SUMMARY MINUTES
Scientific and Statistical Committee

Pacific Fishery Management Council
Hilton Vancouver Washington Hotel
Hemlock Room
301 West Sixth Street
Vancouver, Washington 98660
Telephone: 360-993-4500

March 4-5, 2011

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

The meeting was called to order at 8 a.m. on Friday, March 4, 2011. Council Executive Director, Dr. Don McIsaac briefed the SSC on priority agenda items.

Members in Attendance

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

None

SSC Recusals for the March 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.
Dr. Owen Hamel	Pacific Whiting Assessment and Harvest Specification for 2011	SSC Independence, Dr. Hamel was a member of the stock assessment team.
SSC members of External Review Panels for items considered at the March 2011 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**	
Mr. Tom Jagielo	2011 Pacific Whiting Stock Assessment Review Panel Chair	

Scientific and Statistical Committee Comments to the Council

The following is a compilation of March 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.1 2011 Pacific Sardine Exempted Fishing Permits

The Scientific and Statistical Committee (SSC) was briefed by Mr. Kerry Griffin of the Council staff on the West Coast Aerial Sardine Survey Exempted Fishing Permit (EFP) application for 2011. Mr. Tom Jagielo, the sardine survey science advisor, provided additional information. The permit would continue EFP research conducted in 2009 and 2010 (and a non-EFP pilot project in 2008), and the proposed survey follows essentially the same methodology as in previous years. The survey area is reduced in extent from both the 2009 and 2010 surveys, covering the region off the coasts of Washington and Oregon, but not extending into California.

The survey design is a two-stage sampling approach that includes: 1) a photographic aerial survey, and 2) at-sea point set sampling to estimate species composition, school density, and biological characteristics of the fish. In addition to the latitudinal reduction in survey coverage, the 2011 survey design includes a doubling in transect density between Tillamook, Oregon and the U.S./Canadian border, where the vast majority (>95%) of sardine school surface area north of 42º N latitude has been found, increasing the number of transects from 27 to 41, which should reduce the variance of the estimates.

The EFP proposal in the Briefing Book requests 2,100 mt for the survey, while the applicant intends to request another 600 mt to cover the cost of a third plane while also increasing the number of point set samples (from ~56 to ~72). The third plane is needed to increase the number

of aerial transects and to allow more of the visual survey, but not the point sets, to occur earlier, reducing the impact of poor weather by allowing more data to be collected on each good weather day.

The SSC continues to be concerned about the lack of explicit protocols for the spatial distribution of point sets, which are needed to address a 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 EFP proposal should address how adequate length samples will be collected spatially.

A separate survey may occur in Canadian waters during 2011. However this will depend upon Canadian governmental approvals. The addition of a Canadian survey would not only result in more complete stock coverage, but would provide additional information on the selectivity of the U.S. portion of the survey. The results of any Canadian survey in 2011 are, however, unlikely to be included in the 2011 sardine assessment.

There is a strong scientific basis for the EFP proposal. The continuation of the time series and additional year's data on the surface area to biomass relationship will add to the upcoming and future sardine stock assessments. The SSC recommends that the EFP proposal be approved for public review following any changes in the requested set-aside and related additional justification.

Marine Protected Areas

D.1 Olympic Coast National Marine Sanctuary Management Plan Review

The Scientific and Statistic Committee (SSC) notes the intent of the Olympic Coast National Marine Sanctuary (Sanctuary) to participate in the Pacific Fishery Management Council's Essential Fish Habitat process to identify Habitat Areas of Particular Concern in Sanctuary waters. The SSC appreciates the efforts made by the Sanctuary to collaborate and coordinate the Sanctuary Management Plan with the Council and other agencies. The SSC supports the Council's letter prepared by the Habitat Committee commenting on the revised Sanctuary Management Plan.

Ecosystem-Based Management, continued

J.1 Ecosystem-Based Fishery Management Plan

The Scientific and Statistical Committee (SSC) was briefed by Dr. John Field regarding the Ecosystem Plan Development Team's (EPDT) "Discussion Document: Assessing Ecosystem Policy Principles and Bringing Ecosystem Science into the Pacific Fishery Management Council Process" (Agenda Item J.1.c, Attachment 1). The SSC commends the EPDT for its thorough documentation of ecosystem-based management measures and research needs associated with each of the Council's four fishery management plans (FMPs), and for considering needs and challenges common to all FMPs and cross-FMP effects.

Section 4 of the discussion document includes a lengthy list of ecosystem science topics relevant

to each FMP, as well as topics common across FMPs. It would be helpful if these topics were categorized according to whether they can be addressed in the short term or will require intermediate to long-term research to accomplish.

The SSC notes the following regarding ecosystem-based management:

- Procedures need to be established to identify the types of ecosystem information relevant to Council deliberations and when and how such information should be used in the Council process.

- Building upon existing population models already used by the Council is a constructive and practical way to make progress on incorporating ecosystem considerations into management.

- Incorporation of ecosystem considerations into stock assessments should be considered judiciously. While ecosystem data may be informative, integration of such data directly into assessments also introduces additional sources of uncertainty. Ecosystem data should be considered in terms of whether they provide practical benefits such as improving forecasts. Complexity for its own sake does not generally lead to better assessments or better management.

- Incorporation of ecosystem considerations into management is not limited to quantitative models. Information on biophysical variables, predator/prey relationships and the like may provide insights into stock assessment results or potential risks associated with management decisions.

- Some ecosystem variables may not be immediately relevant to management but may provide longer-term insights into the effects of dynamic factors such as climate change on Council-managed species. Processes for identifying and monitoring such information and tracking related research – perhaps as part of the California Current Integrated Ecosystem Assessment (CCIEA) – need to be developed.

- While stock assessment models currently used by the Council will continue to be relevant as the Council moves toward ecosystem-based management, additional tools (e.g., Atlantis, CCIEA) will also need to be evaluated. Atlantis is a complex model that includes many different modules (e.g., species interactions, stock assessment, fleet dynamics). Reviewing models such as Atlantis will require an interdisciplinary team of reviewers, adequate model documentation, and considerable review time. Procedures for reviewing such models need to be established.

- Socioeconomic factors are an important consideration in ecosystem-based management. For instance, the EPDT notes that FMP fisheries can have cumulative effects that are reflected in spatial and temporal patterns of fishing behavior, effort shifts among fisheries, and the viability and resilience of coastal communities. The SSC notes that community 'viability' and 'resilience' are often cited but ill defined concepts. It is important that socioeconomic changes be captured in a broad range of indicators that are measurable.

Orderly processes need to be established for identifying and incorporating relevant ecosystem considerations into management. The SSC proposes a two-day meeting of its Ecosystem-Based Management Subcommittee in mid-April to help address this need, as follows:

- The Subcommittee will draft terms of reference for identifying ecosystem information relevant to stock assessments and incorporating ecosystem considerations into assessments. Among other things, this will help bring clarity to what would be needed to meet the EPDT's proposed schedule for "bringing ecosystem considerations into stock assessment and harvest-setting processes" (Agenda Item J.1.c, Attachment 1, EPDT Discussion Document, Table 4.1).

- The Council has a longstanding practice of reviewing new models before they are considered for use in management. The Subcommittee will examine current terms of reference for methodology reviews to determine their applicability to review of ecosystem tools that are new to the Council, such as Atlantis.

- Information sources such as the CCIEA provide extensive technical information regarding the California Current Ecosystem. The Subcommittee will discuss the CCIEA in terms of its content and how that content can be organized in ways that enhance its utility to the Council. This is intended to complement efforts initiated by the EPDT to "work with the Science Centers to select a pilot set of species, spread among the four FMPs and of potential interest to the Council" (Agenda Item J.1.c, Attachment 1, EPDT Discussion Document, p. 17).

Council Administrative Matters

K.4 Future Council Meeting Agenda and Workload Planning

Groundfish Workload Planning

Mr. John DeVore briefed the Scientific and Statistical Committee (SSC) regarding the Council's Process Improvement Committee (PIC) for the groundfish biennial specification process. The SSC will make recommendations to the Council about the PIC proposals at the April Council meeting. In general, SSC review and input on science is desired by September 2011. The SSC would like to schedule a review of the Northwest Center's IO-PAC model that is used to evaluate economic impacts of management alternatives. The SSC recommends an initial outside expert review (i.e. a desk-review) to verify adequate documentation and develop recommendations for a more in-depth review by the SSC's Economics Subcommittee. The outside desk-review would likely need to occur in August with the Economics Subcommittee review occurring between then and the September Council meeting.

The SSC discussed whether to update sigma (σ) using the current round of stock assessments. The SSC recommends that σ not be modified this year because there will be limited new information about σ from the assessments conducted this year. This will allow for more stability in the system, address workload concerns, and allow acceptable biological catches to be calculated for each assessment as it is finalized rather than waiting until all of the assessments are completed. After the completion of this assessment cycle, σ will be re-examined to

determine if any changes should be made for the next cycle.

Coastal Pelagic Species (CPS) Workload Planning

CPS Methodology Review

To be able to clearly convey to the CPS Stock Assessment Teams how acoustic-trawl data should be treated in the 2011 CPS assessments, the SSC sees a need to review the results of the February 2011 CPS methodology review panel during the April Council meeting.

Pacific Sardine Stock Assessment Review (STAR) Panel

The current tentative dates of the Pacific sardine CPS STAR Panel are an issue for the proposed 2011 aerial survey because it leaves very little time for the finalization of data collection and analysis. The current dates of the sardine STAR Panel also conflict with the end of the September Council meeting. Moving this STAR Panel into the first week of October would provide more time to complete the 2011 aerial survey work, but will limit the time available to complete and review the post-STAR Panel draft of the assessment. There is a possibility that the STAR Panel report and post-STAR Panel draft will not be available in time for the November Council meeting Briefing Book. However, the SSC expects that an adequate review can be conducted under this schedule and recommends that the Pacific sardine STAR Panel occur from October 4-7, 2011.

Salmon Management

G.1 2010 Fisheries & 2011 Stock Abundance Estimates

2010 Ocean Salmon Fisheries

Dr. Robert Kope presented the results of 2010 ocean salmon fisheries and pointed out that observed abundance, as evidenced by spawning escapement, was relatively close to the forecasts, although catch was substantially lower than predicted for all fisheries and for both Chinook and coho salmon.

The Scientific and Statistical Committee (SSC) noted that non-retention mortality for Chinook greatly exceeded the forecast value for inside Puget Sound fisheries (Table I.8 in Review of 2010 Fisheries). The abundance of sublegal Chinook in these areas was much higher than expected for the last two years.

2011 Stock Abundance Forecasts

Dr. Kope also presented the stock abundance predictions for 2011. The increase reported in 2011 for Oregon coast natural area is a result of new model methodology and not a projected increase in abundance.

The SSC endorses the 2011 forecasts in Preseason Report I as the best available science for use in 2011 management.

There was one note of caution shared by the SSC and Salmon Technical Team (STT). The 2011 forecast value for the Sacramento Index (SI) is more than three times that for 2010. The STT noted that the forecasts for both 2009 and 2010 were substantially greater than observed

abundances and that this is likely an upward bias in the SI forecast due to the increasing strength of successive, recent cohorts. The SSC wants to underscore the importance of this phenomenon, as this condition continues in 2011, and recommend that this likely bias be considered in the 2011 season setting process.

The SSC discussed whether the bias can be corrected using the relationship between pre- and post-season estimates for the last two years. STT members stated that such an adjustment did not increase accuracy when applied retrospectively.

Salmon Management, continued

G.2 Stocks Not Meeting Conservation Objectives

Dr. Robert Kope briefed the Scientific and Statistical Committee on salmon stocks currently not meeting conservation objectives. No stocks are currently overfished or triggering an overfishing concern with the exception of Sacramento River Fall Chinook (SRFC). SRFC escapements were below the minimum of 122,000 in 2007, 2008, and 2009. In 2010, escapement was 125,353 hatchery and natural fish. Current status depends on the criterion adopted for ending the overfishing concern. The Salmon Technical Team recommends using the preferred criterion proposed for Amendment 16: a three year geometric mean escapement exceeding 122,000 (S_{MSY}). Using this measure, the overfishing concern would be ended with an escapement of 354,412 in 2011.

Salmon Management, continued

G.3 Sacramento Fall Chinook Overfishing Assessment

The Scientific and Statistical Committee (SSC) reviewed the Salmon Technical Team (STT) Supplemental Report "Assessment of Factors Affecting Escapement Shortfalls of Sacramento River Fall Chinook Salmon in 2007-2009" (Agenda Item G.3.b). Dr. Robert Kope was present to summarize the report and answer questions. The STT document was largely based on the National Oceanic and Atmospheric Administration (NOAA) Technical Memorandum "*What Caused the Sacramento River Fall Chinook Stock Collapse?*" which was reviewed and commented on by the SSC at the April 2009 Pacific Fishery Management Council (Council) meeting. The NOAA report was focused on the 2004 and 2005 brood years, while the STT report included the 2006 brood year.

The STT report addresses one of the two issues identified by the SSC in its statement on the NOAA Technical Memorandum in April 2009 (April 2009 Agenda Item H.2.c, Supplemental SSC Report). Specifically, breeding success of Cassin's Auklet in additional years is presented in the STT report. There was no further analysis or data presented which addressed the second issue identified by the SSC, namely an examination of trends in annual catchability of out-migrating juvenile Chinook salmon for the Chipps Island seine sampling program.

Because the STT report focuses on the response of only three brood years, the SSC is concerned that the report's conclusions may not be robust. This same concern was expressed regarding the NOAA Technical Memorandum in April 2009. Analyses in both reports would have been strengthened by examining a longer time series of data beyond those years adjacent to the brood years in question.

The SSC generally supports the supplemental STT report conclusions that ocean conditions were an important proximal factor contributing to the poor performance of the 2004, 2005, and 2006 brood years of Sacramento River fall Chinook (SRFC). However, because a high proportion of the stock is composed of hatchery fish that are released in San Francisco Bay and are not exposed to the freshwater environment, ocean conditions will almost by default be a major influence on overall brood survival. However, the SSC stresses that there is ample evidence of problems in the freshwater environment which affect survival of fish that migrate through the system.

The STT applied the conservation objectives proposed for SRFC in Amendment 16 to the Salmon Fishery Management Plan. Based on the three-year geometric mean escapement the SRFC stock would never have been classified as overfished using a trigger point of 0.5 x S_{MSY}, despite the lowest escapements on record. Current data collection programs, including the collection of age composition data and constant fractional marking, should provide new information that could be used in the future to re-visit S_{MSY} and F_{MSY} for this stock. The SSC supports the continuation of these important data collection efforts.

Groundfish Management

H.3 Pacific Whiting Assessment and Harvest Specification for 2011

The Scientific and Statistical Committee (SSC) was briefed on the hake assessment conducted using the Stock Synthesis (SS) model by Dr. Ian Stewart and the TINSS model by Dr. Robyn Forrest. Mr. Tom Jagielo presented the report of the Stock Assessment Review (STAR) Panel. There was increased collaboration between the Canadian and U.S. members of the Joint Technical Working Team (Team) prior to this year's assessment, and both models used a common data set. This data set was checked and revised for the 2011 assessment. A major difference between the data sets on which the 2010 and 2011 assessments were based was that the acoustic survey data prior to 1995 were not included in the 2011 assessment owing to limited spatial and bathymetric coverage. The acoustic data from 1995 to 2009 were comprehensively re-analyzed, and account was taken of the impact of the presence of Humboldt squid on the results of the 2009 survey.

The SSC commends the Team for the analyses undertaken and the level of collaboration. This made the process of reviewing the two models more straightforward than was the case in 2010 when the two models were based on vastly different assumptions and data sets. The SSC noted that several differences between two models remain. However, there is no compelling reason to prefer one model over the other. As such, the SSC agrees that the outcome of two models from the STAR Panel represents best available science, and that management decisions should be based on the combined results of both models.

The SSC was informed that a minor error was discovered in the specification of the TINSS model after the STAR Panel. The differences in results between the corrected version of the model and those in the Draft Stock Assessment (Supplemental Attachment 2) are small, and the SSC recommends that the corrected model be used for decision making. The assessment report should be updated with the results for the corrected model before the Stock Assessment and Fishery Evaluation (SAFE) report is published. The numbers in this statement are based on the outcomes of the corrected model.

The SSC notes that the results from the 2011 assessment differ from those of 2010 assessment. There are a number of reasons for this, including a reformulation of the SS model, correction of errors to the implementation of the TINSS model, and changes to data streams. The inclusion of the 2010 fishery age data had a particularly large impact on the estimates of abundance for recent years.

Pacific hake is an exempt species under the U.S.-Canada hake treaty. As such, although an overfishing level (OFL) needs to be set, there is no requirement for the SSC to recommend an acceptable biological catch (ABC). The SSC agreed to base the OFL for Pacific hake on pooling the results from the SS and the corrected TINSS models under the assumption that these two models are equally likely. The resulting OFL from this approach is 973,700 mt and the SSC endorses this value. There is a 75 percent probability that OFL lies between 530,000 mt and 1,726,000 mt. The full results of this pooling process should be provided by the Team to the Groundfish Management Team because it reflects a distribution for the OFL, and hence captures the uncertainty due to model choice and the uncertainty due to the fit of the model to the data. This information, in addition to the decision tables for each model, could be used by the Council if it wishes to compute a buffer to account for scientific uncertainty.

The SSC agrees with the Joint Technical Team and the STAR Panel that a key uncertainty in the stock assessment is associated with the estimate of the size of the 2008 year-class, which is currently based entirely on the 2010 fishery age data. Inferences about the strength of this year-class rely on the assumption that the selectivity for age-2 animals in the fishery is unchanging over time even though this may not be the case. In particular, the SSC notes that although a large number of age-2 fish in the fishery catches is generally indicative of strong year-class, this is not always the case.

SSC Notes on H.3

Further explore the implications of the designs used by the Alaska Fisheries Science Center on weight-at-age and catch-at-age.

Develop an approach for more straightforward pooling of the results of TINSS and SS.

Consider using the acoustic survey data to provide indices of age-1 whiting.

Adjournment: The SSC adjourned at approximately 5:30 p.m., Saturday, March 5, 2011.

SSC Subcommittee Assignments, March 2011

Salmon	Groundfish	CPS	HMS	Economic	Ecosystem-Based Management
Robert Conrad	**Vidar Wespestad**	**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 Wespestad		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 Reps.**	**Additional Reviewers**
CPS Panel 1	**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
CPS Panel 2	**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)	Petrale 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.**	
CPS Panel 3	**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.