West Coast Best Scientific Information Available Regional Framework

The NOAA Fisheries Framework for Determining that Stock Status Determinations and Catch Specifications are Based on the Best Scientific Information Available (BSIA) Procedural Directive [01-101-10; May 7, 2019] requires each Region to develop a regional BSIA framework that describes how it applies the general NOAA Fisheries BSIA Framework described below, and in the associated workbook, to ensure that management decisions, specifically for stock status determinations and catch specifications, are based on BSIA. The framework should include a general timeline, identify the roles for each partner, be publicly available, and describe necessary modifications from the general NOAA Fisheries Framework. For the purposes of this framework, the partner organizations are the Northwest Fisheries Science Center and the Southwest Fisheries Science Center (Centers), the Pacific Fishery Management Council (PFMC), the Council's Scientific and Statistical Committee (SSC), the West Coast Region (WCR). Partners may also include outside entities, such as States, Tribal organizations or international organizations, who either collaborate on producing the scientific information or who produce it themselves and who may manage the review process for the information. The roles of each of these partners are identified in the workbook tables.

This framework is intended to describe the process NOAA Fisheries relies upon when it certifies that status determinations and catch specifications management actions are consistent with BSIA. While NOAA Fisheries officially certifies that a catch specification or stock status determination is based on BSIA, it strengthens management outcomes if each Council partner organization understands and acknowledges the process by which BSIA is determined. The Attachment 2 spreadsheet describes the roles and responsibilities of each partner organization for each step in the framework described in the policy directive. Those steps include: Stock Assessment; Peer Review; SSC and NOAA Fisheries Steps; Catch Specifications; and NOAA Fisheries Approval.

This is not intended to be an exhaustive or exclusive list of responsibilities of any of the member groups, nor is it intended to limit the abilities of the partner groups to address emergent or unusual circumstances using their collective best judgment. The document is intended to illustrate the general order of the flow of scientific information throughout the management process. Below, "information" is used to indicate that information used to make status determinations or catch specifications. There are five sections for the West Coast -- Highly Migratory Species (HMS), Coastal Pelagic Species (CPS), Groundfish, Salmon, and Hake -- as the processes vary between each. In summary, the "stock assessment" steps in each describe the process of developing a stock assessment, from prioritization to working group formation and model selection and completion. Most HMS stock assessments and Salmon abundance estimates are not led by Center scientists, and are conducted independently as described in the framework.

NS2 Guidelines lists seven criteria for evaluating BSIA: relevance, inclusivity, objectivity, transparency and openness, timeliness, verification and validation, and peer review¹. NS2 Guidelines underscore the importance of peer review in ensuring information used in status determinations and catch specifications constitutes BSIA². The Peer Review section may differ by assessment type or species group as there are slightly different responsibilities, particularly for the SSC depending on the assessment type and level and because not all information used for status determinations or catch specifications undergoes review by the SSC. For CPS, Groundfish, and some Salmon stocks, the SSC, as a whole, serves as a peer review body, with the relevant FMP subcommittee and sometimes Center for Independent Expert panelists serving as part of initial review panels. For information developed in conjunction with or outside of the Centers, and not wholly by them, this framework provides general details for when that information is reviewed outside the SSC.

The "SSC/NOAA Fisheries Steps" describes the process of scientific information proceeding from the Center or from the organization who conducted the assessment to the SSC through Council staff, as appropriate. This section describes the SSC's work on developing an acceptable biological catch (ABC) recommendation for the Council, if appropriate. For groundfish and CPS, the Pacific Fishery Management Council includes a Terms of Reference to guide the reviews that are used by the SSC to "certify" that the recommendations are based on BSIA. While NOAA Fisheries determines if an action complies with the Magnuson-Stevens Fishery Conservation and Management Act National Standard guidelines, including National Standard 2 it is helpful for the SSCs to include an acknowledgment that they consider their recommendations to be based on BSIA. The "Catch Specifications" section describes the process for specifications and management measures, if appropriate. The "NOAA Fisheries Approval" section documents if there is a determination of BSIA on the information and Council recommendations on behalf of the Secretary. For HMS, while status determinations are made using these assessments, many HMS stocks are internationally managed and thus catch specifications are not required for them.

¹ Peer review may occur outside of the Council process in some cases and the NS2 FRN notes this approach [https://www.federalregister.gov/documents/2016/08/16/2016-19522/magnuson-stevens-act-provisions-national-standard-2-scientific-information-regional-peer-review]. The guidelines state, "If formal peer review is not practicable due to time or resource constraints, the development and analysis of scientific information used in or in support of fishery management actions should be as transparent as possible, in accordance with paragraph (a)(6)(iv) of this section."

MSA paragraph (a)(6)(iv) Transparency and openness.

⁽A) The Magnuson-Stevens Act provides broad public and stakeholder access to the fishery conservation and management process, including access to the scientific information upon which the process and management measures are based. Public comment should be solicited at appropriate times during the review of scientific information. Communication with the public should be structured to foster understanding of the scientific process.

⁽B) Scientific information products should describe data collection methods, report sources of uncertainty or statistical error, and acknowledge other data limitations. Such products should explain any decisions to exclude data from analysis. Scientific products should identify major assumptions and uncertainties of analytical models. Finally, such products should openly acknowledge gaps in scientific information.

² The NS2 Guidelines' reliance on peer review is derived from OMB's 2005 Final Information Quality Bulletin for Peer Review, [https://www.federalregister.gov/documents/2005/01/14/05-769/final-information-quality-bulletin-for-peer-review]

Therefore, a BSIA framework for information for catch specifications is not included in the HMS framework. Similarly for salmon, much of the information used for management is developed by committees and technical teams external to the Council process³.

NMFS BSIA Point(s) of Contact to the SSC

- BSIA POCs will focus on issues related to National Standard 1 (and perhaps some elements of National Standard 2 interpretation), and the corresponding agency National Standard Guidelines.
- The Centers may identify a POC (and perhaps a designee) per FMP, and those persons will likely be drawn from levels ranging from supervisor/manager to division director and have familiarity with the science and management of the species in the respective FMP.
- The POCs are not expected to attend each SSC meeting, but should be aware of issues and topics as they relate to BSIA. They may need to be present for some discussions.
- SSC will alert POCs to upcoming or emerging BSIA topics that may need attention.
- This role is specified in the PD [01-101-10; May 7, 2019] under *iii*. and *iv*.

Science Center review of BSIA disagreements between Science Centers and the SSC

NMFS views SSC review of information used in many status determinations and catch specifications as integral to BSIA determinations. Occasionally, issues that were not raised as part of review panel discussions may surface as part of discussion by the full SSC or its relevant subcommittee, and may need to be addressed before recognition of an assessment as BSIA is advisable. In practice, every effort is made to resolve potential disagreements between NMFS Science Centers and the SSC regarding the BSIA status of any information used for status determinations or catch specifications by the time a final decision is required. To date, additional work requested or discussion has been sufficient to resolve disagreements in time for a management process to proceed. The purpose of the process outlined below is to provide an additional avenue for resolving differences prior to the time at which management decisions must proceed.

Ultimate determination of BSIA for federal fisheries management lies with the Secretary of Commerce, as informed by advice from NMFS. It nevertheless remains in NMFS' interest to

³Footnote 1 in BSIA Procedural Directive PD 01-101-10: Within FMPs there are some stocks that will require altered or abbreviated BSIA procedures because of extremely short timelines or a preponderance of involvement by State or Tribal entities, such as for Pacific salmon with the Pacific Fishery Management Council and crab with the North Pacific Fishery Management Council. In these cases, NOAA Fisheries will follow, to the extent practicable, the process outlined below for determining the BSIA.

ensure that a difference of judgment regarding whether new science represents BSIA is thoroughly reviewed, and reviewed as early as possible in the Council's specification-setting process.

Resolution of BSIA disagreements between the PFMC, its SSC, and NMFS will emphasize the importance of timely, joint efforts and collaborative efforts to resolve the issue where possible and by building from the positive working relationships enjoyed by NMFS and PFMC. Where those efforts fail to resolve consequential BSIA disagreement by the time the SSC provides the Council with a recommendation.

The following approach for NMFS review of areas of disagreement will be followed.

As soon as practicable after conflict between a Science Center position and a final SSC BSIA recommendation is realized, the Directors of the Northwest and Southwest Fishery Science Centers will convene a Special BSIA Review Panel (SBRP) meeting to evaluate the persisting area(s) of disagreement, and the impact of those on management guidance. The SRP will consist of the Science Directors of the Northwest and Southwest Fishery Science Centers and 1-2 other experts from outside the west coast NMFS establishment. Given the likely need for this review to be conducted within a matter of weeks from the time the conflict is apparent, these experts would likely be solicited from other NMFS Science Centers around the country, though they could be drawn from other situations.

The case for supporting NMFS science products would fall to the authors (and their programmatic supervisors, as needed). One or more members of the SSC will be requested (via the Council's Executive Director, if not Science Center employees) to present the rationale supporting the SSC's recommendation. Following the conclusion of this review, the Science Center Directors will notify the Regional Administrator and Council's Executive Director and Chair as to whether the Agency's BSIA finding remains at odds with that of the SSC.

In the event that the initial BSIA disagreement involves one or more science products developed primarily by individuals who are not NMFS employees, those individuals would be invited to present their arguments to the SRP, and individuals from both the SSC and related Science Center Programs would be afforded an opportunity to speak on their reasons for supporting, or opposing, endorsement of the new science as BSIA.

Figure1. General process for development and application of BSIA from Groundfish and CPS stock assessments

