

NATIONAL MARINE FISHERIES SERVICE FINAL DRAFT
WEST COAST FRAMEWORK FOR BEST SCIENTIFIC INFORMATION AVAILABLE

As discussed with the Council in [June 2018](#) and the Council Coordination Committee in October 2018, the [NOAA Fisheries Procedural Directive NMFS 01-101-10](#) instructs each Region to develop appropriate frameworks for determining that science products used in determining stock status and establishing catch specifications represent the Best Scientific Information Available (BSIA). The purpose of these frameworks is to provide clarity and increase transparency in how BSIA determinations for catch specifications and status determinations are made and documented. The procedural directive directs regions to describe existing procedures in their region and how they differ from the general BSIA Framework described in the procedural directive.

The procedural directive was finalized on May 7, 2019 and recommends that within three years, or by May 2022, each region develop a regional BSIA framework that describes how it applies the general NOAA Fisheries BSIA Framework to ensure that management decisions are based on BSIA. The Northwest Fisheries Science Center and the Southwest Fisheries Science Center began working on a draft framework in fall 2020 with feedback from the West Coast Region. In March 2020, they presented a first draft of the CPS, HMS, Groundfish and Hake sections to the SSC and a first draft of the Salmon section to the SSC in June 2021. In November 2021 the full draft BSIA framework was presented to the SSC, STT, and the PFMC; and recommendations from each of these bodies were used to update the framework. Responses to recommendations received to date are described below. Since then, the Science Centers and Regional Office have shared and mutually edited the framework resulting in the draft framework provided to the Council for the April meeting ([H.1. Attachment 1](#) and [H.1. Attachment 2](#)).

Discussion of BSIA and peer review

The importance of BSIA for federal fisheries management derives from National Standard 2 (NS2) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA, 2007, and prior versions), which states that, “Conservation and management measures shall be based upon the best scientific information available.” To implement this directive, NOAA Fisheries developed and published [NS2 Guidelines](#) (most recently in 2013), which identify seven criteria to be considered when evaluating whether science products represent BSIA: relevance, inclusiveness, objectivity, transparency/openness, timeliness, verification/validation, and peer review, as appropriate. In particular, it notes that, “Peer review is a process used to ensure that the quality and credibility of scientific information and scientific methods meet the standards of the scientific and technical community. Peer review helps ensure objectivity, reliability, and integrity of scientific information.”

A mandate underscoring the importance of peer review is presented in the [Final Information Quality Bulletin for Peer Review](#) (Management and Budget Office, 2005), which opens by stating that, “This Bulletin establishes that important scientific information shall be peer reviewed by qualified specialists before it is disseminated by the Federal government.” However, it continues that, “We recognize that different types of peer review are appropriate for different types of information. The selection of an appropriate peer review mechanism for scientific information is left to the agency's discretion.” In 2016, NOAA Fisheries published information

on major regional peer review processes in the Federal Register ([Magnuson-Stevens Act Provisions; National Standard 2-Scientific Information; Regional Peer Review Processes](#)), which included a description of the U.S. West Coast's Stock Assessment Review (STAR) process for groundfish and CPS. We note that none of these documents suggest that NOAA Fisheries must conduct or even be actively involved in conducting peer review for every type of scientific information that forms the basis for management decisions. For example, the NS2 guidelines note that, "SSC scientific advice and recommendations to its Council are based on scientific information that the SSC determines to meet the guidelines for best scientific information available... SSCs may conduct peer reviews or evaluate peer reviews to provide clear scientific advice to the Council." For U.S. West Coast groundfish and CPS assessments other than benchmarks, the SSC provides all peer review. Even for benchmark assessments that are reviewed in STAR Panels, NOAA Fisheries considers SSC evaluation as part of the review process.

In some cases, sources outside NOAA Fisheries provide information used in developing management recommendations and the information is not reviewed by PFMC advisory bodies. That information remains subject to the seven criteria listed above in determining whether it represents BSIA. However, the Federal Register notice on regional review processes acknowledges that review can occur outside the PFMC arena stating, "In addition to the peer review processes described above, NMFS uses other important peer review processes to ensure the use of the BSIA for fishery management decisions," and mentions review processes for most highly migratory species, hake, and some salmon, that are established by international agreements. Ultimately, the need for flexibility in establishing BSIA is underscored by language in the procedural directive that, "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..."

Framework structure

The framework consists of a summary orienting the reader to the various framework elements and a workbook that spells out the different processes in our region. In order to most clearly describe the range of current practices that has evolved for developing and reviewing science products and information that contribute to catch specifications and status determinations across the PFMC's domain of species, separate framework tabs are included in the Agenda Item H.1, Attachment 2 workbook for each FMP, with an additional tab for the international hake process. Within each tab, rows identify major activities involved in the development and review of assessment and related science products, as well as the use of resulting information to inform catch specifications and stock status determinations.

Columns are provided for major groups involved in those activities, with cells identifying the roles/actions associated with each group for each stage in the process. Not every group will have a role in every action. Actions differ across FMPs because of the nature of how information is developed and the varied review processes, therefore roles will not always be consistent across FMPs. NOAA Fisheries notes that the SSC has a critical role in advising the Council on BSIA. Further, those products the SSC determines to be BSIA will have the information necessary for status determination. However, as noted above, NOAA Fisheries has determined that other peer review processes may perform a similar function such that SSC review is not essential in all cases for the information to be considered BSIA.

Updates made based on recommendations

The SSC provided feedback in March and June 2021 that indicated the draft framework represented existing processes well, with a few exceptions. Other comments and suggestions covering the themes are listed below, along with the changes made in response.

- The SSC requested more detail on the proposed approach to an arbitration process in the case of disagreements between the SSC and Science Centers. Documentation of this process now describes what the Science Centers will do in such cases, and at the SSC's request, we added the NS2 criteria for BSIA to the Framework.
- Questions were raised by the SSC regarding the review and updating of the reference points used in salmon status determinations and about the process for initiating reviews of the processes and models providing inputs to annual salmon management, such as the forecasts used to inform catch specifications. NOAA Fisheries notes that some questions still remain and will engage in an effort to better document processes moving forward. Documenting the external review processes and considering how they address the NS2 guidelines would increase transparency and be a valuable action to consider after the framework is finalized.
- The SSC noted some differences in the review and harvest specifications processes for CPS versus groundfish, which are now presented separately.
- Fuller description was provided of the overfishing determination process for CPS.

Finalizing the framework

The intent is to finalize the framework shortly after the April PFMC meeting in time for the May 2022 deadline established in the procedural directive. Finalization of the Framework could be followed by a process that NOAA Fisheries undertakes with the PFMC to identify situations where the process for BSIA can be strengthened and better documented.