries Service (NMFS) Southwest Fisheries Science Center (SWFSC) provided the Scientific and Statistical Committee (SSC) with a review of the 2011 Pacific mackerel assessment results and an overview of the assessment schedule for Pacific mackerel and other coastal pelagic species. The SSC endorses a 2012-2013 overfishing level (OFL) of 44,336 mt and $\sigma = 0.36$, and harvest management measures as recommended by the Coastal Pelagic Species Management Team. The SSC further noted that if the same assessment for Pacific mackerel is to be used for 2013-2014, it would be preferable to consider a population abundance projection before adopting an OFL.

Dr. Crone discussed the need for continuing survey work even when the landings are low, emphasized the need to adjust the assessment schedule to better conform to the landings and indicated that the SWFSC is developing a new adaptive management framework for CPS assessment. Dr. Crone also emphasized that that fishery biological sample sizes for some CPS are not sufficient for ongoing monitoring and evaluation needs. The SSC supports the idea of an adaptive management approach to determining appropriate species for assessment and notes the importance of adequate biological sample sizes to support these future assessments.

Ecosystem-Based Management

H.1 Methodology Review Process and Preliminary Topic Selection for 2012

The Scientific and Statistical Committee (SSC) reviewed the latest version of the Pacific Coast Fishery Ecosystem Plan and the Draft Outline for an Annual State of the California Current Ecosystem (CCE) Report. Mr. Mike Burner outlined the proposed schedule for integration of ecosystem considerations into the Council.

The SSC notes that development of a description of biological, physical, geological, economic and other aspects of the CCE for the Ecosystem Plan is a formidable task and questioned whether it could be accomplished on the current schedule. The current version has missing chapters and the

chapters present are often not adequate descriptions of the CCE. One example is that the material on the effects of increasing ocean temperature, acidification and areas with low dissolved oxygen in the version reviewed in November 2011 is not in the current version (but may have been moved to a chapter not yet included in the draft). A second example is the attribution of a description (on p. 8) of circulation features to a publication by Botsford and Lawrence (who are not physical oceanographers). A third is the description of bird population variability in the CCE that omits mention of the complete reproductive failure of Cassin's auklet in 2005 and the high variability in reproduction of Brandt's cormorant in the Gulf of the Farallons. There are additional examples. These suggest that the Ecosystem Plan Development Team (EPDT) should seek assistance from others with expertise in CCE processes, either through review or requests to write specific sections.

The SSC also recommends that the Draft Outline of the Annual State of the CCE should be reviewed by experts in the various areas. With regard to item IV.c, the trawl-survey referred to is likely the Groundfish Trawl Survey, and if so, the SSC cautions that selectivity and catchability be considered in formulating the Higher Trophic Level Predator Index. The SSC questioned the interpretation of item V.c, the mean trophic level of the catch, in an upwelling system where lower trophic level fish have such high population variability. With regard to item V.d, the SSC questioned how the stressors (e.g., shipping) were related to ecosystem effects. The SSC recommends that Section V be divided into benefits, stressors (including hatcheries and aquaculture releases, sewage and pollutants) and beneficial human interventions (including Marine Protected Areas).

The SSC looks forward to review of more complete, fully referenced and comprehensively reviewed versions of these two documents.

Council Administrative Matters

G.3 Advanced Notice of Proposed Rulemaking for National Standard 1 Guidelines

The Scientific and Statistical Committee (SSC) reviewed the National Marine Fisheries Service advance notice of proposed rulemaking (ANPR) regarding potential revisions to National Standard 1 (NS1) Guidelines (Agenda Item G.3.a, Attachment 1). In particular, the seven ANPR-identified issues delineated in the Situation Summary (Agenda Item G.3) were discussed. The SSC offers specific comments on several of them below, followed by a general comment on the timing of the ANPR.

ANPR Issues 2 and 7. Although perhaps beyond the scope of this exercise, management strategy evaluations could be used to assess the performance of potential multi-year overfishing limits (OFLs) and acceptable biological catches (ABCs) in comparison to yearly management limits. A more immediate need for the Council may be to simply allow the flexibility to establish multi-year ABCs and annual catch limits (ACLs), e.g. for use in the individual trawl quota (ITQ) groundfish fishery.

ANPR Issue 3. The current NS1 guidelines establish clear definitions and linkages among OFL, ABC, ACL, and annual catch target. However, optimum yield – a key concept in earlier NS1 guidelines – now appears to be an afterthought and its linkage with the aforementioned reference points is unclear.

ANPR Issue 5. The SSC does not consider this issue to be pertinent to the Pacific Council process.

The NS1 Guidelines were updated following the most recent reauthorization of the Magnuson-Steven Fishery Conservation and Management Act (MSA) in 2009. The Council completed amending its fishery management plans (FMPs) to meet the new NS1 requirements only in 2011. Some of the resulting modifications to the Council's FMPs were substantial and required considerable scientific support work – both conceptual and practical – to implement the new NS1 guidelines, e.g. the development of new methods for establishing scientific uncertainty buffers between OFLs and ABCs. The SSC cautions that insufficient time has passed to allow an objective evaluation of the effect of these changes, and that it would be premature to further modify any of the scientific concepts inherent in NS1 at this time. Any such changes would be more appropriate to consider during the next reauthorization of the MSA

Adjournment: The SSC adjourned at approximately 5:30 p.m., Thursday, June 21, 2012.

SSC Subcommittee Assignments, June 2012

Salmon	Groundfish	Coastal Pelagic Species	Highly Migratory Species	Economic	Ecosystem-Based Management
Robert Conrad	**Vlada Gertseva**	**André Punt**	**Ray Conser**	**Cindy Thomson**	**Loo Botsford**
Loo Botsford	Loo Botsford	Ray Conser	Robert Conrad	Vlada Gertseva	Ray Conser
Carlos Garza	Ray Conser	Carlos Garza	Selina Heppell	Dan Huppert	Martin Dorn
Owen Hamel	Martin Dorn	Owen Hamel	André Punt	Todd Lee	Vlada Gertseva
Meisha Key	Owen Hamel	Selina Heppell		André Punt	Selina Heppell
Pete Lawson	André Punt	Dan Huppert		David Sampson	Pete Lawson
Charlie Petrosky	David Sampson	Meisha Key			Todd Lee
	Tien-Shui Tsou				André Punt
					Cindy Thomson
					Tien-Shui Tsou

Bold denotes Subcommittee Chairperson

DRAFT Tentative Council and SSC Meeting Dates for 2012

Council Meeting Dates	Location	Likely SSC Mtg Dates	Major Topics
March 2-7, 2012 Advisory Bodies may begin Thu, March 1 Council Session begins Fri, March 2	DoubleTree Hotel Sacramento 2001 Point West Way Sacramento, CA 95815 Phone: 916-929-8855	Two Day Session **Thurs, March 1 – Fri, March 2**	GF Stocks for 2013 Assessments Salmon Review/Pre I
April 1-6, 2012 Advisory Bodies may begin Sat, Mar 31 Council Session begins Sun, Apr 1	Sheraton Seattle Hotel 1400 Sixth Avenue Seattle, WA 98101 Phone: 206-447-5534	One Day Session **Sun, April 1**	Groundfish EFH Salmon Meth. Rev. Topics Final CPS EFP
June 21-26, 2012 Advisory Bodies may begin Wed, June 20 Council Session begins Thurs, June 21	San Mateo Marriott 1770 South Amphlett Boulevard San Mateo, CA 94402 Phone: 650-653-6000	Two Day SSC Session **Wed, June 20 – Thurs, June21**	P. Mackerel OFL Final 2013 GF Stock Assess. Fishery Ecosystem Plan
September 13-18, 2012 Advisory Bodies may begin Wed, Sept 12 Council Session begins Thurs, Sept 13	Doubletree Hotel Boise-Riverside 2900 Chinden Blvd Boise, ID 83714 Phone: 208-343-1871	Two Day SSC Session **Thurs, Sept 13 – Fri. Sept 14**	Salmon Meth. Topic Select GF Stk Assess. Schedule Halibut bycatch in GF
November 2-7, 2012 Advisory Bodies may begin Thurs, Nov 1 Council Session begins Fri, Nov 2	Hilton Orange County/Costa Mesa 3050 Bristol Street Costa Mesa, CA 92626 Phone: 714-540-7000	Two Day SSC Session **Thurs, Nov 1 – Fri, Nov 2**	Salmon Methodology Rev Pacific Sardine Assess. Fishery Ecosystem Plan

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

Proposed Workshops and SSC Subcommittee Meetings for 2012

Tentative – Depended on funding, dates subject to change

☐ – Prep. Work Underway, Scheduled to Occur; ▒ – Status of Supporting Analyses Uncertain, Remains a Priority;

▨ – Setbacks exist, Questionable; ■ – Funding or Prep. Not Avail, likely to be canceled or postponed

	Workshop/Meeting	Potential Dates	Sponsor/ Tentative Location	SSC Reps.	Additional Reviewers	AB Reps.	Council Staff
1	Groundfish/CPS Assessment Process Review (Post Mortem)	COMPLETED Dec. 2011	NWFSC Teleconference/Webinar	2011 STAR Panel Participants.	*2011 CIE participation*		*DeVore Burner*
2	Acoustic ROV survey for Rockfishes	COMPLETED Feb. 15-17	SWFSC La Jolla	Dorn, Punt	*3 CIE*		
3	Groundfish Impact and Economic Model Reviews	Held the day after 2012 SSC sessions	Council Various	GF/Econ Subcms & GMT	None	GMT Reps	Burner, Dahl
4	Clarification on the Conservation Performance of Rebuilding Plans	COMPLETED April 2 SSC	Council Seattle	GF/Econ Subcms & GMT reps.	None	GMT Reps	Burner, DeVore, Dahl, Ames
5	CPS Methodology Review –Canadian Survey Data	COMPLETED May 29-31	Council La Jolla	Chair: Punt Conser	CIE: TBD	CPSAS CPSMT	Griffin
6	Data Poor Species Assessment	COMPLETED June 26-29	NWFSC Seattle	Dorn, Punt, Conser	CIE: TBD	GMT GAP	DeVore
7	Pacific Sardine Updated Assess. Review	Oct. 2-3	Council La Jolla	CPS Subcm. Hamel	CPS Subcm. Members	CPSMT/ CPSAS	Griffin
8	Salmon Methodology Review	October 10-11	Council Portland	Salmon Subcm.	None	STT MEW	Tracy

Proposed Workshops and SSC Subcommittee Meetings for 2012

Tentative – Depended on funding, dates subject to change

Prep. Work Underway, Scheduled to Occur; Status of Supporting Analyses Uncertain, Remains a Priority; Setbacks exist, Questionable; Funding or Prep. Not Avail, likely to be canceled or postponed

	Workshop/Meeting	Potential Dates	Sponsor/ Tentative Location	SSC Reps.	Additional Reviewers	AB Reps.	Council Staff
9	Integrated Ecosystem Assessment – Annual Report and App. to Stock Assessments	Winter 2012	NWFSC/ SWFSC TBD	EBM Subcm.	?	EPDT EAS	Burner
10	Harvest Parameters for Pacific Sardine	Dec 2012?	Council La Jolla?	2-3 TBD	CIE: TBD	CPSMT CPSAS	Griffin Burner
11	Reference Points (Bzero) Workshop II	Summer/Fall	Council Portland	GF Subcm?	CIE/External 1-3:	GMT GAP	DeVore
12	Groundfish Historic Catch Reconstructions	NMFS Rpt. at Council Mtgs – Poss. Workshop in late 2012	Council Meetings - Wrkshp	2-3 TBD	None	GMT GAP	DeVore
13	Assessing Socioeconomic Impacts in Ecosystem-Based Fisheries Management	?	NWFSC Seattle?	Econ and EBM Subcms.?	?	EPDT IEA	Burner
14	Transboundary Groundfish Stocks	Initial Steps in 2012	Council	2?		GMT GAP	DeVore