Pacific Fishery Management Council
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Dorothy M. Lowman, Chair| Donald O. McIsaac, Executive Director

August 13, 2013

Mr. Michael Tosatto
Regional Administrator, National Marine Fisheries Service
Pacific Islands Region
1601 Kapiolani Blvd., Suite 1110
Honolulu, HI 96814

Dear Mr. Tosatto:

I am writing you in your capacity as Head of Delegation for the upcoming Ninth Regular Session of the Northern Committee (NC9) of the Commission for the Conservation and Management of Highly Migratory Fish (HMS) Stocks in the Western and Central Pacific Ocean. At its June 2013 meeting the Pacific Fishery Management Council (Pacific Council) reviewed reports from its Highly Migratory Species Management Team (HMSMT) and the Scientific and Statistical Committee (SSC) as a basis for developing recommendation for NC9. These recommendations are directed towards the development of a precautionary management framework for North Pacific albacore tuna, which the NC intends to complete next year.

The attached report "Pacific Fishery Management Council General Recommendations for the North Pacific Albacore Precautionary Management Framework Proposed by the Western and Central Pacific Commission Northern Committee" combines background information and recommendations from the aforementioned advisory bodies with discussion by the Pacific Council and describes the rationale for the Council's recommendations. In brief these recommendations are:

- The management framework should enumerate its objectives, including recognition of the importance of recreational fisheries for North Pacific albacore and the need for improved data collection at the international level.

- The management framework should include both target and limit biological reference points to guide management responses with respect to excessive fishing mortality (overfishing) and reduced stock status (depletion), in the event they occur.

- Fishing mortality (F) based biological reference points should be defined with respect spawning potential ratio (SPR) and not in terms of historical stock biomass as with the current interim reference point, given uncertainty about the stock-recruit relationship and stock size.

- Biomass based reference points, used to determine stock status, should be chosen with care, recognizing uncertainty in estimates of stock biomass.

- A simple linear sliding scale harvest control rule—similar to the framework elucidated in the Pacific Council's Fishery Management Plan for West Coast Fisheries for Highly Migratory Species—should be considered; under this type of harvest control rule fishing mortality is proportionately reduced when stock biomass falls below the target to allow it to rebuild to the target.

- Catch-based management measures are favored over effort-based measures, because catch can be more directly related to fishing mortality and easier to monitor; however, catch-based measures could trigger a variety of issues related to the allocation of fishing opportunity.

Also attached is a preliminary draft proposal for a precautionary management framework document, for consideration by the U.S. delegation to advance at the upcoming NC meeting under its agenda item 2.3.2. We feel it is important for the U.S. to advance something at the NC9 meeting, so as to move forward in accordance with the 2013 NC Work Program; this represents an early seed effort for a focus document that would be expected to evolve as discussions dictate.

We look forward to discussing these recommendations with the delegation during the anticipated pre-meeting conference call. Ms. Marija Vojkovich and Dr. Kit Dahl, will be attending NC9 to further advance the concepts within the U.S. delegation and assist in the development of NC consensus as appropriate.

Finally, I want to emphasize that the Pacific Council wishes to continue to play a significant role as the precautionary management framework for North Pacific albacore is further developed by the NC over the next year or so.

Sincerely,

D. O. McIsaac, Ph.D.
Executive Director

KRD:rdd

Attachments: Pacific Fishery Management Council General Recommendations for the North Pacific Albacore Precautionary Management Framework Proposed by the Western and Central Pacific Commission Northern Committee
Preliminary Draft Precautionary Management Framework

C: Council Members
Mr. Russell Smith, Deputy Assistant Secretary for International Fisheries, NOAA
Mr. Bill Gibbons-Fly, DOS OMC
HMSMT Members
HMSAS Members
Dr. Owen Hamel, SSC Chair
SSC HMS Subcommittee Members
Mr. Tom Graham, U.S. delegation
Mr. Mark Helvey, U.S. delegation
Dr. Samuel Pooley, U.S. delegation
Dr. Gerard DiNardo, U.S. delegation
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PACIFIC FISHERY MANAGEMENT COUNCIL RECOMMENDATIONS FOR THE NORTH PACIFIC ALBACORE PRECAUTIONARY MANAGEMENT FRAMEWORK PROPOSED BY THE WESTERN AND CENTRAL PACIFIC COMMISSION NORTHERN COMMITTEE

1. Introduction

At its September 2011 meeting, the Western and Central Pacific Fisheries Commission (WCPFC) Northern Committee (NC) proposed the development of a precautionary management framework for North Pacific albacore in their work plan. The objectives of the precautionary approach-based management framework include: (1) recommending appropriate reference points; (2) agreeing in advance to actions that will be taken in the event each of the particular limit reference points is breached (decision rules, which the HMSMT believes would include a harvest control rule as discussed below); and (3) recommending any changes to Conservation and Management Measure 2005-03 for North Pacific Albacore. The NC intends to complete these tasks by 2014 when the next North Pacific albacore stock assessment is scheduled.

This report combines material in reports provided by the Pacific Fishery Management Council's (Council's) Highly Migratory Species Management Team (HMSMT) and Scientific and Statistical Committee (SSC). It is further tailored to include the intent of the Council regarding the title of this paper. It serves as the basis for Council recommendations to the US delegation at the 9th Regular Session of the Northern Committee, scheduled for September 2-5, 2013, in Fukuoka, Japan, on the NC's proposed precautionary management framework for North Pacific albacore.

According to advice provided to the WCPFC Science Committee (Berger, et al. 2012), a management framework should ideally contain the following elements:

- management objectives
- target and limit reference points consistent with those objectives
- performance metrics
- consideration of systemic uncertainties
- alternative management options (e.g. types of harvest control measures, data to be used, or stock assessment process)
- candidate harvest control rules

2. Management Objectives

Management objectives need to take into account both the manner in which the benefits from the fishery are to be realized, as well as the possible undesirable outcomes that are to be avoided. It is desirable that both the timeframe and likelihood for achieving the target (or avoiding a limit) is included in the formal specification of each management objective (International Seafood Sustainability Foundation, 2013). Using the list of Management Goals and Objectives in the Fishery Management Plan for West Coast Fisheries for Highly Migratory Species (HMS FMP) as a starting point, the Council proposes the following particularly relevant, slightly edited FMP management goals towards consideration of a precautionary management framework for North Pacific albacore.

1. Maintain the long-term conservation and sustainable use of North Pacific albacore. Implement harvest strategies which achieve optimum yield, prevent overfishing, and rebuild overfished stocks, as needed.

2. Maintain and support long-term economic and social benefits for the albacore fishing industry, including both commercial and recreational fishery participants, giving due consideration to traditional participants.
3. Provide a long-term, stable supply of high-quality fish to consumers.
4. Establish procedures to facilitate rapid and successful implementation of future management actions, as necessary.
5. Implement measures to adequately account for total mortalities, including any discards.
6. Implement harvest strategies that are robust with respect to scientific and management uncertainty.

3. Biological Reference Points

Reference points can either be target reference points (used to guide management objectives for achieving a desirable outcome and not to be exceeded on average, or at least 50 percent of the time) or limit reference points (limits beyond which the state of a fishery and/or a resource is not considered desirable and remedial management action is required).

Reference points can be defined in terms of fishing mortality (F) or stock biomass (B). F-based reference points can be related to catch or effort metrics for the purpose of management. In addition, F-based reference points can address growth overfishing – when mortalities by weight exceed weight gains in the population by growth – or recruitment overfishing – fishing mortality above which the recruitment to the exploitable stock becomes significantly reduced. Biomass-based reference points define critical thresholds in terms of stock status (depletion) and can be used to determine when remedial action is needed to rebuild a stock to a more productive size (by reducing F). The Magnuson-Stevens Fishery Conservation and Management Act requires the identification of both biomass reference points (B-limit and B-target) and F reference points. Not all reference points are useful depending upon the stock assessment modeling approach and knowledge of the stock dynamics.

The International Scientific Committee for Tuna and Tuna-Like Species in the North Pacific Ocean (ISC) Albacore Working Group estimated current fishing mortality, or F, ($F_{2006\text{-}2008}$) relative to several F-based reference points used in contemporary fisheries management. In addition to the simulation-based interim reference point, $F_{SSB\text{-}ATHL}$, these included F_{MAX}, F_{MED} and $F_{0.1}$, reference points that are based on yield-per-recruit analysis, and the $F_{20\text{-}50\%}$ reference points that are spawning biomass-based proxies of F_{MSY}. A summary of the results of the 2011 assessment with respect to these reference points and some of the problems identified with using each of the reference points is provided in Table 1. (For description of these reference points see section 7 at the end of this report.)

Table 1. Estimated ratio of Fcurrent to commonly used F reference points, equilibrium spawning biomass and equilibrium yield for the 2011 north Pacific albacore assessment.

Reference Point	$F_{2006\text{-}2008}/F_{ref}$	SSB (t)	Equilibrium Yield (t)	Drawbacks
$F_{SSB\text{-}ATHL}$	0.71	346,382	101,426	Not useful when there is a declining biomass trend because the lowest biomasses during the end of the time series will be contributing to the average of the 10 historic lowest biomass levels (ATHL).
F_{MAX}	0.14	11,186	185,913	Difficult to estimate when Y/R curve is asymptotic, as for the 2011 assessment.
$F_{0.1}$	0.29	107,130	170,334	Not useful for recruitment overfishing; estimates highly sensitive to changes in M.
F_{MED}	0.99	452,897	94,080	Assumes a stock recruitment relationship; may not be robust if number of recruits are estimated from narrow range of SSB.
$F_{20\%}$	0.38	171,427	156,922	Difficult to specify which %SPR is an appropriate proxy; advice in literature based on assumptions about stock productivity; not robust to changes in selectivity; does not consider impacts of environmental change on productivity.
$F_{30\%}$	0.52	257,140	138,248	
$F_{40\%}$	0.68	342,854	119,094	
$F_{50\%}$	0.91	428,567	99,643	

This list also encompasses the reference points that in 2012 the NC directed the ISC to evaluate more closely.[1] Therefore, it seems reasonable to conclude that the NC has narrowed the range of F-based reference points for consideration to this list. The Council recommends that reference points for international management of North Pacific albacore be consistent with the reference points selected for domestic management. Specifically, F_{MSY} (a Level 1 reference point, see box below) should be the fishing mortality limit reference point of choice, if it can be well-estimated with the stock assessment model. However, because of the lack of understanding about the relationship between spawners and recruits (i.e., steepness, a measure of the productivity of the stock), F_{MSY} is not well-estimated in the current assessment and is therefore not recommended as a reference point for management at this time. (In the above table the quantities associated with F_{MAX} are equivalent to F_{MSY}. for the 2011 assessment because of the lack of a stock-recruitment relationship.) For this reason, in the short term at least, a proxy would have to be used for F_{MSY}. Like F_{MSY}/F_{MAX}, F_{MED} requires knowledge of a stock recruitment relationship, so it is not an appropriate choice for a proxy either. The interim reference point, $F_{SSB\text{-}ATHL}$, appears to be reasonably precautionary given the current assessment time series, as the projected simulated median yield and spawning stock biomass (SSB) fall close to the equilibrium yield and SSB for $F_{40\%}$. However, since this reference point is based on historical minimum stock biomass values, it would become progressively less precautionary if stock biomass is on a declining trend.

[1] The NC request additionally included $F_{10\%}$.

Categorizing Biological Reference Points

The WCPFC Scientific Committee has discussed classifying biological reference points into three categories based on the biological information available about the stock in question. (Preece, et al. 2011, p. 18): **Level 1**: If steepness is well-estimated, then F_{MSY} and B_{MSY} are appropriate limit reference points; **Level 2**: If the steepness is not well-estimated (and essentially unknown) and if the relevant life-history and fishery information (natural mortality, selectivity, maturity) are both available and reliably estimated, then $F_{SPRx\%}$ and γSSB_0 are appropriate candidate F and SSB limit reference points, respectively (with an appropriately justified rationale for the selection of the fractions x and γ); **Level 3**: If the relevant life-history and fishery information are not reliably estimated then only use the SSB-based limit reference point, γSSB_0 is appropriate.

The Council recommends the use of one of the $F_{SPR\%}$ proxies (Level 2 reference points), which do not depend on knowledge of a stock recruitment relationship as a potential F_{MSY} proxy for North Pacific albacore. For tuna management, and albacore in particular, which are considered quite productive, $F_{20\%}$ may be a reasonable limit reference point. Reference points expressed relative to stock biomass, like the current, interim F-based reference point ($F_{SSB\text{-}ATHL}$), are problematic given the high uncertainty associated with biomass estimates for this species. SPR-based reference points are more directly related to stock productivity.

For a target reference point to be precautionary, it should be set lower than the limit reference point. This reduces the likelihood that the limit reference point will be breached. Such a precautionary reduction could be determined in several different ways:

- Similar to US domestic annual catch limit (ACL)-based management, it could be selected by taking into account uncertainty in stock assessments. Based on the most recent north Pacific albacore assessment, sources of uncertainty include the lack of understanding about the relationship between spawners and recruits, potential regional differences in growth, conflicts between indices of abundance for fisheries with the same size selectivity, a lack of stockwide indices, and uncertainty about stock structure.
- If an SPR-based F limit is chosen, a more precautionary SPR reference point could be chosen as the target, e.g. $F_{20\%}$ as the limit and $F_{30\%}$ as the target.
- The HMS FMP identifies a 25% reduction from MSY or its proxy for setting the limit reference point for vulnerable stocks. Analogously, such a percentage reduction from the limit reference point could be chosen to determine the target F reference point.

At the international level, biomass reference points have not been explicitly discussed for North Pacific albacore. Biomass reference points are useful for specifying a different, or more precautionary, management response when biomass declines are encountered (e.g., implementation of a stock rebuilding plan). At this stage, the Council only recommends that biomass reference points be taken into account as part of the North Pacific albacore precautionary management framework. The Council's SSC noted that B_{MSY} had been proposed as a potential limit reference point internationally and stated that "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 uncertainties and management imprecision when fishing at F_{MSY}" (Agenda Item E.2.b, June 2012). Alternatively, consistent with the HMS FMP framework, a biomass limit reference between B_{MSY} and $0.5B_{MSY}$ could be identified. The management framework could implement a steeper linear reduction in the F limit when biomass falls below this biomass threshold (i.e., such that F is reduced to zero before B equals 0) in the harvest control rule (which we assume is equivalent to the "decision rules" identified by the NC).

The Council's HMS FMP identifies B-limit reference points set lower than B_{MSY} (or B_{MSY} proxy). Until an assessment-derived maximum sustainable yield is provided, a level 2 reference point, such as some fraction of unfished B, could be considered.

The ISC Albacore Working Group is most knowledgeable about the productivity of the stock and the impacts of the fisheries on it, and is expected to recommend reference points to the ISC Plenary at its July 2013 meeting.

4. Harvest Control Rules

Harvest control rules (HCRs) identify a pre-agreed course of action which results from reaching stock status benchmarks (e.g., triggers, thresholds or buffers) or some established economic or environmental conditions relative to reference points. Evaluation of alternative HCRs is best done in consultation with stakeholders and managers.

The Council's HMSMT reviewed six HCR forms outlined in Berger, et al. (2012): constant, threshold (or knife-edge), stair step, and three types of sliding scale HCRs (simple linear, complex linear, and non-linear). Sliding HCRs reduce harvest along a continuum when the stock falls below a threshold, while a constant HCR does not adjust with changes in stock status. Figure 1 shows the simple and complex sliding scale HCRs.

The graphs shown in Figure 1 visualize the relationship between stock status (B) and control measures such as F, catch, or effort. Although the graphs were intended only to conceptualize these functional forms, it is important to distinguish between F and catch- or effort-based measures. Thus an HCR would perform differently if the vertical axis is defined in terms of F, catch, or fishing effort.

The HMS FMP specifies a simple linear HCR with a linear reduction in F when biomass falls below B_{MSY}. A complex sliding scale form can include one or more regions where the fishing mortality rate remains constant across a range of biomass levels.

For fishery management purposes, it may be desirable to build buffers into HCRs such that stakeholders and managers have some indication that reference points are being approached. Buffers allow for both the stochastic elements (e.g., recruitment) and the deterministic elements (e.g., harvest) of the stock to co-occur within some "comfort zone." For example, stock status could be allowed to fall within some range below a threshold for a period of time before triggering a linear reduction in F, catch, or effort (the vertical axis in the figures below). For example, the HMS FMP framework includes a minimum biomass flag, set above the level at which a stock is considered overfished, as a warning that a manage response should be implemented to allow biomass to increase.

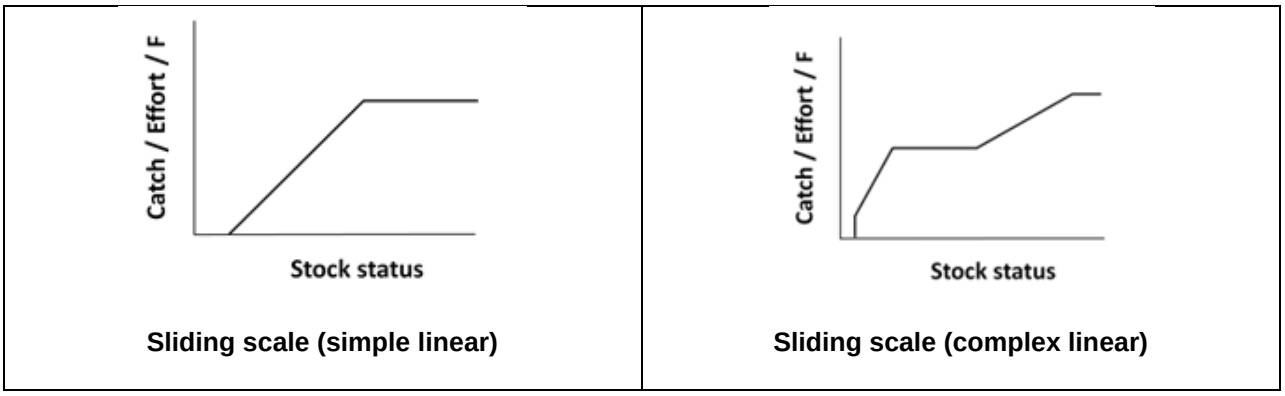

Figure 1. General form of simple and complex sliding scale HCRs. The horizontal axis, "stock status," is relative stock biomass. The vertical axis represents the management response. (Source: Berger, et al. 2012)

In examining the range of HCR forms described in Berger, et al. (2012) the Council recommends the simple linear sliding scale form be considered as a North Pacific albacore HCR. Although either the simple or complex linear forms could be used in a precautionary framework for the management of albacore, with management based on either F or catch, the Council recommends against considering the complex linear sliding scale harvest control rule, because the high uncertainty associated with this stock's parameter estimates and status do not support implementation of a more complex HCR. Nonetheless, a complex linear form could reduce the frequency of management adjustments by including a "plateau" in the region around B_{MSY} (or the target B) but well-above a biomass level that might trigger more aggressive measures to rebuild the stock.

Reference points chosen as HCR thresholds should consider all factors that explain variability in assessed stock levels including not only fishing mortality, but natural environmental variation and assessment uncertainty. HCRs should balance the biological risks of overfishing or overfished stocks against the costs of lost fishing opportunity or unnecessary management.

Berger, et al. (2012) recommend a management strategy matrix to convey management advice and trade-offs associated with different decisions. The matrix is a way to convey the probability of achieving given objectives within a certain timeframe when alternative HCRs are applied. Short of a full management strategy evaluation (MSE), the Council recommends such an approach for evaluating candidate HCRs for the North Pacific albacore precautionary management framework. Because of uncertainty in the fishery system, such as biases in the data, incorrect population assumptions (e.g., growth rates, fecundity) and other aspects, it will be important to more fully test different reference points and control rules through a MSE.

5. Management Measures to Reduce Fishing Mortality

Despite not having an HCR for North Pacific albacore, the fishery has operated under conservation measures since the adoption of international measures to limit effort to 2002-04 levels (WCPFC CMM 2005-03, IATTC Resolution C-05-02). The NC has begun compiling statistics on catch and effort for fisheries targeting North Pacific albacore. The NC has also been monitoring fishing effort with respect to 2002-2004 levels by collecting information by gear type on days fished and number of vessels fishing for North Pacific albacore. At the June 2013 Inter-American Tropical Tuna Commission (IATTC) meeting, a new resolution on North Pacific albacore was adopted, which requires comparable reporting.

Once a control rule is established, management measures are needed to achieve any required fishing mortality reduction in response to declines in biomass below the target or limit. Catch-based and effort-based measures are used as proxies for mortality reduction. Effort-based measures limit fishing mortality

indirectly based on a presumed positive correlation between a given effort measure and catch; effort-based measures would need to relate the effort measure used for regulation to the expected reduction in catch mortality. Potential effort-based measures include time-and-area closures, capital controls (e.g. restrictions on numbers of lines, vessel size, hold capacity or other technological constraints on fishing power), or limits on numbers of vessels permitted to fish or on days fished. Catch-based management measures typically involve establishing a Total Allowable Catch (TAC) in concurrence with the control rule, which may be allocated by season, by sector, or by fishery based on gear selectivity for different age classes of fish.

Each type of mortality-reduction measure has advantages and disadvantages. Days fished or numbers of vessels fishing are conceptually simple, but create incentives to increase fishing power, for example due to changes in vessel capital. In principle, this could be addressed by also imposing gear or other vessel capital restrictions, though such capital restrictions would be difficult to verify, and might also restrict vessels from the most economically efficient fishing methods. Another possibility would be to require a larger-than-proportional reduction in effort compared to the desired reduction in fishing mortality, in anticipation of an offsetting increase in fishing power. Limiting the number of vessels in a fishery would be easier to implement and verify than days fished. Given heterogeneity of fishing power across a fleet, attention would need to be paid to the relative fishing power of vessels which stopped fishing versus those which remained active.

Such effort-based measures serve to limit fishing mortality indirectly based on the relationship between effort and catch. While some nations fishing for North Pacific albacore, including the U.S., have demonstrated the ability to manage based on effort, it has become apparent at the international level that managing all North Pacific albacore fisheries based on effort has been problematic for a number of reasons. There has been little appetite by most nations to agree on a common effort metric, and even the most basic form of data, such as vessels fishing or days fished, has been slow in coming. Furthermore, the submitted data have not been independently verified. The challenge with managing effort under the current resolutions is one of the reasons for the NC work plan to establish a precautionary management framework for NP albacore.

TACs would need to reflect total catch, not just landings. Limiting catch might lead to high-grading or unreported discards, resulting in the need for additional monitoring. The measure of mortality for monitoring and reporting would need to be in comparable terms across fleets and national fisheries, whether by weight, number of fish, economic yield, or population impacts based on fleet selectivity and age structure. A standardized measure of population impacts based on age selectivity for the different methods used and locations fished could provide flexibility in how different national fleets achieve a required mortality reduction. If it is necessary to consider fishery selectivity in allocation decisions, stock assessment results should include: 1) an F-at-age matrix; 2) Y/R analysis by fishery; and 3) a fishery impact analysis. With such information, allocations can be applied by fishery or by life history stage, if needed. Allocations could be made flexible by making them transferable or tradable, allowing an overage in one season to be balanced by a reduced allocation the next, or averaging catch over several seasons. The uncaught portion of one sector's allocation could be reallocated to others later in the season.

Using the simple linear HCR introduced as an example, if B is shown to be some level below the B-target, international managers could apply a catch limit to bring the catch level down to an associated level along the slope of the linear HCR or to some level that is considered sustainable based on the historical B time series. Catch limits could be adjusted iteratively based on the B trajectories of future assessments until annual B estimates remain around the B-target (i.e. the probability of B falling below B-target is approximately 50 percent). Similarly, if F is shown to be at some level above the F-target, catch restrictions could be imposed and adjusted iteratively until future assessments show that F estimates center around the F-target. Catch restrictions, in the form of quotas or total allowable catches could be

applied equitably across fleets or may be more appropriately directed toward fleets having the greatest impact on the stock based on their patterns of selectivity. Likewise, the same example could be used for effort-based measures.

Monitoring, control, and surveillance needs pose a challenge to reducing mortality in an international management context, with respect to costs, feasibility and reciprocal verification. High observer costs might potentially be reduced by using a vessel monitoring system or other electronic surveillance technology as a substitute. Placing observers on board may not be feasible for some vessels. Self-reporting of catch or effort creates incentives for underreporting, suggesting the possible need for reciprocal verification to prove the effectiveness of mortality reduction measures.

The current interim reference point, $F_{SSB\text{-}ATHL}$, is effort-based and provides a status quo reference point that assumes that the current mix of gear types remains constant. The definition of effort is key to any reference point based on fishing effort, and some effort metrics may be more informative than others (e.g., number of vessels or vessel-days vs. number of hooks in the water). Currently, fishing effort for this species is not measured to the degree needed to support reference points based on fishing effort.

In conclusion, given that the effort information submitted to the NC is incomplete and the challenges with managing effort, it may be preferable to develop catch-based measures at the international level.

6. References and Materials Consulted for this Report

Berger, AM, S J Harley, G M Pilling, N Davies, and J Hampton. 2012. Introduction to Harvest Control Rules for WCPO Tuna Fisheries. Eighth Regular Session of the Scientific Committee, August 7-15, 2012. Busan, Korea. WCPFC-SC8-2012/MI-WP-03

Deroba, Jonathan J. and James R. Bence. 2008. A Review of Harvest Policies: Understanding Relative Performance of Control Rules *Fisheries Research* 94(3): 210-223.

Harley, SJ, AM Berger, GM Pilling, N Davies, and J Hampton. 2012. Evaluation of Stock Status of South Pacific Albacore, Bigeye, Skipjack and Yellowfin Tunas and Southwest Pacific Striped Marlin against Potential Limit Reference Points. WCPFC Management Objectives Workshop, Manila, Republic of the Philippines, 28-29 November 2012. MOW1-IP/04 (WCPFC-SC8-2012/MI-WP-01_rev1).

IATTC Proposal IATTC-85 J-1 Submitted by Canada: Draft Proposal on North Pacific Albacore

IATTC Resolution C-12-01: Amendment to Resolution C-11-01 on Tuna Conservation

International Seafood Sustainability Foundation (ISSF). 2013. Report of the 2013 ISSF Stock Assessment Workshop: Harvest Control Rules and Reference Points for Tuna RFMOs, San Diego, California, USA, March 6-8, 2013. Available as WCPFC-SC9-2013/ MI-IP-01. Ninth Regular Session of the WCPFC Scientific Committee, August 6-14, 2013, Pohnpei, FSM.

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Maunder, M and R. Deriso. 2013. Reference Points and Harvest Control Rules. Inter-American Tropical Tuna Commission Scientific Advisory Committee Fourth Meeting. La Jolla, California (USA). 29 April - 3 May 2013. Document SAC-04-09.

Preece, A., Rich Hillary, R and C Davies. 2011. Identification of candidate limit reference points for the key target species in the WCPFC. Final Report to the WCPFC. Scientific Committee Seventh Regular Session, 9-17 August 2011, Pohnpei, Federated States of Micronesia. WCPFC-SC7-2011/MI-WP-03.

WCPFC CMM 2012-01: Conservation Measure for Bigeye, Yellowfin and Skipjack Tuna in the Western and Central Pacific Ocean.

WCPFC Northern Committee. 2012. Eighth Regular Session Summary Report, Attachment D: North Pacific Albacore Catch and Effort Data.

WCPFC Northern Committee. 2012. Eighth Regular Session Summary Report, Attachment E: North Pacific Albacore Reference Points, Requests to the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean

7. Description of Candidate Reference Points

Reference Point	Description
$F_{SSB-ATHL}$	Fishing mortality rate that maintain the spawning stock biomass (SSB) above the average level of its ten historically lowest points (ATHL) with a probability greater than 50%
F_{MAX}	F corresponding to maximum yield per recruit
$F_{0.1}$	F at which slope of Y/R is 10% of value at origin
F_{MED}	Fishing mortality rate corresponding to the median observed recruit/SSB ratio
$F_{x\%}$	F that reduces SSB/R to x% of unfished state

Source: ISC. 2010. A Review of Candidate Biological Reference Points for Northern Stocks of Highly Migratory Species in the North Pacific Ocean. ISC/10/Plenary/04.

Framework for a Precautionary Management Approach for North Pacific Albacore

Preliminary Draft Proposal
Version U.S. 2

The following should be considered an early draft seed effort of a North Pacific Albacore precautionary management approach framework document, with the expectation that it will evolve or engender a similar document to fulfill the schedule in the Northern Committee Work Program. This draft document is organized according to the following section headers, each of which contains a description of the future content of such a section (*italized* blue font) or draft language proposed for consideration (non-italized black font).

Purpose

This section should contain a Purpose Statement reflecting the precautionary intent and justification reasoning on the Northern Committee (NC) record, together with appropriate refinements.

Goals and Objectives

The goals and objectives of this North Pacific Albacore Precautionary Management Approach Framework (APMA) are as follows.

1. Maintain the long-term conservation and sustainable catch of North Pacific Albacore (NP Albacore) by implementing precautionary fishery management strategies that significantly reduce the risk of overfishing; provide for rapid recovery from an overfished condition, should it occur; and achieve an optimum level of average yield relative to the biologically sustainable maximum.
2. Implement harvest strategies that are robust with respect to scientific and management uncertainty.
3. Establish measures to facilitate rapid and successful implementation of any necessary future management actions, in an equitable manner to all Members, Co-operating Non-Members, and if appropriate, Participating Territories (CCM) fishing for NP Albacore or incidentally taking NP Albacore, and in a manner that provides a disincentive to any CCM that does not comply with the provisions of this APMA.
4. Maintain and support long-term economic and social benefits to the various NP Albacore fishery participants of CCMs.
5. Provide a long-term, stable supply of high-quality NP Albacore to consumers.
6. Implement measures to adequately account and manage for total fishery related mortalities, including directed and incidental fishery impacts, including discarded fish not landed.

DRAFT

Scope

This PMA applies directly to CCM with registered or authorized vessels fishing for NP Albacore, and is structured to apply also to those with vessels that have incidental or non-directed catches as well as those with vessels that do not now but may enter directed or incidental fisheries in the future.

This APMA is intended to align with essentially similar precautionary approach elements presumed at some point to be adopted by the IATTC for waters of its jurisdiction (see IATTC Resolution C-13-03, points 5 and 6).

Fishery Data Requirements

This section should describe and list catch and effort accounting and reporting necessities, and any associated fishery data obligations, of all CCM fishing for or otherwise catching NP Albacore. It will note WCPFC CMMs (such as 2005-03) and IATTC Resolutions as appropriate and replicate critical wording as appropriate.

Biological Reference Points

This section should have a description of the specific proposal for reference points, with citation to an Appendix that would include background material and candidate reference points the proposal was selected from.

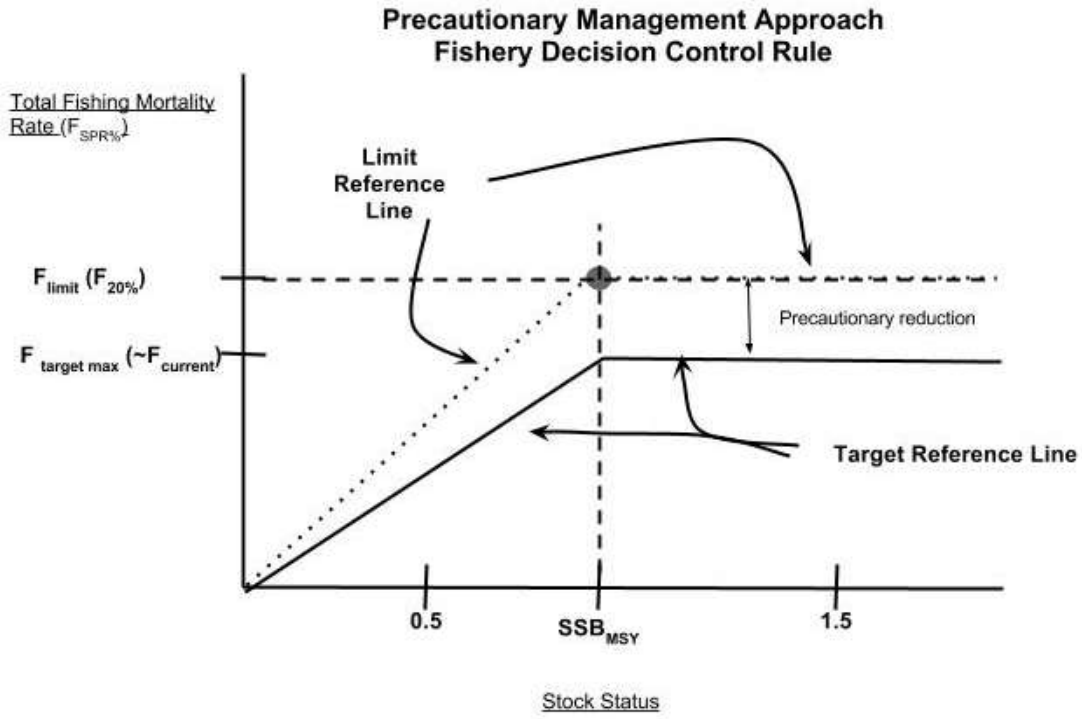
This section should provide specifics of both fishery limit and stock status biological reference points proposed to be adopted by this APMA. The draft fishery limit reference point proposed in this document, in the spirit of a starter for serious discussions, is an SPR-based F limit: $F_{20\%}$. $F_{current}$ would also be presented as a reference point, with the selection of a recent base period defining "current" to be completed at some future point. A reference point of $F_{target\ max}$, a primary precautionary buffer feature of this approach, would also be discussed in an introductory manner in this section, relative to a fuller description within the Fishery Decision Control Rules section. The draft proposal for primary stock status reference point is SSB_{MSY}.

Fishery Decision Control Rules

This section should include introductory narrative that notes the decision control rule is intended to cover the current stock status, considered to be in good condition, as well as situations where the stock status increases, the stock status is declining, and the stock status collapses unexpectedly. The introductory narrative should also include reference to the precautionary target catch buffer concept relative to the limit reference point of $F_{20\%}$.

The graphic below represents a fishery decision control rule for the total aggregate catch, with the Y axis showing SPR fishing rates and the X axis showing stock status. The horizontal dashed line is intended to represent the best available scientific estimate of the biological reference point associated with the aggregate sustainable spawning-adult-equivalent SPR fishing rate, while the vertical dashed line is intended to represent the maximum yield spawner biomass point. Thus, the diagonal dotted line is intended to represent a limit reference associated with overfishing at spawner biomass levels less than the MSY point. The solid line represents the precautionary fishing target rates to be observed by aggregate CCMs. The target fishing rate intercepts the X axis at zero in recognition of the need for an incidental *de minimis* catch at stock collapse levels.

DRAFT



This section should describe the precautionary buffer concept in specific detail and what it is supposed to accomplish as a cushion for management and scientific uncertainty. As a seed idea to promote further dialogue, this buffer should be considered as a straight percentage, such as 5% or 20%, representing a contemporary estimate of uncertainty, as opposed to a formulaic calculation based on annual or updated assessments of management precision and stock assessment or other scientific variability.

Individual CCM fishery decision control rules are to be based on a similar CCM-specific graph with fishing rates that are a subset of the total aggregate fishing rate. CCM-specific "partial F" fishing rates should be developed at some point reflective of base period data, together with a description of how a CCM specific fishing rate translates to an annual catch via a stock assessment; a three year average catch limit should also be considered. It also would be useful to construct an Appendix showing three hypothetical CCM-specific catch limits associated with three hypothetical stock assessments.

There are no detailed fishery decision rules associated with fishing effort, such as a vessel-day scheme, because this APMA relies on catch control as the essential mechanism. However, there is an overarching management measure described below precluding significant increases in net effort capacity by any CCM directed at NP Albacore.

Fishery Management Measures

This section should describe the use of a total allowable catch (TAC) for each CCM and associated fishery management measures responsive to fishery decision control rule thresholds. It should include the concept that incidental non-target catches are to be accounted for and taken off the top of each CCM's TAC. The following represent some things that could be included at some future point.

DRAFT

Stock Category: Current stock status (good) and if stock status increases

Catch Management Measure

- *Insert definition as to what this category is relative to X axis on the control rule graph, and how it translates to an individual CCM catch level, across gear types.*
- *This section should provide for the flexibility for each CCM to manage for its individual F_{target} catch limit, be it via seasonal closures, area closures, quotas, or other measures it is confident can control total catch.*
- *At some point in the future, this subsection should address the question of catch management precision, such as consideration of an annual slippage allowance for F_{target} exceedance with three year averaging; carry-over and overage payback provisions, etc.*

Effort Management Measure

- *This section will describe a provision intended to accomplish no net increase in fishing effort or capacity. While this could be viewed as a "no new boats" concept that allows for replacement of vessels lost or decommissioned, effort measurements may be in metrics different than vessel or tonnage capacity, e.g. vessel days fished, hooks deployed, etc. The intent of this effort management measure is to prevent acute increases in fishing effort while relying on catch-based management measures as the primary management measure.*

Stock Category: Declining stock status and collapsed stock status

Catch MM

Effort MM

Exceptions, Reviews, and Enforcement

This section should describe the principle that full accounting of fishery impacts to NP Albacore, with no exceptions or exclusions such as artisanal fishery exceptions. In the event there is a claim under WCPFC Article 30 from small island developing States, arrangements for full accounting and compliance with the overall fishery control rule need to be assured.

There shall be an effectiveness review of this APMA after every NP Albacore stock assessment, or after five years in the event a stock assessment is delayed for that period of time.

Compliance monitoring reporting and enforcement shall be done in accordance with proposed CMM 2012-2, presuming it is finalized and adopted in a timely manner. However, if there is not clarity within CMM 2012-2, Section VI, paragraph 23 by August, 2014 about a penalty for exceeding the allowable catch limit, insufficiency in reporting directed catch amounts, or the building of new boats directed towards entering this fishery, then the Northern Committee shall develop penalty language to accomplish Goal 3 above regarding (1) insuring equitable treatment for those countries that comply and (2) instituting an obvious disincentive for significant non-compliance.

Assumptions and Attachments

This section is to include a description of assumptions and attachments.

DRAFT

Draft Northern Committee 9 Results Report

2.3.2 North Pacific albacore

65 The ISC presented its response to NC8 request on NP albacore (NC9-IP-04). The US and Canada invited other participants to work on the margins of NC9 to begin developing reference points to form the basis of a precautionary approach management framework for North Pacific albacore.

66 While agreement could not be reached on a suitable limit reference point, progress was made on a ~~US presented its~~ concept paper tabled by the US regarding precautionary management framework for north pacific albacore. It provides the elements to be included the future management framework for the species. The participants appreciated the US initiative. It was agree that the paper will be discussed at NC10 in conjunction with the new stock assessment results. The US proposal is attached as **Attachment G**). Participants agreed to resubmit to the ISC the questions posed from NC8 so that responses can be updated based on the 2014 stock assessment.

Attachment G

The Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean

Northern Committee
Ninth Regular Session

Fukuoka, Japan
2–5 September 2013

Precautionary Management Framework for North Pacific Albacore
(USA Concept paper)

Introduction

At the Sixth Regular Session of the Northern Committee (NC), Canada submitted a paper (WCPFC-NC6-DP02) on the development of a precautionary fishery management regime for the northern stocks. Building on this paper, NC7 agreed to a three-year Work Programme to develop a precautionary management framework for North Pacific (NP) albacore.

Important elements of a precautionary management framework including management objectives, limit and target reference points for stock size and fishing mortality, and associated decision rules (e.g., pre-agreed actions that will be taken in the event that a limit reference point is breached). Under the NC's Work Programme, NC9 is tasked with agreeing on appropriate reference points and decision rules.

In accordance with Convention Article 6, and as set out in the Northern Committee Work Programme, the Northern Committee further develops a precautionary management framework for North Pacific albacore as follows:

1. Management Objectives

To build upon the fundamental management objectives for highly migratory fish stocks as set out in the Convention, the Northern Committee will work to establish specific management objectives for NP albacore fisheries. In doing so, the Northern Committee will contribute to, and consider the outcomes of, the Commission's "management objectives workshop" initiative.

2. Biological Reference Points

Following the hierarchical approach adopted by the Commission:

Level	Condition	LRPs
Level 1	A reliable estimate of steepness is available	F_{MSY} and B_{MSY}
Level 2	Steepness is not known well, if at all, but the key biological (natural mortality, maturity) and fishery (selectivity) variables are reasonably well estimated.	$F_{X\%SPR_o}$ and either $X\%SB_o$ or $X\%SB_{current,F=0}$
Level 3	The key biological and fishery variables are not well estimated or understood.	$X\%SB_o$ or $X\%SB_{current,F=0}$

- NP albacore is to be treated as a Level-2 stock.[1]
- The limit reference point for the fishing mortality rate, or F-limit, is $F_{[\ ]\%SPR}$.[2]
- The limit reference point for the stock size, or B-limit, is $[\ ]\%SB_{current,F=0}$.[3,4]

The Northern Committee will work to establish a control rule in which the F-limit decreases with decreasing B, of the type illustrated in Canada's 2010 paper (WCPFC-NC6-DP02).

Once specific fishery management objectives have been adopted, the Northern Committee will work to establish target reference points for F and/or B, the purpose of which will be to guide the formulation of management strategies such that the fishery management objectives are achieved.

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[1] This determination is based on the information provided by the ISC (see NC9-IP-03).

[2] This F-limit replaces the interim F-limit, $F_{SB\text{-}ATHL}$.

[3] Based on the information provided by the ISC (see NC9-IP-03), B-limit should be $X\%SB_{current,F=0}$ (unfished SB) rather than $X\%SB_0$ (initial SB) because the estimate of the latter is highly uncertain.

[4] The F-limit and B-limit are specified such that the B-limit serves as a second line of defense behind the F-limit, as follows: If the stock were fished at the F-limit, SB would be expected to average about a particular level associated with that level of F, but would vary above and below that level due to variation in recruitment, natural mortality, and other environmental factors. To accommodate such expected natural variation, it is appropriate that SB be allowed to decrease some amount below the level associated with the F-limit before taking the serious corrective action that would be triggered by breaching the B-limit. The greater the stock's expected natural variation, the greater that allowance should be (to a certain point). A stock's natural mortality rate, M, is a crude indicator of the degree of natural variation in SB that would be expected under a constant fishing mortality rate. Therefore, it is appropriate to set the B-limit at (1-M) times the proportion of unfished SB that would be expected, on average, when fishing at the F-limit. For NP albacore, M is estimated to be 0.25, so the B-limit is set at [ ]% of unfished SB.

3. Decision Rules

The Northern Committee will develop and recommend management strategies for the stock that ensure that the risk of F exceeding F-limit and of B decreasing below B-limit is very low, as follows: With respect to the B-limit, the Northern Committee will use a risk level of [ ] percent. With respect to the F-limit, until target reference points are established, the Northern Committee will account for risk by designing management strategies such that F is unlikely to exceed [ ] percent of the F-limit. The Northern Committee will periodically request the ISC to evaluate the performance of a suitable range of alternative management strategies with respect to these limits and risk levels.

In the event that, based on information from the ISC, the fishing mortality rate exceeds the F-limit for at least one year, the Northern Committee will, at its next regular session, or intersessionally if warranted, recommend a conservation and management measure that can be expected to reduce F to less than the F-limit within one year of its adoption.

In the event that, based on information from the ISC, the spawning stock size decreases below the B-limit at any time, the Northern Committee will, at its next regular session, or intersessionally if warranted, adopt a reasonable timeline for rebuilding the spawning stock to at least the B-limit and recommend a conservation and management measure that can be expected to achieve such rebuilding within that timeline. Furthermore, the Committee will develop management strategies that are consistent with the pre-agreed levels of F specified in any adopted control rule.

The Northern Committee will work to establish specific pre-agreed management measures that would be automatically triggered upon breaching a limit and/or warning reference point.

Agenda Item A.3
Supplemental NMFS Report
September 2013

Northwest & Southwest Regional Offices' Realignment:

Draft Division Organizational Charts of the NMFS West Coast Regional Office

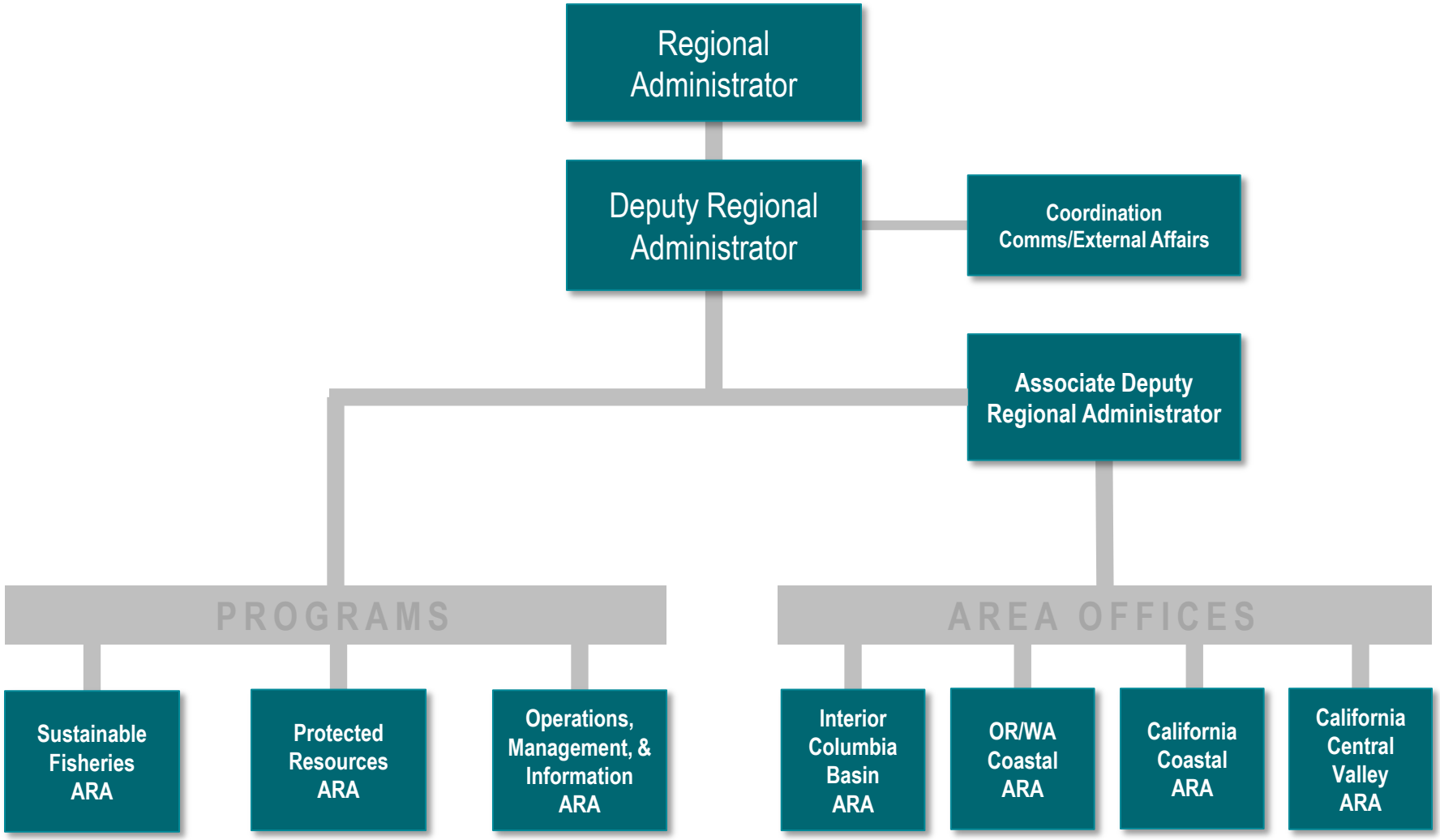
For Internal Distribution

September 4, 2013

NOAA FISHERIES

West Coast Region

HQ approved August 5, 2013



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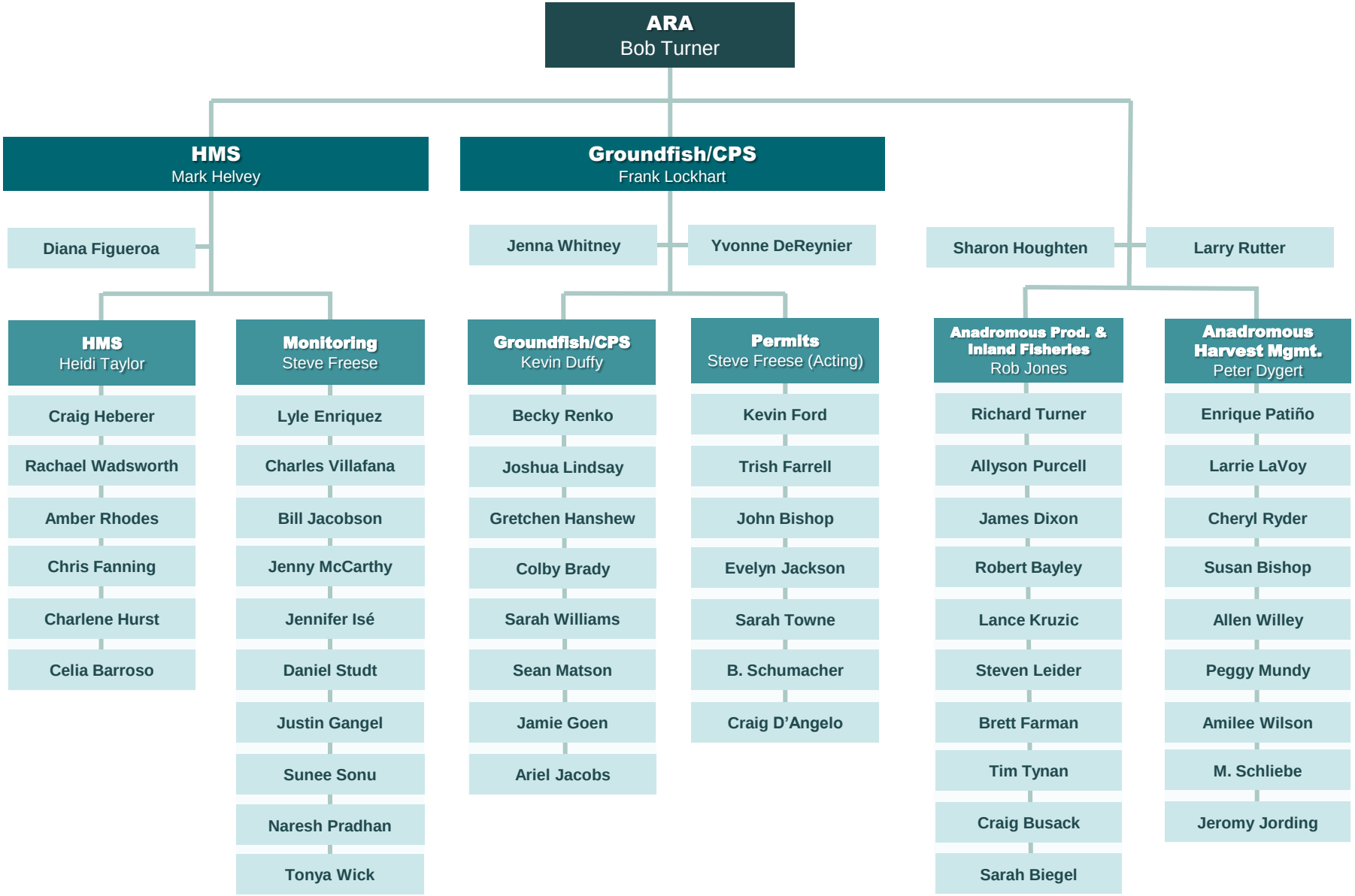
Sustainable Fisheries



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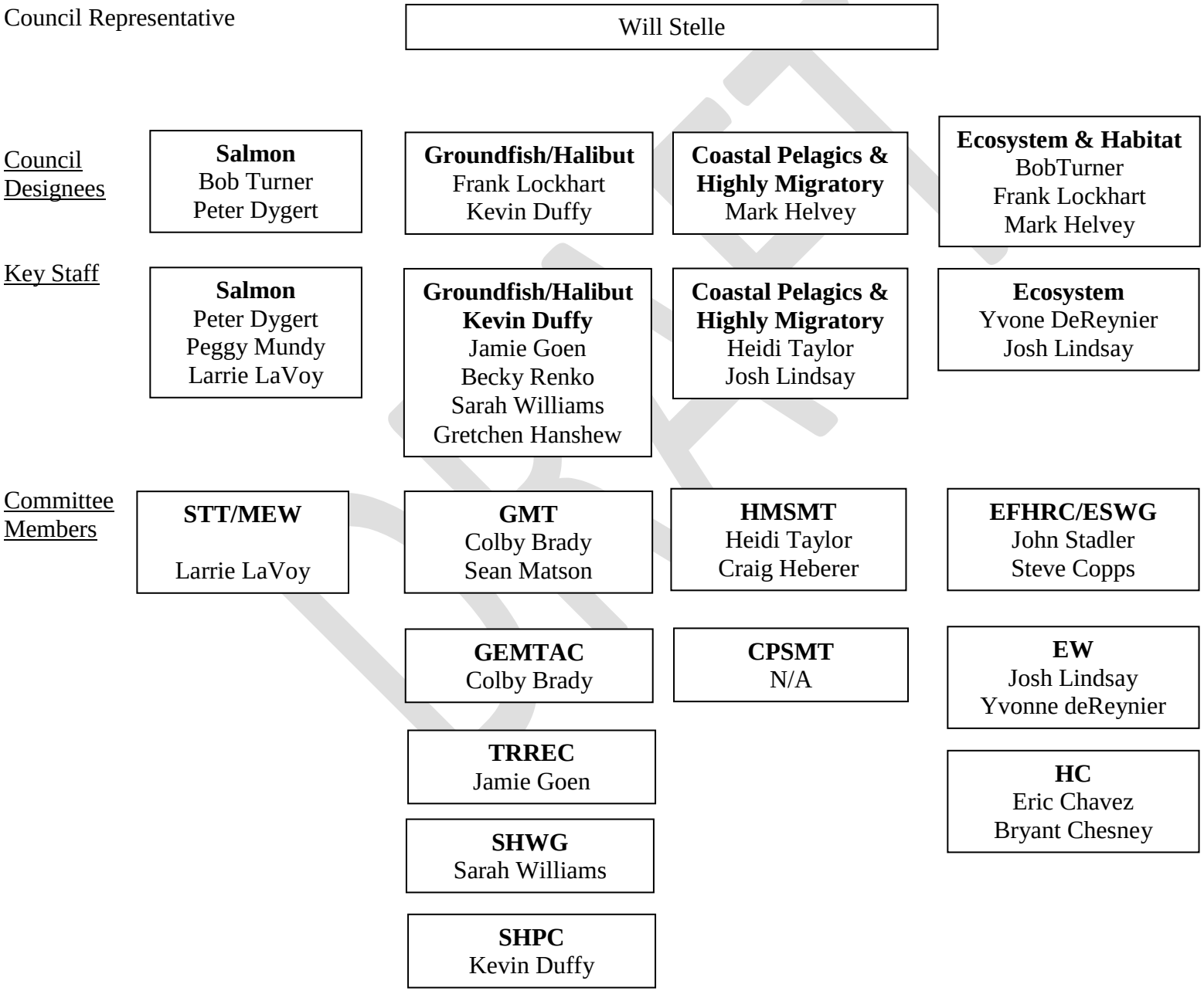

Agenda Item A.4
Proposed Detailed Agenda
September 2013

220th Session of the Pacific Fishery Management Council

September 11-17, 2013

The Riverside Hotel
2900 Chinden Blvd, Boise, ID 83714
Telephone - 208-343-1871

Wednesday Sept 11	Thursday Sept 12	Friday Sept 13	Saturday Sept 14	Sunday Sept 15	Monday Sept 16	Tuesday Sept 17
A listing of times and locations for Advisory Body meetings begins on page 8.	Call to Order	Salmon	Administrative	Groundfish	Groundfish	Ecosystem Based Management
	Open Comment					
	Enforcement					Administrative
	Pacific Halibut	Habitat	Groundfish			
	Salmon	Groundfish			Administrative	
	Closed Session				Ecosystem Based Management	

Schedule of Ancillary Meetings begins on page 8.

Refer to the Schedule of Ancillary Meetings beginning on page 8 for a complete list of technical and administrative committees, advisory bodies, work groups, state delegations, and special sessions scheduled throughout the period of September 11 – September 17, 2013.

Proposed Detailed Agenda begins on the next page.

The following items are on the Pacific Council agenda. However, please note that the timing--including the day--of the agenda items may change on the basis of the time required for prior agenda items and the order may change as required to effectively address the issues.

Council Action descriptions to adopt imply consideration to adopt; adoption is not mandatory.

220th Session of the Pacific Fishery Management Council
September 12-17, 2013

Proposed Detailed AGENDA

Thursday, September 12, 2013
8:00 AM Juniper-Laurel Ballroom

A. Call to Order

A.1 Opening Remarks — Dorothy Lowman, Chair
A.2 Roll Call — Don McIsaac
A.3 Executive Director's Report — Don McIsaac
A.4 Agenda — Dorothy Lowman
  a. **Council Action**: Approve Agenda

B. Open Comment Period

B.1 Comments on Non-Agenda Items
  a. Advisory Body and Management Entity Comments
  b. Public Comment
  c. Council Discussion of Comments as Appropriate

C. Enforcement Issues

C.1 Tri-State Enforcement Report
  a. Agenda Item Overview — Jim Seger
  b. Tri-State Enforcement Report — David Anderson, Dan Chadwick, Robert Puccinelli
  c. Reports and Comments of Advisory Bodies and Management Entities
  d. Public Comment
  e. **Council Action**: Discussion and Guidance, as Needed

D. Pacific Halibut Management

D.1 Pacific Halibut Bycatch Estimate
  a. Agenda Item Overview — Kelly Ames
  b. National Marine Fisheries Service Recommendation — NW Fisheries Science Center
  c. Reports and Comments of Advisory Bodies and Management Entities
  d. Public Comment
  e. **Council Action**: Review and Provide Guidance on the Pacific Halibut Bycatch Estimate for use by the International Pacific Halibut Commission in 2014 Fisheries

D.2 2014 Pacific Halibut Regulations
  a. Agenda Item Overview — Kelly Ames
  b. Reports and Comments of Advisory Bodies and Management Entities
  c. Public Comment
  d. **Council Action**: Adopt for Public Review Proposed Changes for the 2014 Pacific Halibut Catch Sharing Plan and Annual Fishing Regulations

Thursday, September 12, 2013 (continued from previous page)

E. Salmon Management

E.1 2013 Salmon Methodology Review

a. Agenda Item Overview — Mike Burner
b. Reports and Comments of Advisory Bodies and Management Entities
c. Public Comment
d. **Council Action**: Adopt Final Review Priorities and Consider Recommendations for Sacramento Winter Chinook Harvest Control Rules

Closed Executive Session

This session is closed to all except Council members, their designees, and others designated by the Council Chair to discuss litigation and personnel matters.

Friday, September 13, 2013
8:00 AM Juniper-Laurel Ballroom

A. Call to Order (reconvene) — Dorothy Lowman

A.5 Commencing Remarks — Don McIsaac

E. Salmon Management (continued)

E.2 Fishery Management Plan Amendment 18 – Update of Essential Fish Habitat (EFH) for Salmon

a. Agenda Item Overview — Kerry Griffin
b. Summary of Amendment 18 Alternatives — Kerry Griffin and John Stadler
c. Reports and Comments of Advisory Bodies and Management Entities
d. Public Comment
e. **Council Action**: Final Adoption of Salmon EFH Updates

E.3 Lower Columbia River Double-Crested Cormorant Management Plan

a. Agenda Item Overview — Mike Burner
b. Reports and Comments of Advisory Bodies and Management Entities
c. Public Comment
d. **Council Action**: Provide Comments to U.S. Army Corps of Engineers

F. Habitat

F.1 Current Habitat Issues

a. Agenda Item Overview — Jennifer Gilden
b. Report of the Habitat Committee — Fran Recht
c. Reports and Comments of Advisory Bodies and Management Entities
d. Public Comment
e. **Council Action**: Consider Habitat Committee Recommendations

Friday, September 13, 2013 (continued from previous page)

G. Groundfish Management

G.1 National Marine Fisheries Service Report

a. Agenda Item Overview — Kelly Ames
b. Regulatory Activities — Frank Lockhart
c. Northwest Fisheries Science Center Activities — John Stein, Michelle McClure
d. Reports and Comments of Advisory Bodies and Management Entities
e. Public Comment
f. Council Discussion

G.2 Sablefish Permit Stacking Program Review

a. Agenda Item Overview — Jim Seger
b. Reports and Comments of Advisory Bodies and Management Entities
c. Public Comment
d. **Council Action**: Provide Guidance on Calendar, Process, and Content of Program Review

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Saturday, September 14, 2013
8:00 AM Juniper-Laurel Ballroom

A. Call to Order (reconvene) — Dorothy Lowman

A.6 Commencing Remarks — Don McIsaac

H. Administrative Matters

H.1 Managing Our Nation's Fisheries 3 Conference Follow-ups and Unrelated Legislative Matters

a. Agenda Item Overview — Jennifer Gilden
b. Report of the Legislative Committee — Dave Hanson
c. Reports and Comments of Advisory Bodies and Management Entities
d. Public Comment
e. **Council Action**: Identify Priorities for Consideration in Amending the Magnuson-Stevens Act, and Consider Other Legislative Committee Recommendations

G. Groundfish Management (continued)

G.3 Approve Stock Assessments

a. Agenda Item Overview — John DeVore
b. Reports and Comments of Advisory Bodies and Management Entities
c. Public Comment
d. **Council Action**: Adopt Final Stock Assessments for Rougheye, Aurora, Shortspine Thornyhead, Longspine Thornyhead, and Cowcod Rockfishes, and Pacific Sanddab

Saturday, September 14, 2013 (continued from previous page)

G. Groundfish Management (continued)

G.4 Science Improvements for the Next Groundfish Management Cycle

a. Agenda Item Overview — John DeVore
b. Northwest Fisheries Science Center Report — Michelle McClure
c. Reports and Comments of Advisory Bodies and Management Entities
d. Public Comment
e. **Council Action**: Prioritize and Plan for 2014 Science Improvements

G.5 Consideration of Inseason Adjustments

a. Agenda Item Overview — Kelly Ames
b. Reports and Comments of Advisory Bodies and Management Entities
c. Public Comment
d. **Council Action**: Adopt Inseason Adjustments to 2013 Groundfish Fisheries, Including Petrale Sole Carryover

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Sunday, September 15, 2013
8:00 AM Juniper-Laurel Ballroom

A. Call to Order (reconvene) — Dorothy Lowman

A.7 Commencing Remarks — Don McIsaac

G. Groundfish Management (continued)

G.6 Consideration of Trawl Rockfish Conservation Area (RCA) Boundary Modifications

a. Agenda Item Overview — Kelly Ames
b. Reports and Comments of Advisory Bodies and Management Entities
c. Public Comment
d. **Council Action**: Consider Recommendations for Trawl RCA Boundary Modifications for 2013-2014 Groundfish Fisheries

G.7 Initial Actions for Setting 2015-2016 Groundfish Fisheries

a. Agenda Item Overview — John DeVore, Kelly Ames
b. Reports and Comments of Advisory Bodies and Management Entities
c. Public Comment
d. **Council Action**: Adopt Final Overfishing Limits and Preliminary P*s/Acceptable Biological Catches, Consider New Management Measures and Modifications to Council Operating Procedure 9

G.8 Consider Stock Complex Aggregations

a. Agenda Item Overview — John DeVore
b. Reports and Comments of Advisory Bodies and Management Entities
c. Public Comment
d. **Council Action**: Consider Analysis of Stock Complex Aggregations Alternatives

Sunday, September 15, 2013 (continued from previous page)

G. Groundfish Management (continued)

G.9 Trawl Rationalization Trailing Actions Scoping, Process, and Prioritization

a. Agenda Item Overview — Jim Seger
b. NMFS Reports — Frank Lockhart
c. Reports and Comments of Advisory Bodies and Management Entities
d. Public Comment
e. **Council Action:** Set priorities for upcoming trailing action cycle, including guidance on priorities for implementing past actions.

(This Item Continues on Monday)

Monday, September 16, 2013
8:00 AM Juniper-Laurel Ballroom

A. Call to Order (reconvene) — Dorothy Lowman

A.8 Commencing Remarks — Don McIsaac

G. Groundfish Management (continued)

(This Item Continued from Sunday)

G.9 Trawl Rationalization Trailing Actions Scoping, Process, and Prioritization

a. Agenda Item Overview — Jim Seger
b. NMFS Reports — Frank Lockhart
c. Reports and Comments of Advisory Bodies and Management Entities
d. Public Comment
e. **Council Action:** Set priorities for upcoming trailing action cycle, including guidance on priorities for implementing past actions.

G.10 Electronic Monitoring Scoping

a. Agenda Item Overview — Brett Wiedoff
b. Reports and Comments of Advisory Bodies and Management Entities
c. Public Comment
d. **Council Action**: Consider Range of Issues and Provide Guidance on Development of Alternatives and Analyses for Electronic Monitoring Regulations in the Rationalized Groundfish Trawl Fishery

H. Administrative Matters (continued)

H.2 Approval of Council Meeting Minutes

a. Council Member Review and Comments — Dorothy Lowman
b. **Council Action**: Approve Previous Council Meeting Minutes

H.3 Fiscal Matters

a. Agenda Item Overview — Chuck Tracy
b. Report of the Budget Committee — Dave Ortmann
c. Reports and Comments of Advisory Bodies and Management Entities
d. Public Comment
e. **Council Action**: Consider Budget Committee Report

Monday, September 16, 2013 (continued from previous page)

I. Ecosystem-Based Management

I.1 Update List of Fisheries

a. Agenda Item Overview — Mike Burner
b. Reports and Comments of Advisory Bodies and Management Entities
c. Public Comment
d. **Council Action**: Final Adoption of Updates to the List of Fisheries

I.2 Unmanaged Forage Fish Protection Initiative

a. Agenda Item Overview — Mike Burner
b. Reports and Comments of Advisory Bodies and Management Entities
c. Public Comment
d. **Council Action**: Provide Guidance on Amending Fishery Management Plans to Protect Forage Species

(This Item Continues on Tuesday)

Tuesday, September 17, 2013
8:00 AM Juniper-Laurel Ballroom

A. Call to Order (reconvene) — Dorothy Lowman

A.9 Commencing Remarks — Don McIsaac

I. Ecosystem-Based Management (continued)

(This Item Continued from Monday)

I.2 Unmanaged Forage Fish Protection Initiative

a. Agenda Item Overview — Mike Burner
b. Reports and Comments of Advisory Bodies and Management Entities
c. Public Comment
d. **Council Action**: Provide Guidance on Amending Fishery Management Plans to Protect Forage Species

H. Administrative Matters (continued)

H.4 Membership Appointments and Council Operating Procedures

a. Agenda Item Overview — Chuck Tracy
b. Reports and Comments of Advisory Bodies and Management Entities
c. Public Comment
d. **Council Action**: Appoint Individuals to Advisory Bodies and Consider Changes to Council Operating Procedures

H.5 Future Council Meeting Agenda and Workload Planning

a. Agenda Item Overview — Don McIsaac
b. Reports and Comments of Advisory Bodies and Management Entities
c. Public Comment
d. Council Discussion and Guidance on Future Meeting Agenda and Workload Planning

ADJOURN

SCHEDULE OF ANCILLARY MEETINGS
September 11-17, 2013

Day 1—Wednesday, September 11, 2013	**Time**	**Location**
Groundfish Advisory Subpanel	8:00 AM	Tamarack Room
Groundfish Management Team	8:00 AM	Aspen Room
Scientific and Statistical Committee	8:00 AM	North Star Room
Habitat Committee	8:30 AM	Liberty Room
Council Secretariat	11:00 AM	Ponderosa Room
Budget Committee	12:00 PM	Emerald Room
Legislative Committee	2:30 PM	Emerald Room
Enforcement Consultants	5:00 PM	Delamar Room

Day 2—Thursday, September 12, 2013	**Time**	**Location**
Council Secretariat	7:00 AM	Ponderosa Room
California State Delegation	7:00 AM	Tamarack Room
Oregon State Delegation	7:00 AM	Cinnabar Room
Washington State Delegation	7:00 AM	North Star Room
Groundfish Advisory Subpanel	8:00 AM	Tamarack Room
Groundfish Management Team	8:00 AM	Aspen Room
Scientific and Statistical Committee	8:00 AM	North Star Room
Habitat Committee	8:00 AM	Liberty Room
Enforcement Consultants	As Needed	Delamar Room
Chair's Reception	6:00 PM	Lawn Area by Fireside Foyer

Day 3—Friday, September 13, 2013	**Time**	**Location**
Council Secretariat	7:00 AM	Ponderosa Room
California State Delegation	7:00 AM	Tamarack Room
Oregon State Delegation	7:00 AM	Cinnabar Room
Washington State Delegation	7:00 AM	North Star Room
Groundfish Advisory Subpanel	8:00 AM	Tamarack Room
Groundfish Management Team	8:00 AM	Aspen Room
Scientific and Statistical Committee	8:00 AM	North Star Room
Enforcement Consultants	As Needed	Delamar Room

Day 4— Saturday, September 14, 2013	**Time**	**Location**
Council Secretariat	7:00 AM	Ponderosa Room
California State Delegation	7:00 AM	Tamarack Room
Oregon State Delegation	7:00 AM	Cinnabar Room
Washington State Delegation	7:00 AM	North Star Room
Groundfish Advisory Subpanel	8:00 AM	Tamarack Room
Groundfish Management Team	8:00 AM	Aspen Room
Ecosystem Advisory Subpanel	8:00 AM	Liberty Room
Enforcement Consultants	As Needed	Delamar Room

Day 5— Sunday, September 15, 2013	Time	Location
Council Secretariat	7:00 AM	Ponderosa Room
California State Delegation	7:00 AM	Tamarack Room
Oregon State Delegation	7:00 AM	Cinnabar Room
Washington State Delegation	7:00 AM	North Star Room
Groundfish Advisory Subpanel	8:00 AM	Tamarack Room
Groundfish Management Team	8:00 AM	Aspen Room
Ecosystem Advisory Subpanel	8:00 AM	Liberty Room
Enforcement Consultants	As Needed	Delamar Room

Day 6— Monday, September 16, 2013	Time	Location
Council Secretariat	7:00 AM	Ponderosa Room
California State Delegation	7:00 AM	Tamarack Room
Oregon State Delegation	7:00 AM	Cinnabar Room
Washington State Delegation	7:00 AM	North Star Room
Groundfish Advisory Subpanel	8:00 AM	Tamarack Room
Groundfish Management Team	8:00 AM	Aspen Room
Enforcement Consultants	As Needed	Delamar Room

Day 7—Tuesday, September 17, 2013	Time	Location
Council Secretariat	7:00 AM	Ponderosa Room
California State Delegation	7:00 AM	Tamarack Room
Oregon State Delegation	7:00 AM	Cinnabar Room
Washington State Delegation	7:00 AM	North Star Room

PFMC
8/23/2013 9:12 AM

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