

AN INITIAL DRAFT COUNCIL STAFF WHITE PAPER ON
POTENTIAL REVISIONS TO THE GROUND FISH BIENNIAL HARVEST
SPECIFICATIONS AND MANAGEMENT MEASURES PROCESS

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Introduction

The Council transitioned from an annual to biennial implementation of harvest specifications and management measures with Amendment 17 to the groundfish Fishery Management Plan (FMP). This transition was intended to: 1) comply with a court order requiring the National Marine Fisheries Service (NMFS) to provide more opportunity for public comment in the rulemaking process; and 2) streamline the process of and reduce the workload associated with developing specifications and management measures so that more Council and NMFS time may be devoted to addressing other issues.¹

Overall, the biennial cycle has been successfully achieving the stated goals in Amendment 17. The proposed regulations implementing the harvest specifications and management measures process now fully accommodates Federal notice and comment rulemaking requirements. Additionally, the Council and NMFS have been able accomplish numerous other groundfish amendments in addition to the two year harvest specifications and management measures. However, workload associated with the biennial cycle has increased substantially and there are underlying process issues that require attention. Some of the problems may be resolved in the short term through changes in the timing of key decisions and supporting analyses, which should result in a more sustainable workload for all involved, increasing the probability of implementation on January 1. Further, a review of the advisory bodies' responsibilities and resources could also help improve workflow and better support Council decision-making.

The 2011-2012 biennial cycle overlapped with several events that made the process anything but routine. First, the cycle corresponded with the implementation of Amendments 20 and 21, which rationalize the trawl fishery and establish formal allocations for the trawl and non-trawl sectors. The Council was also considering Amendment 23, which was needed to incorporate a new harvest specifications framework that was compelled by the passage of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (MSRA) of 2006 and the revised National Standard 1 guidelines interpreting the MSRA. These three amendments changed the existing framework and substantially increased the complexity and workload surrounding the 2011-2012 and future harvest specifications and management measures process.

The overfished species rebuilding plans typically require substantial time from the analysts and the Council. The 2011-2012 cycle involved reevaluation of the existing seven rebuilding plans and creation of a new rebuilding plan for petrale sole, which was declared overfished in early 2010. Furthermore, prior to final action at the June Council meeting, a court ruling was issued in response to the latest in a series of complaints filed in *Natural Resources Defense Council v. Locke*, challenging the rebuilding provisions in the groundfish FMP. The ruling changed the 2010 harvest specifications for cowcod, yelloweye rockfish, and darkblotched rockfish which consequently required a new analysis of the no action alternative between the April and June Council meetings.

The impact of these complexities was evidenced at the Council meetings, which resulted in very extensive and lengthy discussions on the Council floor. For comparison, the amount of time

¹ *Natural Resources Defense Council, Inc. v. Evans*, 2001 168 F. Supp. 2d 1149

spent discussing the 2011-2012 biennial cycle was approximately 1.6 times longer than the time spent during the development of the 2009-2010 cycle. The Council's advisory bodies were also overwhelmed with analyzing and generating recommendations relative to the new frameworks. The Council's Groundfish Management Team (GMT) worked extraordinarily long days; one team member estimated over 50 hours of overtime at the April Council meeting alone. The GMT produced nearly double the number of pages in their team statements, which are in addition to the analysis and write ups provided for the draft environmental impact statement (EIS). After final Council action, the GMT, Council and NMFS staff spent considerable time completing the analysis of the final preferred alternative, preparing the draft EIS, drafting and deeming the regulations, carrying out rulemaking, and processing of the FMP amendment. Due to numerous process issues, almost every post-Council meeting deadline in the schedule that was agreed-upon pre-season was missed, making workload planning nearly impossible.

Goal of this White Paper

The extraordinary workload associated with the 2011-2012 biennial process may have been somewhat unique given the major co-occurring events described above. Nonetheless, certain underlying process issues should be resolved in order to provide a more sustainable workload and a better likelihood of implementation by the January 1 start of the fishing year. **The following paper provides a brief background on the biennial process and highlights possible ways of making the process more efficient, transparent, and effective.** To scope this range of possible improvements, Council staff conducted a series of interviews with the individuals primarily responsible for the analysis and production of the groundfish harvest specifications and management measures EIS. Interviewees included representatives from the NMFS Northwest Region (NWR), Southwest Region, General Counsel, Northwest Fisheries Science Center (NWFS) as well as the Council's GMT.

The initial draft of the white paper, presented here, provides background information on the process of adopting harvest specifications and management measures, and summarizes the recommendations gathered from the interview process. At the end of the document, Council staff recommends that the Council consider moving forward with a more detailed analysis of the recommendations, including scoping any additional ideas for improvement, by establishing a task force and adopting a schedule for Council consideration and possible implementation.

Background

From 1990 to 2004, the Council developed recommendations for the specifications and management measures annually in a two-meeting process, usually in September and November. Subsequent to final Council action, NMFS would publish a final rule in the Federal Register with the opportunity for public comment and correction after the effective date of the action. A court ruling in 2001 ordered NMFS to provide prior notice and allow public comment on the annual specifications.² The rulemaking process requires agencies to publish proposed regulations in the Federal Register, provide a public comment period, and then publish final regulations and public comment in the Federal Register before the regulations are effective. Concurrently, NMFS asked

² Natural Resources Defense Council, Inc. v. Evans, 2001 168 F. Supp. 2d 1149

all fishery management councils to consider streamlining their process for developing regulatory recommendations. The Council's ambitious September and November schedule and the requirements of the rulemaking process, which can take five months or more, made it difficult to attain a January 1 start date for fisheries. The Council took up Amendment 17 to address these procedural issues and to create more time for scientific processes, public involvement, decision-making, and Federal rulemaking.

During the development of Amendment 17, five alternatives were analyzed that included variations on the length of the specifications and management measures (i.e., annual or biennial), the fishing year start date (January 1, March 1, or May 1), the Council schedule for decision-making, and a schedule for conducting new and updated groundfish stock assessments. The analysis for a biennial cycle introduced the concept of having "on" years where scientific findings are developed into management specifications and "off" years where stock assessment methods and databases are refined. The Council's final preferred alternative was a biennial cycle with a January 1 fishing year start date and a three-meeting Council process with stock assessments conducted every other year. Specifically, the process envisioned proposed specifications and management measures to be decided at the November Council meeting (meeting 1), preliminary preferred alternatives and management measures in March/April (meeting 2), and final Council action in June (meeting 3).

The current process for biennial management accommodates several important sequential steps, including scientific peer review of data and analyses used for management decision-making; preparation of either an environmental assessment or EIS as required by the National Environmental Policy Act (NEPA) to analyze alternative harvest specifications and management measures; the opportunity for constituent meetings sponsored by state agencies to solicit public input on a preferred management alternative; and full notice and comment rulemaking to implement new biennial regulations effective on January 1.

Sections of the FMP relevant to the harvest specifications and management measures process can be found in Agenda Item H.1.a Attachment 1. Figures 1 and 2 provide an overview of the biennial cycle responsibilities and Council actions by month and year. Council attention to the biennial process begins in June, one year prior to final action, when the process and schedule for developing the harvest specifications and management measures is adopted. The subsequent three-meeting process typically occurs in November and April, with final Council action in June. After Council final action, the Council decision must be submitted for the implementation process conducted by NMFS. The specifics of the process depend on the nature of the action and the level of analysis; however, there are a number of parallel processes which must be coordinated by NMFS in order to implement the action through regulations (and FMP amendment, if applicable). Appendix 1 provides greater detail on the primary applicable laws affecting the biennial harvest specifications and management measures process. Table 1 includes an example timeline that incorporates these processes for implementing the 2013-2014 process, assuming an EIS and FMP amendment are necessary.

During the 2011-2012 cycle, for the first time, the proposed rule implementing the harvest specifications and management measures process was thoroughly reviewed by the Council staff and GMT prior to being deemed by the Executive Director of the Council.

Harvest Specifications Process

Amendment 23 to the FMP proposes modifications to the way the biennial harvest specifications are decided but the timing of Council action and the fishery start date remains unchanged. Under the proposed framework, an overfishing limit (OFL), which is the estimated maximum sustainable yield (MSY) harvest level, is set for each stock and stock complex in the fishery. An acceptable biological catch (ABC) is then specified at a level lower than the OFL to accommodate the scientific uncertainty in the OFL. The annual catch limit (ACL) is set equal to or below the ABC to accomplish the MSRA objective of managing fisheries over the long term at an optimum yield. Considerations for setting ACLs include management uncertainty, socioeconomic objectives, rebuilding objectives, and ecological considerations. Finally, in cases where current accountability measures, such as inseason catch monitoring and adjustment of management measures, are considered inadequate for keeping harvest within a specified ACL, an annual catch target (ACT) below the ACL may be specified.

West coast groundfish harvest specifications are decided every other year for the subsequent two-year management cycle, with the exception of Pacific whiting which is assessed annually. Data and analyses informing harvest specifications come from assessments and, for overfished species, rebuilding analyses. Harvest specifications for unassessed stocks are typically based on historical harvests with a relatively larger precautionary uncertainty buffer than specified for assessed stocks to account for greater scientific uncertainty.

Full stock assessments are typically peer-reviewed in a two-step process. A Stock Assessment Review (STAR) panel chaired by member of the Council's Scientific and Statistical Committee (SSC) and further comprised of two independent reviewers with no explicit ties to the west coast groundfish management agencies and one other reviewer with west coast groundfish experience. The SSC subsequently reviews these assessments and the recommendations of the STAR panel before recommending the assessment for use in management. In cases where the STAR panel or the SSC reject an assessment, the SSC may recommend a further review late in the assessment cycle in a "mop-up" review panel. The SSC does a final review of any assessments recommended by the mop-up panel before making their formal recommendation of an assessment.

Updated stock assessments and rebuilding analyses are initially reviewed by the SSC Groundfish Subcommittee and then reviewed by the entire SSC before these analyses are recommended for decision-making. Final review and adoption of stock assessments and rebuilding analyses occurs at or before the November Council meeting that marks the beginning of the biennial specifications decision-making process.

Stock assessments are typically brought forward for Council adoption at the June and September meetings in odd years. At its November meeting, the Council typically adopts the SSC-recommended MSY harvest level (i.e., OFL under the Amendment 23 framework) for all actively managed stocks and stock complexes. Additionally, the Council adopts a range of ACLs for detailed analysis at the November meeting. The Council is also encouraged to adopt preliminary-preferred ABCs and ACLs at the November meeting to better focus analysis. Preferred ABCs and ACLs are decided in the subsequent April Council meeting. In practice, some final preferred ACLs, especially for the more constraining stocks, have been decided in the

final June meeting when management measures are also decided. This schedule allows close to six months after the June Council meeting for completing the analysis of the final preferred alternative, preparing the draft EIS, taking comment and preparing the final EIS, regulation writing and deeming, rulemaking, and the processing of any associated FMP amendments.

Management Measures Process

Section 6.0 of the FMP outlines the purpose of management measures and the process by which measures are established and adjusted (Agenda Item H.1.a, Attachment 1). More specifically, the management measures process during the biennial cycle includes the following components: 1) establishing accountability measures including ACTs and harvest guidelines; 2) deductions from the ACLs or ACTs to account for groundfish mortality in tribal fisheries, incidental open access fisheries (e.g., non-groundfish fisheries that impact groundfish stocks), scientific research, and exempted fishing permits (EFPs); 3) sector allocations for species without long term formal allocations specified in the FMP; 4) fishery-specific management measures required under a range of harvest specifications (i.e., integrated alternatives); and 5) the analysis of new management measures.

Accountability measures are management controls to prevent the ACL from being exceeded. The new National Standard 1 guidelines identify two primary sources of management uncertainty: 1) uncertainty in the ability of managers to constrain catch so the ACL is not exceeded; and 2) uncertainty in quantifying the true catch amounts. In other words, management uncertainty involves consideration of the effectiveness of management measures at limiting catch to desired levels, and at the same time, an examination of the accuracy and precision of the estimates used to quantify catch. The new NS1 guidelines recommend consideration of the ACT, which can be set below the ACL if there is uncertainty in the ability of the management system to effectively keep total fishing mortality below the prescribed ACL.

Static off the top deductions for groundfish mortality in tribal fisheries, incidental open access fisheries (e.g., non-groundfish fisheries that impact groundfish stocks), scientific research, and EFP set asides are required in order to calculate the trawl and non-trawl allocations necessary to support a rationalized trawl fishery (see 75FR60868, definition of fishery harvest guideline). Prior to Amendments 20 and 21, if the Council discovered that the off the top deductions in the scorecard were mis-specified due to changes in tribal take, research, EFPs, or incidental open access, the scorecard would simply be updated and routine inseason management measures for fisheries would be adjusted up or down to attain but not exceed the optimum yields (OYs). Under Amendment 21, off the top deductions to the ACL or ACT need to be estimated during the biennial process in order to calculate static trawl and non-trawl sector allocations. Once the yield is compartmentalized into trawl and non-trawl allocations, the allocations cannot be revised through routine inseason management if changes in the set asides arise mid-biennium.

There are two types of sector allocations used to manage west coast groundfish fisheries: long-term formal allocations and ad hoc allocations that might persist for only one 2-year management cycle. Long-term formal sector allocations are meant to persist and an FMP amendment is required to change these allocations. Ad hoc biennial allocations are either hard 2-year allocations (e.g., trawl and non-trawl allocations) or the 2-year catch sharing arrangements (e.g., harvest guidelines in the recreational fisheries) made in the biennial specifications process that

attempt to meet conservation objectives while also meeting the socioeconomic objectives of equitable coastwide and year-round fishing opportunities.

For the 2011-2012 cycle, the management measure components were combined into integrated alternatives in an effort to better understand the combined impacts of the harvest specifications and management measures decisions. In April 2010, the Council considered nine integrated alternatives, in addition to the no action alternative, and selected a preliminary preferred alternative for more detailed analysis. In addition to the Council's preliminary preferred alternative, intermediate and lower options were analyzed to better explore the relationship between the time to rebuild the overfished species and the needs of the fishing communities in order to determine the shortest time possible while taking into account the appropriate statutory factors. The intermediate alternative was developed in consideration of the court order issued on April 23, 2010.

The integrated alternatives significantly added to the 2011-2012 workload and complexity of the analysis. The task was largely accomplished by the GMT who modeled the estimated harvest of selected species and proposed management measures under each alternative, and by Council staff, a contractor, and the NWFSC who conducted the corresponding socioeconomic analysis and incorporated the results into the draft EIS. Since the integrated alternatives for detailed analysis were not adopted until the April Council meeting, there was a very short turnaround for the analysis of the alternatives and the June briefing book deadline (end of May).

The groundfish FMP is based on principles of adaptive management with management measures enacted in anticipation that they will be evaluated and modified when necessary and appropriate. Management measures may be developed to achieve the full range of social, economic, and ecological objectives included in the MSRA. As information and experience are gained, new priorities and mandates arise; unanticipated consequences are discovered, requiring the need to revisit management measures. The list of needed changes and modifications can grow quickly and the need for prioritization given limited resources is inevitable. New regulatory management measures can be analyzed in a two-meeting Council process or within the biennial cycle. Some changes require an FMP amendment which involves a three-meeting Council process.

Responsibilities of the Council's Advisory Bodies

Scientific and Statistical Subcommittee

The SSC's role is to ensure that the analysis used in the harvest specifications and management measures process represents the "best available science." More specifically, the SSC is responsible for reviewing and recommending the stock assessments (full and updates) and rebuilding analysis for use in management. The SSC is also responsible for reviewing and approving stock categorizations (i.e., category 1, 2, and 3), reviewing and recommending the OFLs, and calculating the scientific uncertainty buffers. Additionally, the SSC has reviewed some of the GMT's total mortality projection models for overfished species and selected non-overfished species (e.g., the trawl model). For the 2011-2012 harvest specifications and management measures process, the SSC reviewed the input-output model (IO-PAC), which was developed by the NWFSC for use by the Council in evaluating the regional economic impacts of changes to commercial harvest of west coast groundfish ([Agenda Item G.9.b, Supplemental SSC](#)

[Report, November 2009](#)). This model had previously been reviewed by a panel of independent experts outside of the Council process under terms of reference provided by the NWFSC.

Groundfish Management Team

The GMT is primary analysts in the harvest specifications and management measures process and one of the main contributors to the EIS. The team analyzes or recommends harvest limits, develops and evaluates rebuilding plans, prepares fishery impact analyses, and conducts other tasks assigned by the Council or Executive Director. During the 2011-2012 process the GMT's workload was significantly increased for both harvest specifications and management measures. In coordination with the SSC groundfish subcommittee, the GMT was involved in categorizing stocks and conducting the productivity and vulnerability analysis for SSC review and approval. The GMT, in coordination with Council staff, drafted the new petrale sole rebuilding plan, reevaluated the seven existing rebuilding plans, and provided guidance to the Council. Finally, the GMT was primarily responsible for the analysis of the integrated alternatives, which also increased workload compared to previous cycles.

Groundfish Advisory Sub-Panel

The Groundfish Advisory Sub-Panel (GAP) represents the commercial and recreational fishing industry, tribes, the public, and conservation interests. They advise the Council on fishery management issues such as annual catch limits, rebuilding plans, management measures, and FMP amendments. The GAP plays an integral part of the harvest specifications and management measures process. They help define the needs of the fishing community and help the analyst (typically the GMT) ground truth assumptions for the management measures analysis, and provide the Council with perspectives on the public's various policy preferences.

Summary of Recommendations from the Interviews

Interviewees suggested that many of the problems plaguing the harvest specifications and management measures process could be resolved in the short term through changes in the timing of key decisions and supporting analyses, which should result in more sustainable workload for all involved. These changes could be reinforced by developing and adopting a more detailed process and schedule for both the Council action and the NMFS implementation process, based on careful consideration of available resources. As important, there must be a commitment on the part of the Council, analysts, and agencies to meet the agreed upon milestones and deadlines to ensure time for a focused analysis and review. A summary of the interviewee recommendations by topic follows.

Overarching

After final Council action, the NMFS implementation schedule requires several milestones and deadlines that must be achieved to increase the likelihood of a January 1 implementation (Table 1). In order to be successful, the implementation schedule should be created with close coordination between the NWR, SWR, General Counsel, and Council staff. Interviewees suggested that the schedule has become untenable, which means there a greater risk of the implementation date is being later than January 1, as occurred in the 2009-2010 cycle. Some

interviewees suggested that a longer implementation schedule is needed, which could require significant changes to the Council process and a subsequent amendment to the FMP.

Interviewees recommended that the Council and NWR staff, along with the NEPA coordinator, develop a standardized reporting format for the EIS which would increase readability and facilitate public comment and Council decision-making. Additionally, the revised format should provide for an easier transition from analysis and decision-making to regulations, ideally streamlining the process and improving workflow. Furthermore, if the adopted schedule provides for more front-loading, there could be time to summarize the relevant components of the EIS in order to better facilitate public comment and Council decision-making. For example, the integrated alternatives describe the impacts of the harvest specifications decisions on the various fishery sectors. However, some interviewees expressed the desire to see the information summarized by sector, instead of by alternative.

Staff at the NWR, along with the GMT, requested that the objectives and instructions for the deeming process be clearly outlined prior to the next cycle. Additionally, they recommended that the Council adopt a formal deeming schedule that provides sufficient time for review and discussion of the proposed regulatory changes. Details of such schedule could be provided at the June Council meeting in the odd year.

Harvest Specifications

Timely decision-making of 2011-2012 biennial harvest specifications was compromised by two initiatives: 1) Amendment 23 and 2) development of new methodological approaches recommended by the SSC for estimating the OFLs for unassessed stocks. Further, a new initiative to reconfigure the current stock complexes is anticipated for the 2013-2014 cycle. The requisite analyses and timing of decisions for this initiative should be well-planned to avoid process delays that could compromise focused analysis and decision-making for other biennial harvest specifications and management measures.

Amendment 23 proposes to better prevent overfishing by incorporating new terms and procedures for incorporating precautionary buffers in harvest specifications to manage scientific and management uncertainty. The MSRA mandated implementation of these new National Standard 1 guidelines by 2011 for stocks not subject to overfishing³. Amending the FMP would have been a relatively easy task given that the west coast groundfish FMP was the template used to develop the new National Standard 1 guidelines. However, NMFS did not publish the revised National Standard 1 guidelines, which formed the basis for Amendment 23 decisions, until January 2009. Consequently, the SSC was not given adequate time to develop new methodologies for quantifying scientific uncertainty in consideration of new ABC specifications. Therefore, ABC control rules were not developed in a timely fashion, which delayed Council decisions for Amendment 23 and 2011-2012 harvest specifications. Such problematic delays are not anticipated for the next specifications cycle given that these new rules are now in place. However, if new approaches for quantifying scientific uncertainty and ABC uncertainty buffers are considered for the 2013-2014 biennial specifications, it will be important to have these

³ The MSRA also mandated implementing new National Standard 1 guidelines by 2010 for stocks subject to overfishing; however, no west coast groundfish stocks were subject to overfishing.

approaches reviewed and finalized prior the November 2011 meeting to avoid the same process delays experienced in deciding the 2011-2012 specifications.

New approaches for determining OFLs for unassessed species were developed in the 2011-2012 specifications cycle. These approaches (i.e., depletion-based stock reduction analysis (DBSRA) and depletion-corrected average catch (DCAC)), were considered superior to using average historical catches for determining OFLs for unassessed species by the SSC. However, with the competing Amendment 23 initiative of developing new ABC control rules, there was also a delay getting these methods reviewed and approved, which subsequently delayed Council harvest specification decisions. Final OFL and ABC decisions were therefore made at the June 2010 Council meeting, when all such decisions should be made by the April meeting at the latest to allow better focus on deciding final management measures. Potential delays in deciding 2013-2014 OFLs are not anticipated. The Council decided to convene a formal review panel for any methods considered for deciding 2013-2014 OFLs in April 2011. This should allow adequate time for the SSC to decide new OFLs in advance of the November 2011 meeting.

The Council staff recommended process for deciding 2013-2014 harvest specifications is to decide final OFLs for all stocks and stock complexes at the November 2011 meeting. Any new approaches for deciding ABC scientific uncertainty buffers should also be decided by the November 2011 meeting to allow the Council to decide preliminary preferred or final ABCs then. The Council staff recommends that, if possible, the Council should decide preliminary preferred ACLs for non-overfished species and a range of ACLs for overfished species at the November 2011 meeting that are within the final preferred OFLs and preliminary preferred or final ABCs. This would allow for detailed analysis of a “more viable” range of ACLs over the winter. The Council could then decide final preferred ABCs and confirm or modify the preliminary preferred ACLs in April 2012. This more measured process for determining biennial harvest specifications should enable better, more focused analysis and decision-making than experienced in the 2011-2012 decision-making cycle.

Council staff recommends that the GMT and SSC reconfigure the current stock complexes for use in the 2013-2014 cycle. This initiative may involve adding and/or removing some species from the FMP and regrouping species in current stock complexes. Conceptually, the task involves managing species with similar vulnerabilities to overfishing within a complex. Harvest specifications determined for well-structured stock complexes should theoretically reduce the risk of serial overfishing of component stocks within a complex. Council staff recommends that all the requisite analysis of new stock complexes be completed by the November 2011 meeting to allow final decisions on new complexes at that meeting. This timing may avoid the types of process delays that could compromise focused analysis and decision-making on harvest specifications for stock complexes to be implemented in 2013.

One interviewee recommended that the Council schedule to adopt assessments be revised in order to accommodate overfished species assessments (both full and updates) early in the process, that is during the June Council meeting instead of the September Council meeting. Since overfished species constrain access to target species, understanding the status of the stocks at the earliest time possible would facilitate the analysis of potential management measures. Specifically, if changes in our understanding of stock status and biology require a change in the

rebuilding plan, then having that information early in the process would provide more time for public input necessary to develop management measures.

Another interviewee recommended a comprehensive review of how stock assessments are approved and adopted by the Council at Council meetings. Problem areas include how Council members get the necessary detailed information and how much Council floor time is devoted to the approval process.

Management Measures

During the 2011-2012 cycle, the GMT, in coordination with the West Coast Groundfish Observer Program, began some initial scoping to address uncertainty in quantifying the true catch amounts as it relates to projection model inputs. The current formulation of fishery projection models assume several inputs are known without error. These include total landing estimates, allocation of landing by depth strata, bycatch ratios, and discard mortality. Treating these quantities as known decreases the amount of uncertainty admitted in the model and ultimately influences the realization of model outputs (i.e., projected catches). Improvements to these models would address characterizing the uncertainty in each of the input quantities. Council staff recommends that this task be included in the workload planning for the GMT, with the possibility of an SSC review, for the 2013-2014 cycle.

There are inherent difficulties in estimating the off the top deductions during the biennial cycle, as required by Amendment 21. For example, estimating groundfish mortality from research is problematic because regulations imposed under MSRA do not apply to scientific research; therefore research activities cannot be restricted by fishing regulations. Further, there are no requirements that researchers must inform NMFS of their activities in a manner that would facilitate annual or biennial planning. That is, new research may emerge at any time during the year and may potentially impact either target or overfished species. Additionally, biennial estimates for EFPs must occur before EFP applications have even been received. In essence, during the biennial cycle the Council would not be setting catch limits for any specific EFP projects, but considering future EFPs and the potential for needing to give those projects some amount of yield of both overfished species as well as non-overfished species.

Inevitably the off the top deductions will be mis-specified and solutions that result in the least amount of disruption to the formal allocations will be needed. Interviewees recommended that this issue be resolved prior to the 2013-2014 cycle. Since the off the top deductions and associated definition of fishery harvest guideline were created through Amendment 21, it may be logical to include this issue in the proposed trawl rationalization trailing amendment that will address the status of Amendment 6 relative to Amendment 21. Additionally, interviewees recommended consideration of two-year EFPs, timed appropriately with the biennial process, which would eliminate the need to predict future EFP needs. A preliminary interpretation is that this change would only require modifications to the Council's Operating Procedures and not the FMP.

In previous cycles, the Groundfish Allocation Committee (GAC) met over winter to discuss the types of management measures that could be necessary to reduce bycatch of depleted species in the various groundfish fisheries, while considering the needs of west coast fishing communities.

This dialogue was particularly useful for scoping the issues related to the two-year overfished species allocations and developing the framework for the analysis. Under the current process, with preliminary preferred decisions in April and analysis of the integrated alternatives occurring between the April and June Council meetings, there is insufficient time to conduct a GAC meeting. If preliminary preferred ACL decisions for non-overfished species and a narrow range of overfished species ACLs were chosen by the Council in November, the analysis of the integrated alternatives could occur over winter, providing sufficient time for a GAC meeting.

Interviewees recommended that the ACLs that are the basis for the integrated alternatives (i.e., preliminary preferred non-overfished species ACLs and overfished species ACL) should be narrowed at the November Council meeting, analyzed over winter, and included in the April briefing book. This would provide time for more focused and detailed analysis. The preliminary preferred integrated alternative will likely be some variation on one of the integrated alternatives analyzed over winter. Although this new alternative would need to be analyzed between the April and June Council meetings, this would involve a lot less work than if all integrated alternatives had to be analyzed between April and June. If this schedule were adopted, the socioeconomic analysis could also be provided at the April Council meeting, which would provide for greater understanding of the impacts prior to making a preliminary preferred decision.

Interviewees expressed concern that narrowing the range of alternatives for more detailed analysis can sometimes result in insufficient contrast between the impacts of the preferred alternative and the impacts of higher harvest levels. In the 2011-2012 process, the Council's preliminary preferred ACL decision for overfished species was used as the upper bounds for the integrated alternatives. However, the Council previously considered and rejected higher ACLs earlier in the process (see Chapter 2 of the draft EIS). The Council rejected the higher overfished species' ACL alternatives because they extended rebuilding too far to meet the Council's conservation objective to rebuild the stocks in the shortest time possible while taking into account the status and biology of the overfished stock, the needs of fishing communities, and the interaction of the overfished stock within the marine ecosystem. The interviewees recommended that future analysis include one or two alternatives that allow analysis of ACLs higher than those in the Council's preliminary preferred alternative so the impact of the Council's preliminary preferred alternative is better understood and reflected. If the number of integrated alternatives for analysis is expanded, it would add to the workload of the GMT and analytical team, which would need to be accommodated in the schedule.

In recent years, given Council workload on other groundfish items (e.g., Amendments 20, 21, and 23), there has been limited opportunity to analyze new management measures outside of the biennial cycle. As a result, the biennial cycle has been viewed as the "one time shot" to analyze new management measures. Several interviewees felt this expansion caused a significant burden on the process and recommended the Council limit the scope of management measures for consideration in the biennial cycle. The rationale was that implementing harvest specifications and management measures that keep total catch within the ACLs should be the priority, given limited resources. They recommended that the Council evaluate available resources, including advisory body and agency workload, at the June Council meeting and define the scope of the action for management measures. If the scope of management measures in the biennial process is

limited, the Council would need to plan for more regulatory amendments to address management needs deemed to not fit within the scope of the biennial process.

Interviewees noted that more a detailed analysis of management measures needs to come before the Council in November, instead of April. Under the current process, a bulleted list of new management measures along with a brief description is presented in November. The Council narrows the list based on the potential for the management measure to achieve FMP goals and objectives as well as anticipated workload and available resources. Over winter, a preliminary analysis is conducted and is presented in April. If this preliminary analysis were presented in November, the Council would have a better understanding of the potential for the management measure to meet the FMP objectives. Additionally, the Council would be better able to assess the complexity of the proposed management measure and associated workload in order to determine if it can be accommodated. In April, the management measure analysis would be completed and included in the briefing book for a preliminary preferred decision, with final action in June.

Interviewees also requested that the Council provide more detailed guidance on the framework for prioritizing management measures for analysis. This framework could be used to develop a form for proposed management measures that outlines the criteria for considering how a particular management measure meets the FMP goals and objectives. Further, the form would allow the Council to determine whether the measure is better suited to the biennial management measures process or a separate two or three-meeting process. Appendix 2 contains regulation and FMP amendment proposal forms used by the International Pacific Halibut Commission and the North Pacific Fishery Management Council, which could form the basis for a similar proposal process for the Pacific Council.

Long Term Recommendations

At the September Council meeting, the GMT expressed support for Council consideration of improvements to the biennial process, including an FMP amendment, if necessary. During the interview process, several recommendations were raised during that cannot be accomplished prior to the 2013-2014 process or would require an FMP amendment. These ideas include

- A five year cycle or programmatic EIS with new stock assessment and management measures infused every two years.
- Changing the fishing year start date from January 1 to later in the year to provide more time for the NMFS implementation process.
- Separating the harvest specifications decision from the management measures decision.

Recommendations for the Advisory Bodies

Interviewees indicated the need to refine the SSC review process for the IO-PAC model and other socioeconomic analysis, such as the net present value and community vulnerability analysis. Depending on the complexity of the analytical framework, an independent review conducted within the Council process with the terms of reference developed by the SSC may be appropriate. Essentially, the review envisioned for the socioeconomic analysis was similar to the process currently conducted for the groundfish stock assessments. Timelines for accomplishing an SSC review would need to be developed such that there would be sufficient time for the review as well as time for the analysts to incorporate any recommended changes. Such a timeline

would result in the socioeconomic framework being approved by the SSC prior to the November Council meeting that starts the decision-making process (i.e., the odd year).

If the SSC has greater involvement in the review of the socioeconomic analysis, then the interviewees recommended that the Council should consider whether the current SSC membership and expertise is sufficient or if it should be expanded to include more economists, social scientists, or anthropologists.

Interviewees held differing views on the scope of GMT's role in the process, with some preferring a narrow role and others expressing the view that the team could perform a wide range of analytical tasks needed to inform Council decision-making. Interviewees recommended that the Council, based on recommendations from Council staff, outline the team's assignments and responsibilities prior to beginning the biennial process and then assess whether the team has the right resources to accomplish the tasks. Further, it was recognized that depending on the scope of the work products anticipated, that the GMT may need to be expanded to include other experts to assist in the analysis.

Many members of the GMT also requested that Council staff and the NWR, along with the NEPA coordinator, develop a template or checklist that could be used to ensure the analysis for both harvest specifications and management measures is compliant and satisfies MSRA, NEPA and court orders. This guidance should come early, like at the June Council meeting and the October GMT meeting that start the biennial process.

Members of the GMT recognized the need to identify the standard set of data requests needed from the NWFSC, including trawl survey data used for apportioning the coastwide assessments as well as data requests from the West Coast Groundfish Observer Program for use in management measure analysis or model refinements. The GMT will work with the NWFSC to better align requests such that they enter into the process in a timely manner.

Interviewees noted that the GAP could use further guidance from the NWR relative to preparing statements to the Council that describe the needs of the fishing community.

Next Steps

During the interview process several potential solutions were recommended to improve the biennial process; however all concepts need further evaluation and consideration. Council staff recommends that the Council approve moving forward with detailed analysis of the recommendations and revisions by establishing a task force to help in the appropriate analytical tasks. Ideal candidates for the task force would have knowledge and experience with the biennial process and include members of the Council, GMT, SSC, GAP as well as Council staff, NWR staff, and General Counsel.

The task force could be charged with scoping changes to the 2013-2014 process as well as longer term changes that may require an FMP amendment. Council staff could expand the interview process and solicit further areas or ideas for improvement from the Council, advisory bodies, agencies, and the public. Staff could also investigate how harvest specifications and management measures are recommended by other Councils and implemented by NMFS. This information,

along with the draft white paper presented here, could form the basis for the task force discussions.

Further, staff recommends that the Council adopt a schedule for considering and recommending revisions to the biennial process. The Council is tentatively scheduled to make decisions on changes for the 2013-2014 process and determine whether changes that require an FMP amendment are required at its April 2011 Council meeting. At the April meeting, the Council could receive a second draft white paper, including recommendations from the task force, to support Council decision-making for changes to the biennial process.

Table 1. An example schedule of the NMFS internal review process for the 2013-2014 cycle.

	Step interval	Step begins on:
NEPA		
Sunday, June 03, 2012	40	Begin NMFS internal review and revision of draft EIS, clearance
Friday, July 13, 2012	7	File draft EIS with EPA
Friday, July 20, 2012	45	EPA publishes NOA, 45-day public comment begins
Monday, September 03, 2012	32	Begin staff draft response to comments, FEIS preparation, and NMFS internal review
Friday, October 05, 2012	7	File FEIS with EPA
Friday, October 12, 2012	30	EPA publishes NOA, 30-day cooling off period begins
Sunday, November 11, 2012	11	30 days end
Thursday, November 22, 2012		ROD signed
MSRA		
Thursday, August 09, 2012	45	Begin preparation and internal review of FMP amendment and regulations
Sunday, September 23, 2012	5	FMP Amendment and proposed regulations transmitted from Council office to NMFS.
Friday, September 28, 2012	60	FMP Amendment Comment period begins
Tuesday, November 27, 2012	30	Secretarial decision on FMP Amendment
APA		
Wednesday, June 20, 2012	45	Begin preparation of proposed regulations
Saturday, August 04, 2012	30	Begin Council "deeming" and NMFS internal review
Monday, September 03, 2012	30	30-day comment period on proposed rule begins
Wednesday, October 03, 2012	60	Begin final rule package preparation and internal review
Sunday, December 02, 2012	30	Final rule publishes, 30-day cooling off period begins
Tuesday, January 01, 2013		30-day cooling off period ends, regulations effective

Timelines computed from final rule effective date

Draft EIS and final EIS NOA publication must fall on a Friday

Figure 1. Year 1 (odd year) work products and Council schedule for the biennial cycle.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Science	Stock assessments & STAR panels conducted					Stock assessment updates	Stock assessments & STAR Panel		Rebuilding Analysis and Mop-Up			
WCGOP Data Delivery	Bycatch rates for GMT models updated										Total Mortality Report: previous year est.	
GMT											Harvest Spex and MM mtg.	
Council Meetings	Adopt P. whiting assessment (annually)			Adopt stock assessments; SPEX schedule and process			Adopt stock assessments; Off yr science improvements			Adopt rebuilding analysis & Mop up; Adopt proposed SPEX and MM decisions		

Figure 2. Year 2 (even year) work products and Council schedule for the biennial cycle.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Science	Models and databases refined											
WCGOP Data Delivery	Bycatch rates for GMT models updated										Total Mortality Report: previous year est.	
GMT	Analyze harvest spex and MM; approve models		Analyze SPEX and MM					Finalize SPEX DEIS		Deeming		
Council Meetings			Adopt P. whiting assessment; Stock assessment planning		Adopt PPA SPEX and MM		Adopt final SPEX and MM; Final stock assessment planning					

Appendix 1 – Applicable Laws

The primary applicable laws affecting the biennial harvest specifications and management measures process are as follows:

- The Administrative Procedures Act (APA) and MSRA §304(b) govern the promulgation of regulations, which is the principal way in which harvest specifications and management measures are implemented. This includes a 15-day window for NMFS review of the proposed regulations, preparation of a proposed rule, which is published in the Federal Register and followed by a 30-day public comment period, publication of a final rule in the Federal Register and a 30-day cooling off period after publication before the regulations become effective. All together, once the regulations have been initially drafted, this process takes 90-120 days. (In unusual circumstances the process can take longer.)
- If the harvest specifications process also requires an FMP amendment (for example to incorporate a new rebuilding plan or revisions to existing plans) then MSRA §304(a) comes into play. Once the proposed amendment is formally transmitted to NMFS by the Council NMFS must immediately publish a Notice of Availability for the amendment, which triggers a 60-day public comment period. NMFS must take a final decision on the amendment within 30 days of the end of the public comment period. Taken together 95 days are typically allotted for this process.
- If NMFS determines that formal consultation on the effect of the proposed action on species listed under the Endangered Species Act pursuant to section 7 of the Act is required, the NEPA document would serve as the biological assessment, which provides information necessary to determine whether to initiate formal consultation. Under formal consultation a Biological Opinion is prepared, which supports a determination on the effect of the action on listed species and may contain discretionary and nondiscretionary measures to address effects. Once formal consultation is initiated, it must be completed within 135 days (60 days for the consultation and 45 days to prepare the Biological Opinion) and the action cannot be implemented before the consultation process is concluded.
- NEPA provides an umbrella framework to incorporate analyses required under applicable law and support decision-making. Since 2003 an EIS has been prepared for annual and biennial harvest specifications and management measures. If an EIS is prepared, a two-stage process is required. A draft EIS is filed with the Environmental Protection Agency. The EPA then publishes a Notice of Availability, which triggers a minimum 45-day public comment period. Once this is concluded, any comments received must be addressed in a final EIS, which is also filed with EPA. A 30-day cooling off period then ensues before the responsible official may sign the Record of Decision (ROD), which serves as the legal determination of the agency's action. The ROD must be signed before the final rule is published and in the case of a related FMP amendment, before the determination on approval of the amendment.

Appendix 2 – Example Proposal Forms

**HALIBUT AND SABLEFISH IFQ PROGRAM
AMENDMENT PROPOSAL
North Pacific Fishery Management Council
Fax: (907) 271-2817**

Name of Proposer:

Date:

Address:

Telephone:

Brief Statement of Proposal:

Objectives of Proposal (What is the problem?):

Need and Justification for Council Action (Why can't the problem be resolved through other channels?):

Foreseeable Impacts of Proposal (Who wins, who loses?):

Are there Alternative Solutions? If so, what are they and why do you consider your proposal the best way of solving the problem?

Supportive Data and Other Information (What data are available and where can they be found?):

Signature:

Appendix 2 (cont')

IPHC Regulations Proposal Submission Form

Proposal Title: _____

Year Proposed For: _____

Submission Information (Please print or type)

Name: _____

Affiliation:

Address:

City: State/Prov: Postal/ZIP Code:

Telephone: Fax: Email:

Signature:

1. What is the definition and objective of the proposal?

2. Impacts: Describe who you think this proposed change might affect (include fishers, processors, agencies, and the public).

2a. Who might benefit from the proposed change?

2b. Who might suffer hardships or be worse off?

3. Are there other solutions to the problem described above? If so, why were they rejected?

Please attach any other supporting materials. All items submitted by **November 10, 2010** will be considered at the IPHC Annual Meeting. ***Remember to include contact information and signature.***