

Stock Structure /Spatial management workgroup Report

Administrative and background

Workgroup Participants: Farron Wallace (SSC), Anne Hollowed (SSC), Dana Hanselman (BSAI co-Chair), Grant Thompson (BSAI co-Chair), Jim Ianelli (GOA co-chair), Jon Heifetz (GOA co-chair), Paul Spencer (GOA), Cindy Tribuzio (BSAI), Ian Stewart (GOA and IPHC), Alan Haynie (BSAI), Glenn Merrill (NMFS RO), Mary Furuness (BSAI and NMFS RO), Jim Armstrong (GOA and Council staff), and Diana Stram (BSAI and Council staff).

Workgroup meetings: In order to meet the Council's request from October, a small group comprised of Plan Team, Council staff, NMFS RO, and SSC members met to discuss outstanding issues of stock structure/spatial management focusing on recommendations for moving forward in this cycle with BSAI blackspotted/rougheye rockfish and clarifications of the Council's policy. The group met twice by teleconference on November 13th and December 3rd.

Council motion in October 2015:

The Council will form a workgroup and begin discussion and development of stock structure and spatial management for BSAI and GOA with an emphasis to begin the discussion with BSAI Blackspotted/Rougheye rockfish.

Council Spatial Management Policy (adopted October 2013):

1. *As soon as preliminary scientific information indicates that further stock structure separation or other spatial management measures may be considered, the stock assessment authors, plan teams (groundfish, crab, scallop), and SSC should advise the Council of their findings and any associated conservation concerns.*
2. *With input from the agency, the public, and its advisory bodies, the Council (and NMFS) should identify the economic and management implications and potential options for management response to these findings and identify the suite of tools that could be used to achieve conservation and management goals. In the case of crab and scallop management, ADF&G needs to be part of this process.*
3. *To the extent practicable, further refinement of stock structure or other spatial conservation concerns and potential management responses should be discussed through the process described in recommendations 1 and 2 above.*
4. *Based on the best information available provided through this process, the SSC should continue to recommend OFLs and ABCs that prevent overfishing of stocks.*

Outstanding Issues of Clarification from the Joint Groundfish Plan Team minutes, 2014

The workgroup discussed and made recommendations to address issues raised in the 2014 Joint Plan Team minutes (attached). The 6 issues with resulting recommendations are listed below.

“The Teams recommend that the following outstanding issues and questions of clarification be forwarded to the appropriate body (SSC, Council, or both):”

1. “Does the Council’s policy apply only to spatial structure, or does it also apply to stock structure? For example, does it apply to the process of splitting a stock out from a complex, or only to spatial management of the complex?”

The workgroup recommends that the Council clarify that this policy applies equally to both spatial structure/management and stock structure issues. The workgroup recommends that the Council rename the policy as the “Stock Structure and Spatial Management policy.”

2. “Need for specific guidance on the role of the Teams.”

The workgroup feels that the list of alternative tools/options to be identified under Step 2 of the Council’s policy should always include separate harvest specifications at the TAC level, the ABC level, the OFL level, or all three.

To help make this understanding explicit, the workgroup recommends that the Joint Plan Teams revise their spatial management and stock structure policy as described in the 2014 JPT minutes to read (changes in red and underlined; changes to “Little or no concern” are related to recommendations listed under question #3):

The Teams recommend that the following scale of concern be adopted in the context of the Council’s stock structure and spatial management policy (with the understanding that the list of alternative tools/options to be included under Step 2 of the Council process should always include separate harvest specifications at the TAC level, the ABC level, the OFL level, or all three, and that all actions described here would be contingent on SSC concurrence):

- *Little or no concern*, in which case no action needs to be taken. This includes situations where information is insufficient to determine a level of concern, which may motivate additional research.
- *Moderate concern*, in which case special monitoring (e.g., frequent updating of the template) is required at a minimum and Steps 2 and 3 of the Council’s process may be activated
- *Strong concern*, in which case Steps 2 and 3 of the Council’s process must be activated
- *Emergency*, in which case the Team will recommend separate harvest specifications at the ABC level, the OFL level, or both, for the next season (straight to Step 4 of the Council policy)

The workgroup further recommends that the Council amend Step 2 of its policy to read (changes in red and underlined):

With input from the agency, the public, and its advisory bodies, the Council (and NMFS) should identify the economic and management implications and potential options for management response to these findings and identify the suite of tools that could be used to achieve conservation and management goals. This suite of tools should always include separate harvest

specifications at the TAC level, the ABC level, the OFL level, or all three. In the case of crab and scallop management, ADF&G needs to be part of this process.

Given the above clarifications, the workgroup recommends the following role for the Teams: 1) The Teams will typically be the first to propose a level of concern for a stock or stock complex, or modification of an existing level of concern, as they are typically the first to receive new scientific information that might relate to stock structure concerns. 2) Because separate harvest specifications at the TAC level, the ABC level, the OFL level, or all three are always included in the suite of tools to be identified under Step 2 of the Council policy, there will typically be no need for the Teams to recommend separate ABCs or OFLs while Step 2 of the Council policy is being conducted. 3) In the event of an emergency, where waiting for completion of Step 2 would pose a serious conservation concern, the Teams may propose separate ABCs or OFLs for the coming harvest year. 4) Once Steps 1-3 of the Council process have been completed, the Teams may recommend management responses, including separate ABCs or OFLs.

3. “Need for a proactive default policy that covers both of the following cases: 1) data are insufficient to determine whether a biological concern exists, and 2) sufficient data exist to make such a determination but time or other resource constraints are anticipated to prevent those data from being analyzed for several years.”

There was considerable discussion about the difference between a situation where there is a finding of “little or no concern” based on a lack of stock structure or a low exploitation rate, or a situation in which there is insufficient data to make any finding.

The workgroup recommends amending the description of “little or no concern” in the Joint Plan Team policy as listed above (see changes listed under question #2) to clarify that this category includes cases where either lack of data or constraints on evaluation of data preclude, at least for the time being, the identification of some other level of concern.

4. Clarification of whether the current inconsistencies in spatial management between the two FMP areas that were summarized by the Stock Structure Working Group should be further examined or revised (and to whom such a charge would be assigned).

The workgroup discussed the differences in spatial management between the two groundfish FMPs, noting that there are a variety of reasons for these, including the biology of the species, SSL measures, and fleet characteristics. The workgroup concluded that, from the perspective of stock structure/spatial management issues, the differences in spatial management reflect reasonable responses to available information.

5. “How much time is allowed for acceptance (by the Council or SSC) of an industry response to a management concern?”

The workgroup discussed the differences between stocks and complexity of management implications of spatial/stock structure recommendations. Two examples were noted of the time frame for adapting to a need for alternative spatial management: BSAI Pacific cod and BSAI BS/RE rockfish. For cod, almost five years passed from the first indications of the need for an area split to the enacting of one, due to complex management implications and regulatory response. For BS/RE, two years have passed since the first indication of “strong concern” (however, as early as 2012 the BSAI Team noted concerns regarding spatial management of this stock). While the workgroup understands that each situation will be different and involve varying degrees of complexity, the workgroup feels that five years is too long for an effective response to evidence of stock concern. Given this, the workgroup proposes the following timeline for

Council consideration in conjunction with Step 2 of the Council’s policy, with the understanding that a somewhat longer time frame may be necessary for actions involving rulemaking:

Month	Action
September/October (year 1)	Notification of strong stock structure concern. SSC indicates to Council that it has 11 months to develop suite of tools and management and economic implications of the application of these tools to the stock/complex in question.
March/April (year 1)	Suite of proposed management tools compiled. One of these would be separate ABCs and/or OFLs per recommendations listed earlier.
March/April-August (year 1)	Evaluation of suite of management tools for consideration of management and economic implications. Note that this does not necessarily mean a comprehensive analysis; this could simply be an informed listing of the likely implications of each tool.
September/October (year 2)	Team/SSC/Council review of suite of tools and selection of approach for use in the coming harvest year (assuming that the approach does not require rulemaking).
2 years later: September/October (year 4)	Update on result of application of tool. If deemed insufficient to address issue, consideration of additional measures (e.g., area split).
Continuing forward annually in September/October	If management tool successful over 2 year time frame, continued annual update on progress. Consideration of performance criteria for continued need for tool.

The workgroup notes that further discussion and work is needed to identify the role of the Teams and the SSC in developing performance criteria to assess the degree to which a tool is successful in addressing strong stock structure concerns and under what conditions the tool should be considered no longer necessary.

6. “What is the relationship between evidence of stock structure and degree of concern? Two possibilities have been discussed: 1) degree of concern is synonymous with strength of evidence of stock structure, and 2) degree of concern is a function of both the strength of evidence of stock structure and the extent to which the fishery is impacting that structure.”

The workgroup recommends that the relationship between stock structure and degree of concern is by necessity relative to impacts due to fishing pressure (or foreseeable future fishing pressure). Evidence of stock structure does not necessarily lead to a higher level of concern, while high localized exploitation with no evidence of significant stock structure may, particularly in the case of insufficient data to make a finding about stock structure. Therefore the workgroup recommends clarifying that degree of concern is a function of both the strength of evidence of stock structure and the extent to which the fishery is impacting that structure.

BSAI Blackspotted/Rougeye rockfish (BSAI BS/RE)

The workgroup discussed in detail the specific issue of BSAI BS/RE rockfish and plans for application of Step 2 of the Council’s policy (and schedule as noted above) in 2016.

Paul Spencer provided an overview of issues related to BS/RE catch by area and the evolution of the maximum sub-area species catch (MSSC) levels recommended for the past two years. He noted that the MSSC was not intended as a goal but it might be perceived as such. The discussion noted issues with implementation of the MSSC over the past two years, including some difficulty on the part of the fleet in

awareness of the catch level and accrual of catch towards that level. The MSSC is not a regulatory management measure and therefore was not listed in the harvest specifications document. The MSSC is now listed in a separate catch report on the RO website. The fleet is now aware of the goal of MSSC but the RO intends to use additional information tools to communicate with the fleet in 2016, e.g., information bulletins.

The group discussed issues related to this MSSC, such as: Is this something to be used only to guide voluntary efforts when they occur? (i.e., the MSSC would become unnecessary if the fishing fleet decided not to take voluntary efforts to reduce catch). Or it is to be used as a management goal, not to be exceeded, and which would be established irrespective of any voluntary efforts from the fishing fleet? The group discussed other potential tools, including area- or subarea-specific OFLs/ABCs/TACs. The BSAI PT recommended the use of MSSC for 2016. The workgroup discussed how to move forward in 2016 such that, if in September/October of 2016 the MSSC is not found to be a sufficient tool, the Council will be prepared to select alternative/additional tools for use in 2017. The workgroup recommends that the schedule as listed above be followed for BSAI BS/RE rockfish in 2016, so that in March a suite of alternative tools has been identified and by September 2016 an evaluation of the management and economic implications of these is provided to the SSC and Council.

The workgroup seeks the following general clarifications from the Council in December in order to move forward in 2016 for BSAI BS/RE:

- Who should propose additional management tools and what is the role of the public in identifying them?
- Who will evaluate the suite of tools?
- What is (or, is there) a continued role for the workgroup in this process?

Attachment: Joint Plan Team minutes on stock structure policy

November 2014

Stock structure and spatial management policy

Grant Thompson presented an update on recent Team and SSC comments regarding stock structure. He reviewed two “scales of concern:” 1) a three-level scale, which was adopted for provisional use by the BSAI Team in September 2013; and 2) a four-level scale (shown below), which was discussed but not adopted by the Joint Teams in November 2013, but which was used at the same meeting by the BSAI Team.

The Teams recommend that the following scale of concern be adopted in the context of the Council’s stock structure and spatial management policy (with the understanding that all actions described here would be contingent on SSC concurrence):

1. *Little or no concern*, in which case no action needs to be taken
2. *Moderate concern*, in which case special monitoring (e.g., frequent updating of the template) is required at a minimum and Steps 2 and 3 of the Council’s process may be activated
3. *Strong concern*, in which case Steps 2 and 3 of the Council’s process must be activated
4. *Emergency*, in which case the Team will recommend separate harvest specifications at the ABC level, the OFL level, or both, for the next season (straight to Step 4 of the Council policy)

In October of this year, the SSC requested that the Teams assign a level of concern to all stocks for which the stock structure template has already been completed.

The Teams recommend assigning the following levels of concern to stocks for which the stock structure template has already been completed (shaded cells indicate levels established at this meeting):

FMP	Chapter	Stock	Author	Level
BSAI	1A	AI pollock	Barbeaux	Little
BSAI	2	BS Pacific cod	Thompson	Little
BSAI	4	Yellowfin sole	Wilderbuer	Little
BSAI	6	Arrowtooth flounder	Spies	Little
BSAI	13	Northern rockfish	Spencer	Little
BSAI	14	Blackspotted/rougheye rockfish	Spencer	Strong
BSAI	15	Shortraker rockfish	Spencer	Moderate
BSAI	16	Other rockfish	Spies	Moderate
BSAI	17	Atka mackerel	Lowe	Little
BSAI	18	Skates	Ormseth	Little
BSAI	21	Sharks	Tribuzio	Little
GOA	1	Pollock	Dorn	Little
GOA	7	Arrowtooth flounder	Spies	Little
GOA	9	Pacific ocean perch	Hanselman	Little
GOA	12	Dusky rockfish	Lunsford	Little
GOA	13	Rougheye/blackspotted rockfish	Shotwell	Little
GOA	17	Atka mackerel	Lowe	Little
GOA	18	Skates	Ormseth	Strong
GOA	20	Sharks	Tribuzio	Little

The Teams noted that, in some cases, “little” concern was identified in part because sufficient data were lacking to indicate otherwise.

In October 2014, the SSC also made the following recommendation:

“The SSC recommends that the current stock structure policy include a requirement for a recommended maximum area specific catch level when a stock or stock complex is elevated to the level of ‘concern.’ This would provide a clear guide to industry regarding what reductions in catch would be needed to alleviate the ‘concern.’ This area specific catch level would likely be estimated by the assessment author with review and comment by the Plan Teams and SSC.”

The above request was prompted by the case of BSAI blackspotted/rougheye, in which the fishing fleet expressed an interest in voluntarily taking steps for reducing incidental catch in the WAI for 2014, but a WAI ABC had not been adopted. In fall of 2013, a representative of the fishing fleet obtained an unofficial potential WAI catch level directly from the assessment author, and interpreted this number as a *de facto* ABC to guide fishing operations. Team members felt that it is laudable for the fishing industry to have taken steps to reduce catch. However, the process followed in 2013 resulted in a recommended harvest level that was not scientifically reviewed and was inaccessible to the general public.

The Teams noted that, since the policy in question is a Council policy, it will be up to the Council to consider the SSC’s request for an amendment to that policy. However, the Teams did discuss some features that such an amendment might include.

The Teams recommend that any suggested subarea catch level be reviewed by the respective Team, be obtained in a transparent process, and be accessible to the public so that progress in meeting management goals can be easily monitored. The term “maximum subarea species catch” was proposed as a label for subarea harvest recommendations that are not included in the OFL/ABC specifications.

The Teams also noted that several of the outstanding issues and questions of clarification identified at the November 2013 Joint Team meeting do not appear to have been addressed.

The Teams recommend that the following outstanding issues and questions of clarification be forwarded to the appropriate body (SSC, Council, or both):

- Does the Council’s policy apply only to spatial structure, or does it also apply to stock structure? For example, does it apply to the process of splitting a stock out from a complex, or only to spatial management of the complex?
- Need for specific guidance on the role of the Teams.
- Need for a proactive default policy that covers both of the following cases: 1) data are insufficient to determine whether a biological concern exists, and 2) sufficient data exist to make such a determination but time or other resource constraints are anticipated to prevent those data from being analyzed for several years.
- Clarification of whether the current inconsistencies in spatial management between the two FMP areas that were summarized by the Stock Structure Working Group should be further examined or revised (and to whom such a charge would be assigned).
- How much time is allowed for acceptance (by the Council or SSC) of an industry response to a management concern?
- What is the relationship between evidence of stock structure and degree of concern? Two possibilities have been discussed: 1) degree of concern is synonymous with strength of evidence of stock structure, and 2) degree of concern is a function of both the strength of evidence of stock structure and the extent to which the fishery **is impacting that structure.**