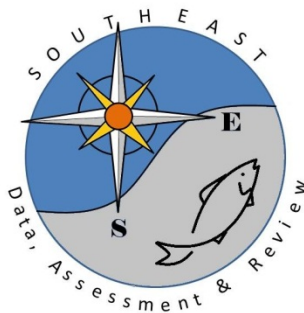


Standard Operating Policies and Procedures



SouthEast Data, Assessment, and Review

Cooperative Stock Assessment Development and Review Program of:

NOAA Fisheries Southeast Fisheries Science Center

NOAA Fisheries Southeast Regional Office

South Atlantic Fishery Management Council

Gulf of Mexico Fishery Management Council

Caribbean Fishery Management Council

Atlantic States Marine Fisheries Commission

Gulf States Marine Fisheries Commission

NOAA Fisheries Highly Migratory Species Division

SEDAR

4055 Faber Place #201
North Charleston, SC 29405

FINAL TO APPROVE FALL 2015

Table of Contents

1. Program Goals.....	5
2. Administration and Oversight	5
2.1 SEDAR Cooperators.....	5
2.2 Oversight.....	5
2.3 Administration	6
2.4 SEDAR Staff Responsibilities.....	6
2.4.1 SEDAR Program Manager	7
2.4.2 SEDAR Coordinator	7
2.4.3 SEDAR Administrative Assistant.....	7
2.5 Cooperator Obligations.....	8
3. SEDAR Panel Participant and Appointment Process.....	8
4. Public Participation	9
5. SEDAR Approach.....	10
5.1 General Process	10
5.2 Project Documentation and Dissemination	11
5.3 Science Based Decision Making	12
6. SEDAR Assessment Development Approaches	12
6.1 Benchmark Approach	12
6.2 Standard Approach	13
6.3 Update Approach	15
7. SEDAR Benchmark Approach Details.....	16
7.1 Benchmark Data Stage	16
7.2 Benchmark Assessment Stage	16
7.3 Benchmark Peer Review.....	17
7.3.1 Review Workshop Process	18
7.3.2 Desk Review Process.....	18
8. Role of the SSCs	19
9. Relation to State Agencies	19
10. NOAA Fisheries Highly Migratory Species Division	19

INTRODUCTION

Southeast Data, Assessment, and Review (SEDAR) is a cooperative Regional Fishery Management Council process initiated to improve the quality and reliability of assessments of fishery resources in the southeastern United States, including the South Atlantic, Gulf of Mexico, and US Caribbean. SEDAR is managed by the three Regional Fishery Management Councils in the Southeast in coordination with NOAA Fisheries and the Interstate Fisheries Commissions (Atlantic States MFC and Gulf States MFC). SEDAR seeks to improve the quality and reliability of stock assessments, improve the quantitative basis of fishery management actions, and increase the relevance of research and monitoring programs in the Southeast Region.

This document describes SEDAR operating policies and procedures as determined by the SEDAR Steering Committee. Nothing in this document should be considered supersede the SOPPs of any program Cooperators.

Definitions

Advisory Panel (AP)	Designated advisors within the Federal fishery management system as specified in the Magnuson-Stevens Act.
Analytical Team	Scientists appointed by the lead assessment agency who are charged with preparing technical analysis required for an assessment.
Appointed Observer	Any individual appointed by a Cooperator to observe SEDAR assessment project meetings.
AR	Administrative Record, cumulative official proceedings and administrative documentation
ASMFC	Atlantic States Marine Fisheries Commission
Assessment	A quantitative evaluation of a population parameters for a fish stock
Assessment Project	The overall process of preparing an assessment through SEDAR. An assessment project may include multiple individual stock assessments.
Assessment Stage Attendees	Individuals who attend SEDAR meetings but are not appointed by any Cooperators to a specific role.
Benchmark	A comprehensive assessment project required for first time assessments or major revisions.
CFMC	Caribbean Fishery Management Council
CIE	Center for Independent Experts. An entity established by NOAA Fisheries in 1998 to provide external, independent expert reviews of science used for policy decisions.
Confidential Data	Data which are protected by the confidentiality rules of the collecting or compiling organization. Typically applies to commercial fishery information related to a business.
Consensus	A decision making process characterized by discussion of multiple viewpoints rather than voting, and generally described as reaching a position which all participants can "live with", even if it is not their preferred position. Within SEDAR, reaching consensus can include recommending alternatives or multiple values for an assessment parameter as opposed to a single position.
Cooperator	Agencies and organizations that participate in and provide oversight of SEDAR
CTB	Cooperator Technical Body, such as an SSC of a Council or Technical Committee of an Interstate Commission
Data Stage	
Desk Review	A type of peer review where reviewers consider material on their own and submit individual written findings. There is no interaction between reviewers and those who prepared the material under review.

GMFMC	Gulf of Mexico Fishery Management Council
GSMFC	Gulf States Marine Fisheries Commission
HMS	NOAA Fisheries Highly Migratory Species Management Division
Lead Analyst	Scientist, appointed by the lead assessment agency, to lead the analytical team and conduct and oversee technical analyses required for the assessment.
Lead Assessment Agency	The agency which will conduct the primary assessment analyses required to address SEDAR assessment project Terms of Reference. For most assessments this is the SEFSC, but it can also include state marine fisheries agencies such as the Florida Fish and Wildlife Conservation Commission.
MSA	Magnuson-Stevens Act. Federal law governing fisheries management.
NGO	Non-governmental organization.
NMFS	National Marine Fisheries Service, aka NOAA Fisheries
NOAA	National Oceanic and Atmospheric Administration
OMB	Office of Management and Budget
Panel	A group of individuals appointed by a SEDAR Cooperator that is charged with making decisions and recommendations to address assessment project TORs.
Project Schedule	Detailed list of the steps and timing for an assessment project
Reference Documents	Published documents such as journal items or agency reports.
Review Stage	
SAFMC	South Atlantic Fishery Management Council
SEDAR	Southeast Data, Assessment, and Review
SEDAR Coordinator	SEDAR Staff who provide project management
SEDAR Guidelines	
SEFSC	NOAA Fisheries Southeast Fisheries Science Center
SERO	NOAA Fisheries Southeast Regional Office
SOPPs	Standard Operating Procedures and Policies
SSC	Scientific and Technical Committee. Each Council is required by the MSA to have an SSC.
Standard	One of two follow-up assessment approaches used to add recent information to an assessment.
Steering Committee	Administrative oversight body for the program
TORs	Terms of Reference, specifying the tasks and objectives for an assessment project
Update	One of two follow-up assessment approaches used to add recent information to an assessment

Webinar	A method of meeting which connects participants via the internet. Webinars allow all participants to hear each other as well as to see the same information on their computer screens.
Working Paper	Informal written documentation of data sets or analyses submitted during a SEDAR project to provide background or specific details.

1. Program Goals

- Provide robust and transparent assessments
- Provide stakeholder involvement in the assessment process
- Provide reliable and scientifically rigorous assessments
- Provide independent peer review of assessment products
- Provide timely assessment products
- Provide thorough documentation of methods and data
- Provide appropriate consistency in documentation, assessment approaches, and treatment of uncertainties

2. Administration and Oversight

2.1 SEDAR Cooperators

- NOAA Fisheries Southeast Fisheries Science Center (SEFSC)
- NOAA Fisheries Southeast Regional Office (SERO)
- South Atlantic Fishery Management Council (SAFMC)
- Gulf of Mexico Fishery Management Council (GMFMC)
- Caribbean Fishery Management Council (CFMC)
- NOAA Fisheries Highly Migratory Species Management Division (HMS)
- Atlantic States Marine Fisheries Commission (ASMFC)
- Gulf States Marine Fisheries Commission (GSMFC)

2.2 Oversight

- Oversight of the SEDAR process and operations schedule is provided by the SEDAR Steering Committee.
- The SEDAR Steering Committee shall be included as an official Council Advisory Panel (AP) in each Council's Standard Operating Policies and Procedures (SOPPs).
- The SEDAR Steering Committee shall meet at least once annually to review policies and establish the work plan.
- The Steering Committee is composed of representatives of the SEDAR Cooperators, including:
 - SEFSC Director
 - SERO Regional Administrator
 - Executive Directors of the SAFMC, GMFMC and CFMC
 - Chairs of the SAFMC, GMFMC and CFMC
 - HMS Division Chief
 - Executive Directors of the ASMFC and GSMFC.
- The SEDAR Steering Committee is supported by SEDAR Staff.

- SEDAR Steering Committee members may designate alternates.
- The SEFSC Director shall chair the Steering Committee. Officers may serve successive terms without limit.
- *The SEDAR Steering Committee shall operate primarily by consensus. This does not preclude the use of motions when there is no clear consensus or for formal actions such as approving the SOPPs.*

2.3 Administration

- SEDAR is administered through the SAFMC and GMFMC with funding provided by NOAA Fisheries and the SEFSC.
- The SAFMC Executive Director, Administrative Officer, and SEDAR Program Manager shall develop an annual (calendar year) SEDAR activities schedule and budget for consideration by the Steering Committee.
- SAFMC provides primary program staffing and support. This includes the SEDAR Program Manager, SEDAR Coordinators as needed based on workload and funding, and general SEDAR administrative support which may include a dedicated administrative assistant.
- SAFMC administers travel and meeting arrangements for all Cooperators, except in special circumstances that will be determined by the Cooperators and Steering Committee during project planning.
- SEDAR travel orders and travel reimbursement will be provided for workshop panelists, AP representatives appointed to specific workshops by a Cooperator, and SEDAR staff supporting SEDAR workshops.
- Travel orders will be issued, and reimbursements provided, in accordance with applicable SAFMC policies, rules and regulations.
- SEDAR is prohibited from providing travel support for federal employees.
- SAFMC maintains the SEDAR Administrative Record (AR).
- GMFMC provides administrative support for SEDAR workshops involving GMFMC managed species.
- The SEDAR Steering Committee may enter into alternative administrative arrangements, with Cooperators and other organizations, as deemed necessary for the program.
- If a policy or process issue arises that is not addressed by existing SEDAR policies stated in the existing SOPPS, the group where the issue arises may develop an interim consensus solution. In addition, the issue will be reported to the Steering Committee by the Coordinator for final resolution and policy development.

2.4 SEDAR Staff Responsibilities

The following is a general description of primary SEDAR staff responsibilities. The Steering Committee may approve other arrangements and assignments of these responsibilities as necessary to meet program objectives and address funding issues. Such arrangements may be described in grant documents, project plans, steering committee meeting summary, or memoranda as appropriate.

2.4.1 SEDAR Program Manager

- Ensure SEDAR SOPPS and Steering Committee policies are followed during assessment projects.
- Supervise SEDAR Staff.
- Provide staff support to the Steering Committee.
- Represent the SEDAR program at meetings and conferences as necessary.

2.4.2 SEDAR Coordinator

- Coordinate and manage SEDAR assessment projects.
- Serve as liaison between Cooperators, analytical agencies, data providers, and others involved in SEDAR projects to develop project plans and deadlines and manage progress.
- Ensure SEDAR guidelines and Steering Committee policies are followed during assessment projects.
- Represent SEDAR at Cooperator technical body (CTB, e.g., Council SSC) meetings when benchmark and standard assessments are presented and at other times as necessary when SEDAR issues are on the agenda. Attendance at CTB meetings is contingent upon funding, scheduling and availability.
- Ensure technical documentation for the AR is complete and up-to-date for each project.
- Chair, as a facilitator, data and assessment workshops.
- SEDAR coordinators will monitor project deliverables (applied comprehensively, including working papers, data and report segments) to ensure items are provided as required in project schedule deadlines. Deadlines for delivery that are not met (defined as being 7d after the deadline) will be reported by the Coordinator in writing (email sufficient) to the Cooperator's designated SEDAR contact, and the Steering Committee chair. Each cooperator will develop a process for addressing items reported as a result of this policy.
- Develop DRAFT project schedules, project Terms of Reference, and suggested participant lists in consultation with Cooperators and lead assessment agencies, for cooperator approval.
- Notify Cooperators of their responsibilities under the SEDAR guidelines and Steering Committee policies, such as appointments and administrative approvals.

2.4.3 SEDAR Administrative Assistant

- Provide administrative support to SEDAR Program Manager and Coordinators.
- Set-up and manage AV and recording equipment during SEDAR workshops.
- Serve as the administrative contact for venue staff during SEDAR workshops
- Provide initial point of contact for travel related issues involving SEDAR appointees.
- Distribute Travel Orders, meeting notices and reminders to workshop participants.
- Manage SEDAR website postings.
- Ensure the administrative documentation for the Administrative Record is complete and up to date.

2.5 Cooperator Obligations

- Each Cooperator shall approve the project schedule and terms of reference, and appoint workshop participants. The Cooperator may include review of such documents by their technical and advisory bodies as part of their approval process.
- Each Cooperator may provide notices of workshops and SEDAR activities, through press releases, mailing lists, or newsletter notices, as they deem appropriate.
- Each Cooperator shall identify a designated staff contact to serve as a lead contact and liaison between their organization and SEDAR Staff for all SEDAR projects involving their organization. Cooperators shall notify the Steering Committee Chair and Program Manager in writing of any changes in their liaison. This designee shall be responsible for:
 - Ensuring Cooperator administrative responsibilities, such as TOR and schedule approvals and panel appointments, are addressed as specified in the project schedule.
 - Notifying the SEDAR Coordinator in writing of completion of administrative tasks.
 - Assisting the SEDAR Coordinator in ensuring their organization's appointees meet deadlines for data and document submissions.
 - Assisting SEDAR staff in preparing for SEDAR workshops and ensuring designated workshop roles are filled.
- Each SEDAR Cooperator shall establish guidelines and procedures for approving schedules, terms of reference, and panel appointments.
- The Steering Committee acknowledges that SEDAR is not necessarily the sole source of assessment information available to the Councils and other Cooperators.
- Invitations to appointed participants shall be issued by the Cooperator making the appointment, to make it clear which organization is responsible for the appointment.
- Cooperators shall provide written notification to the SEDAR Coordinator of schedule and TOR approval, and a list of appointed participants and contact information.
- Each Cooperator may determine how SEDAR assessment products are presented to the Cooperator and its technical and advisory bodies, and the involvement of its representatives to SEDAR panels in such presentations.
- SEDAR expects lead analysts to present assessment findings to the CTB; Coordinators will maintain contact with the lead analyst and provide meeting locations and times Cooperator Liaisons will inform SEDAR Cooperators of meeting details.
- Cooperators should work directly with the lead assessment agency to coordinate any additional presentations desired. Such requests should be made to the appropriate representative of the lead assessment agency in accordance with normal agency and Cooperator procedures and do not require any SEDAR involvement.

3. SEDAR Panel Participant and Appointment Process

- Workshop participants and attendees include:
 - Panelists: Individuals appointed by a Cooperator to a workshop panel. Responsible for participating in workshop discussions, deliberations, consensus building, and

documentation. May also be responsible for submitting data and analyses in support of the assessment.

- Appointed Observers: Individuals appointed by a Cooperator to observe a workshop and provide guidance as requested by the workshop panel. This group may include Council members, Cooperator staff, and AP representatives. These individuals do not contribute to consensus building or workshop reports.
- Staff: Individuals providing support to a workshop and SEDAR project.
- Attendees: Any individual who attends a workshop on their own initiative without any Cooperator appointment.
- Each Council and HMS shall establish a SEDAR Advisory Panel (AP; also known as the SEDAR Pool) from which participants (panelists and appointed observers) shall be selected for each workshop. Note: provisions related to the SEDAR AP do not apply to the Interstate Fisheries Commissions.
- All workshop panelists and observers appointed by a Council or HMS must be included in that Council's SEDAR AP.
- The SEDAR AP is governed by the same requirements as other Council APs and should be included in each Council's SOPPs. Each Council and HMS shall establish a process for making SEDAR AP appointments.
- Each Cooperator shall establish a process for making SEDAR workshop appointments.
- The Cooperator requesting the assessment and having jurisdiction over the species assessed is responsible for appointing those panelists and observers it deems necessary to fulfill the Terms of Reference.
- Each Cooperator shall ensure that all panelists and appointed observers are members of the Cooperator's SEDAR AP and therefore eligible to participate in SEDAR.
- The SEFSC Director and SERO Administrator are responsible for designating agency employees to participate on workshop panels to provide expertise, data, and analyses, and represent their offices as appropriate.
- In the event of joint jurisdiction, each Cooperator with an interest makes appointments from within its SEDAR Advisory Panel. Cooperators involved in joint assessments are asked to agree to an equitable division of the available seats when the SEDAR project is approved by the Steering Committee, as part of the annual SEDAR budget and activities review.

4. Public Participation

- SEDAR is a Council process, with public participation during workshops and other meetings governed by Council policies and practices.
- SEDAR workshops and other meetings are open and accessible to the public, subject to the standards and procedures of the Cooperators and provisions contained this document.
- Members of the public who attend workshops or meetings are noted in workshop reports as attendees and are expected to sign-in on the roll each day of attendance. All written comment submitted during the SEDAR process will become part of the SEDAR Administrative Record.

- Public comment and questions shall be taken during SEDAR data and assessment workshops at an appropriate time determined by the workshop Chair.
- Written comment will be accepted for the Data, Assessment, and Review Workshops. Comments received no later than one week before the start of a Workshop will be distributed to the Workshop Panel. Comments received later than 1 week prior to the workshop, until the close of the meeting on the next to last day of the workshop, will be provided to the panel at the workshop. Comments received after the conclusion of an Assessment or Data workshop will become part of the AR component for the next workshop in the project.
- Written comments for consideration after the conclusion of the SEDAR Review Workshop should be submitted to the appropriate Cooperator in accordance with the stated policies of the Cooperators involved with the project. Those interested in submitting written comment are directed to contact the Cooperator involved in an assessment project for policies regarding written comment.
- Oral public comment will be taken during SEDAR workshops and Steering Committee meetings at specific times indicated on workshop and meeting agendas.

5. SEDAR Approach

5.1 General Process

- SEDAR assessments are developed through an open and transparent process which may consist of up to 3 separate stages. A report documenting findings and recommendations shall be developed at each stage within the process, all of which reports shall be compiled to create the overall Stock Assessment Report.
- The charge for each assessment project is specified in Terms of Reference (TORs). Framework TORs are approved by the Steering Committee and may be modified for each project. SEDAR Coordinators provide the approved framework TORS to the lead assessment agency, which will modify as necessary for each project. This version of the TORS is submitted to the SEDAR Coordinator who will submit the TORs for approval by the appropriate Cooperators.
- SEDAR assessment projects may be completed through in-person workshops, webinars or conference calls, or a combination of all these approaches. Policies affecting SEDAR meetings are general and apply to all meeting approaches.
- All SEDAR meetings will be noticed by SEDAR Coordinators in the Federal Register.
- All SEDAR meetings are recorded. Recordings are retained for the Administrative Record. Preparation of written transcripts of SEDAR assessment project and Steering Committee meetings may be requested in writing by any SEDAR Steering Committee member.
- The names and affiliations of all who attend meetings, including panelists, observers, general public attendees and staff, will be disclosed in workshop documents.
- All panelists are expected to actively contribute to the process by reviewing documentation, preparing supporting analyses, contributing documents and datasets, participating in discussions, and producing report text.
- Panelists are expected to provide alternative solutions along with any criticisms and work toward consensus while conducting themselves with respectful and professional behavior. No personal attacks or aggressive behavior will be tolerated from any participants, and those who persist in such actions will be asked to leave.

- SEDAR coordinators will monitor project deliverables (applied comprehensively, including working papers, data and report segments) to ensure items are provided as required in project schedule deadlines. Deadlines for delivery that are not met (defined as being 7d after the deadline) will be reported by the Coordinator in writing (email sufficient) to the Cooperator's designated SEDAR contact, and the Steering Committee chair. Each cooperator will develop a process for addressing items reported as a result of this policy.
- SEDAR panels are expected to reach consensus decisions, which may include acknowledging multiple approaches for addressing issues and unknowns. Voting is not conducted.
- Council Members attending as official representatives are considered appointed observers and may not serve as panelists.
- Panelists and appointed observers are expected to sign-in daily during meetings.
- The SEFSC Director may appoint additional experts (such as university researchers, international experts, and NOAA Fisheries employees from outside the SE Region) for data and assessment workshop panels as necessary to complete assigned Terms of Reference and ensure adequate expertise is available at each step of the process.

5.2 Project Documentation and Dissemination

- All submitted materials are subject to public distribution and internet posting.
- Documentation consists of working papers prepared for each project stage, reference documents selected from published literature, and project reports.
- Documentation will be distributed electronically.
- Preliminary or draft working papers will be identified as such, with language included on a cover page providing the date, submitter or author, and statement that the information is pre-decisional. Subsequent revisions should include the date of the revision and retain the original submission date. Working papers will be made final following the assessment stage for which they were provided, upon submission of a final version by the authors.
- SEDAR does not specify the format or content of working papers.
- Assessment and review stage presentations, prepared for a meeting shall be posted to the SEDAR website after presentation. "Working" presentations developed during a meeting are not posted to the website due to their pre-decisional and informal nature.
- Meeting recordings may be obtained by contacting the appropriate SEDAR Coordinator.
- Draft reports shall not be distributed to non-panelists panel until finalized by the panel and the chair.
- Panelists are individually responsible for ensuring that their viewpoints and opinions are reflected in the panel report.
- Reports should provide clear rationale for panel decisions and recommendations, and note associated uncertainties.
- SEDAR panels are not approved for viewing of confidential information. Confidentiality will be maintained in accordance with agency and data collector requirements for all submitted datasets, working papers, and workshop reports. Each author or data provider is personally responsible for maintaining confidentiality.

- The final assessment report, including the reports of all SEDAR processes and any necessary addenda, shall be disseminated to the Cooperators involved in the project through memorandum from the SEDAR Coordinator following completion of the review panel report and compilation of the final SEDAR Stock Assessment Report.
- SEDAR involvement is complete once the final Stock Assessment Report is finalized and disseminated to the Cooperator.
- SSC Summary reports regarding a SEDAR assessment should be forwarded to the appropriate SEDAR Coordinator for inclusion on the SEDAR website.
- Each Cooperator is responsible for subsequent distribution of SEDAR documentation to its panels and committees.

5.3 Science Based Decision Making

- SEDAR panel decisions and recommendations shall be achieved through consensus of the entire panel in attendance at the meeting, rather than formal votes. Consensus recommendations shall be structured to ensure that the full range of opinions, variability and uncertainty is reflected in the report
- SEDAR panels shall consider biological and technical aspects of datasets and stock assessments and base recommendations upon the scientific merit of the alternatives proposed.
- SEDAR panel decisions are not to be based on possible management outcomes or regulatory impacts. At no point should a SEDAR panel consider such concerns.
 - Participants, whether panelists or observers, who embark upon discussions of management implications or regulatory consequences beyond those needed to address the Terms of Reference will be notified by the chair that such deliberations are beyond the scope of SEDAR and explicitly and intentionally prohibited.
 - If such issues continue to be raised and notices to the contrary are ignored, the Chair, Council staff, and Council members present are authorized by the Steering Committee to ask the offending individual to leave the meeting.
 - If the individual refuses to leave upon such a request, the Chair shall be under no obligation to recognize them during further panel discussions.

6. SEDAR Assessment Development Approaches

Classifications applied to SEDAR assessment projects refer to the approach used to develop the assessment, not to the information quality of the assessment. All SEDAR project approaches are intended to provide reliable and robust assessment products.

6.1 Benchmark Approach

- Benchmark SEDAR assessments are required for the first assessment of a species and for the first application of a new assessment approach/methodology to a stock. .
 - For example, a stock assessed through a data poor method (e.g., a production model or DCAC) will require a new benchmark assessment if data improve to support its assessment through a more advanced technique such as a catch-age model.
- A SEDAR benchmark project (SEDAR XX) may have multiple related/similar species assessed concurrently.

- The benchmark process provides a robust and rigorous evaluation of data and methods...
- Multiple model classifications and configurations are evaluated, with the goal of working down to one model ‘package’ that will be applied to develop management advice and determine stock status, and will serve as a tool for future stock evaluations
- All models initially evaluated need not be carried through to the Review Panel and SSC review (e.g. working papers should suffice to confirm simpler models give similar results to “base” model).
- The Benchmark process involves a stages data, assessment modeling and independent peer review. These stages may be conducted by workshops or webinars, as determined based on the project needs and specified in the project schedule and Terms of Reference.
- Each panel is responsible for determining if the assessment is ready to move forward to the next step in the process.
- Additional meetings, held via conference call, teleconference, or webinar, may be necessary to complete data, assessment or review stage tasks.
- Tasks and goals for each stage of the process are governed by the approved Terms of Reference.
- The benchmark process includes an independent peer review... The Steering Committee shall determine the make-up of SEDAR review panels; specific appointments shall be made by the Cooperators in whose jurisdiction the assessed stocks reside and by the CIE for their Review Panel representatives.
- The Benchmark process will take approximately 12 months.

6.2 Standard Approach

- The standard approach is used to refresh the data sources with the most recent information available. There is also limited flexibility to modify the assessment configuration, within TORs approved by the Cooperator. Details on the types of modifications accepted in the Standard approach are provided below.
- Standard assessments are intended to update prior assessments with recent information and address issues supported by new data or other advancements as feasible within the approved benchmark model approach. The primary restriction is that new model classifications may not be applied using the standard assessment procedures.
- Terms of Reference will specify data and modeling issues to be considered.
 - The lead assessment agency and CTB will identify issues to consider.
 - The lead assessment agency shall draft the preliminary TORs for consideration by the Cooperator.
 - The TORs will specify any modifications or additions considered acceptable by the Cooperator and lead assessment agency.
- A single model will be developed based on the accepted model from the previous benchmark. Those data streams used in the prior assessment will be included in the standard configuration, unless there is a specific reason to doubt the data and the issue is noted in TORs.

- The CTB shall be consulted when considering modifications to the benchmark framework and shall recommend to the Cooperator whether the desired changes may result in the need for a benchmark rather than a standard assessment.
- Limited flexibility is allowed for deviations from the benchmark model. The lead assessment agency and CTB shall determine what changes are appropriate and specify the accepted additions and modification in the project TORs. Examples of the types of changes that may be considered are as follows:
 - May incorporate technical advances approved through other SEDAR benchmark assessments or SEDAR intercessional workshops.
 - New datasets reviewed and developed through a previous SEDAR intercessional workshop may be included, if feasible given the model structure.
 - Data-provider revisions to original datasets may be incorporated (e.g., revised catch estimates provided by an agency.)
 - Errors may be corrected in input datasets or model configuration.
 - Supporting models, such as growth relationships, may be updated based on new age and growth information.
 - Biological parameters and assumptions may be updated if there is new supporting research and the updates are consistent with the model structure.
 - May consider new model configurations if necessary to address new data or output needs.
 - May consider alternative software packages that accommodate the benchmark model type.
- The standard process may include a single workshop combining data and assessment stage discussions. Workshop length will depend upon the number of species and complexity of issues to be addressed in the TORs. Alternatively, the standard process may be fully conducted through webinar, if consented to by the lead assessment agency and Cooperator.
- Teleconference, conference call, and webinar approaches will be utilized as needed and appropriate in the data and assessment stages.
- An Assessment Panel will be appointed that includes representatives of the lead assessment agency and Project Cooperator. Assessment panels will typically consist of 6 – 12 individuals, including data providers, SSC (or equivalent) representatives, lead analysts and others with assessment expertise.
- The lead assessment agency will appoint a lead Analyst and Analytical Team as necessary to meet the project TORs and schedule.
- Standard assessment workshop panelists may include NOAA Fisheries stock assessment scientists, Commission/State/university/independent assessment scientists, Scientific & Statistical Committee members.
- The Cooperator may appoint observers to provide guidance on industry practices. Appointed observers are not members of the Assessment Panel and do not contribute to consensus decision making.
- The standard assessment process adheres to the same administrative policies, record keeping, and support requirements as other SEDAR activities.
- Peer review of a standard process assessment is provided by the SSC or Cooperator equivalent. The SSC (or equivalent) shall document its findings in a peer review report to be forwarded to

SEDAR staff for inclusion in the SEDAR Administrative Record and posted on the SEDAR website.

- The Standard process is anticipated to take 6 months.
- Standard workshops and webinars shall be chaired by the SEDAR Coordinator, serving as a facilitator.
- Workshop discussion topics will be governed by the approved Terms of Reference.

6.3 Update Approach

- The update approach is used to refresh the data sources with the most recent information available.
- The update approach is considered the default for all subsequent assessments of a stock.
- Recommendations on assessment approach will be provided to the SEDAR Steering Committee by the Cooperator for consideration during the scheduling process. Justification for application of standard or benchmark approaches shall be provided by the Cooperator. Justification should include comments by the CTB. The Steering Committee may also solicit guidance from the lead assessment agency for the previous assessment of the stock.
- Assessments prepared with the update approach are restricted to incorporating additional years of observations to those datasets used in the prior benchmark or standard assessment, with limited exceptions:
 - New datasets reviewed and developed through a SEDAR intercessional workshop may be included, if feasible given the model structure. (For example, CPUE from a new independent survey may be added if the model accommodates such measures and the index was evaluated for the stock in another SEDAR workshop.)
 - Data-provider revisions to original datasets may be incorporated (e.g., revised catch estimates provided by an agency.)
 - Errors may be corrected in input datasets or model configuration.
 - Supporting models, such as growth relationships, may be updated based on new age and growth information.
 - Biological parameters and assumptions may be updated if there is new supporting research and the updates are consistent with the model structure (e.g., updated values on natural or discard mortality)
- The update process is managed through the lead assessment agency and Cooperator directly.
- The SEDAR Steering Committee will schedule update approach assessments as part of the overall regional workload management. Specific timing of deliverables will be addressed by the assessment agency and Cooperator.
- Data and modeling stages for the update process are conducted directly by the lead assessment agency. No data or assessment panels are convened and no SEDAR workshops are held. The lead assessment agency is responsible for obtaining all data necessary for the update.

- Upon completion of the data and modeling stages, the lead assessment agency shall provide SEDAR a copy of the final assessment report for inclusion in the administrative record and posting on the SEDAR website and for distribution to the appropriate Cooperators
- The peer review stage of the update approach is provided by the SSC or Cooperator equivalent. The peer review body shall develop the peer review report and forward it to SEDAR staff for posting on the SEDAR website in association with the update assessment report.
- Update process anticipated to take 3 months,

7. SEDAR Benchmark Approach Details

7.1 Benchmark Data Stage

- Data panelists shall assemble and critique all available fishery data, monitoring programs, and life history information.
- Data panelists should compile necessary data and working papers per project deadlines so that meeting time can be spent reviewing and revising datasets. Papers and initial data summaries are desired at least 2 weeks prior to the initial data meeting.
- Data workshops and webinars shall be chaired (as facilitator) by the SEDAR Coordinator.
- Data panelists may include database managers, data specialists, and data collectors; life history researchers and biologists; and stock assessment scientists from States, NOAA Fisheries, Interstate Commissions, universities, independent laboratories and institutions; and Council advisory panel (commercial, recreational, and/or NGO) representatives.
- The data stage will be structured around working groups devoted to primary data areas. Working groups shall review data, working papers, reference documents, and other information to develop recommendations for consideration by the data panel on analyses, assumptions and data for inclusion in the assessment.
- Each working group shall select a rapporteur from among its members to take notes during workgroup and plenary sessions.
- All decisions of the data panel are made during the plenary sessions by consensus of the entire membership.

7.2 Benchmark Assessment Stage

- An Assessment Panel will be appointed that includes representatives of the appropriate Cooperator and lead assessment agency. The Assessment Panel is a technical body and therefore composed of scientists qualified to evaluate and provide recommendations on stock assessments.
- An Analytical Team will be appointed by the lead assessment agency, to include a designated lead analyst and other support staff as deemed necessary by the agency. Analytical Team members may also serve on the Assessment Panel.
- An Assessment Advisory Panel will be appointed by the appropriate Cooperator to provide guidance on fishery practices as requested by the Assessment Panel or Analytical Team. Members of the Assessment Advisory Panel must be chosen from the Cooperator SEDAR Advisory Panel unless the Cooperator is exempt from that requirement as specified elsewhere in this document.

- The Assessment Panel shall provide guidance to the Analytical Team on assessment models, model configuration, and uncertainty evaluation. The Assessment Panel is expected to identify a preferred model configuration that meets the TORs and is appropriate for providing management advice.
- Assessment decisions will be approved by consensus of the Assessment Panel. The Panel should consider input of the Analytical Team and Assessment Advisory Panel as appropriate.
- The assessment stage of the benchmark process may be conducted through workshops, webinars or teleconference. The timing and types of meetings will be specified in the project schedule.
- The default approach recommended by the Steering Committee is to convene 3 webinars, scheduled at specific points in assessment development. Milestones for each of these webinars will be specified in the project TORs. During the webinars the Assessment Panel will consider work prepared by the Analytical Team to reach the milestones and will make recommendations for moving to the next step in the process.
- The Assessment Panel and Analytical Team are expected to compile necessary data and working papers in advance of the panel meetings so that time can be spent discussing and evaluating progress toward milestones. Briefing materials are desired for distribution at least 2 weeks prior to each meeting.
- Assessment Stage workshops and webinars shall be facilitated by the SEDAR Coordinator.

7.3 Benchmark Peer Review

- The review process shall provide an independent peer review of SEDAR stock assessments. The intent of the review is to ensure that the assessment and results are scientifically sound and that decision makers are provided adequate advice that reflects uncertainties in the data and methods.
- Peer reviews are preferably conducted through Review Workshops, but may be conducted through a desk review process. Specific guidelines for each type of review are provided in the next section.
- Desk Reviews may be considered if a project falls behind and convening a Peer Review Workshop will add additional delay. There may be other circumstances where the nature and scope of the assessment are conducive to a desk review approach. As these guidelines cannot address all circumstances, the Cooperator, analytical agency representative and SEDAR Steering Committee chair may decide if a desk review is appropriate. Desk reviews may be requested through the initial TORs for a project or during a project if the analysis progresses such that a desk review is considered appropriate by the Cooperator, assessment lead, and Steering Committee Chair.
- All reviewers shall be independent from the assessments under review, and must submit to the SEDAR program manager a completed OMB Conflict of Interest form. Conflict of Interest forms for reviewers appointed by the CIE are handled by NOAA Fisheries CIE project managers.
- Review panels may not conduct alternative assessments. Panels may request additional sensitivity runs and minor corrections. Results of such runs should be documented in addenda to the assessment report.
- Assessment findings will be presented to the review panel by the lead analysts with support of other assessment panel members as appropriate and necessary.

- The review panel shall not provide specific management advice. Review panel recommendations are advisory in nature.

7.3.1 Review Workshop Process

- Review Workshop Panels shall typically be composed of:
 - 3 reviewers appointed by the CIE (Center for Independent Experts).
 - 2 reviewers from the CTB of from each Cooperator having jurisdiction over the stocks under review, if desired by the Cooperator.
 - Optionally, 1 reviewer appointed by each Cooperator having jurisdiction over the stocks under review.
- The Review Workshop Chair will be appointed by the Project Cooperator. If there are multiple Cooperators involved, they shall decide which will appoint the Chair when the SEDAR Steering Committee reviews the annual SEDAR Project Plan. It is recommend that a member of the Cooperator's SSC or other scientific body be appointed as Chair.
- Review Workshop Chairs are facilitators, not reviewers. Chairs are responsible for conducting the workshop, compiling the Review Panel report, providing an executive summary of review activities for the report, arranging for panel review of the report and submitting the final review panel report to the SEDAR Coordinator once it is approved by the Review Panel.
- Only the Review Panel and Review Workshop Chair participate in report development and review.
- Each Cooperator may appoint observers to a review workshop. These may include representatives of the Council, additional scientists, or constituent representatives. All appointed observers must be members of the Council's SEDAR AP. Observers do not participate in deliberations during the review. However, Panelists and the Chair may direct questions to them as necessary.
- If a Review Panel finds an assessment deficient to the extent that technical staff present cannot correct the deficiencies during the course of the workshop, or the Panel deems that desired modifications would result in an alternative assessment, then the Review Panel shall provide in writing the required remedial measures and suggest an appropriate approach for correcting the assessment and subsequently reviewing the corrected assessment.

7.3.2 Desk Review Process

- Desk reviews refer to written reviews conducted by individuals, working on their own outside of any workshop process and without any presentation of methods and results beyond that contained in the assessment reports.
- Desk reviews shall be conducted by 3 reviewers appointed by the CIE (Center for Independent Experts). The Cooperator may appoint an additional reviewer at its discretion.
- All individual reviewer reports will be compiled by SEDAR staff to provide the Review Workshop segment of the SEDAR Stock Assessment Report.
- Each Cooperator shall develop a process and guidelines to assists its technical bodies in addressing desk review findings and recommendations.

8. Role of the SSCs

- SSC members participate in all phases of the SEDAR process.
- The SSC is not expected to provide duplicative peer review of completed SEDAR benchmark assessments. (although SSC members are included in the review panel)
- SSCs provide peer review of SEDAR standard assessments and update assessments.
- SSCs will determine whether the assessment constitutes Best Scientific Information Available (BSIA) and determine whether assessment findings and outputs are adequate for supporting fishing level recommendations to the Council.
- SSCs may request additional sensitivity analyses if deemed necessary to adequately characterize uncertainty, and additional projection analyses if necessary to adequately evaluate management alternatives.
- If the SSC determines that an error or omission has been made in the assessment model or in any input datasets, and further determines that such issues significantly impact the assessment results, and in particular the magnitude and direction of required management actions, the SSC shall prepare a written report for submission to the Council and SEDAR Steering Committee which details (1) the nature of the concerns, including appropriate documentation of the correct information; (2) possible impacts; (3) specific concerns related to the issues raised, including the estimated parameters that are affected; and (4) the recommended process and timeline for correction or revision, review, and reconsideration by the SSC.
- The SSC is responsible for presenting to their Council their evaluation of the adequacy of the assessment, their interpretation and summary of the assessment methods and findings, and their recommendations regarding appropriate actions.

9. Relation to State Agencies

- State agencies may request SEDAR peer review of assessments conducted by their staff or through contract.
- SEDAR Staff may support the state agency during data and assessment phases of the process if feasible; SEDAR projects will take precedence, however.
- SEDAR Staff will serve as a liaison between the state agency and the other Cooperators for purposes of reviewing schedules, terms of reference, and accommodating Cooperator appointees.
- The Steering Committee may also request that state agencies provide analytical lead in developing assessments through SEDAR, especially with regard to species found primarily within one state's boundaries.

10. NOAA Fisheries Highly Migratory Species Division

- For the HMS Management Division, NMFS staff shall review the report and process and determine whether the assessment findings are adequate for management.
- Staff may request further evaluation of assessment uncertainties and alternative projection scenarios if deemed necessary for management.
- Standard and Update assessments conducted on behalf of HMS will be reviewed by through a CIE desk review, as HMS does not have an SSC to provide a review.

- If designated HMS staff determine that an error or omission has been made in the assessment model or in any input datasets, determine that such issues significantly impact the assessment results, and upon consideration of the magnitude and direction of required management actions that may be impacted by the error or omission, said staff shall prepare a written report for submission to the SEDAR Steering Committee that details (1) the nature of the concerns, including appropriate documentation of the correct information; (2) possible impacts; (3) specific concerns related to the issues raised, including the estimated parameters that are affected; and (4) the recommended process and timeline for correction or revision, review, and reconsideration by NMFS.
- Upon completion of its review, NMFS shall consider the SEDAR assessment findings and the results of any additional supplementary analyses requested in developing specific management recommendations as the best scientific information available.
- Representatives of the analytic team that participated in one or more workshop or the SEDAR staff will assist the HMS Management Division in making a presentation of the assessment to the HMS Advisory Panel either during or after the NMFS review and recommendations phase.