

## 2016 CHAIR'S REPORT OF THE SEDAR DATA BEST PRACTICE STANDING PANEL

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### 1. INTRODUCTION

Throughout the course of SEDAR Data Workshops, certain topics arise repeatedly in discussions, and often occupy considerable time and analytical effort. When topics are frequently revisited, inefficiencies result as analytical capacity is allocated to readdress problems previously solved at the expense of innovation and improvements. This is detrimental to a process that is already severely limited by time and resources, and increasingly challenged to increase productivity. Since many data challenges are inherent to data collection programs and do not change from one stock assessment to another, decisions and approaches for dealing with common challenges should be standardized whenever possible. Doing so would allow data providers to produce assessment inputs more efficiently and consistently, and allow data workshop panelists to concentrate on novel issues under consideration.

To that end, the SEDAR Procedural Workshop 7 (PW 07) was convened during June 22-26, 2015 (Atlanta, GA) to identify common decisions made in SEDAR data workshops that have successfully been through the peer review process, and to develop recommended best practices to help support and streamline such decisions for future assessments. The final report<sup>1</sup> and supplemental documents from this procedural workshop can be found online (<http://sedarweb.org/pw-07>).

To streamline the future revision and evaluation of best practices, the PW07 panelists recommended the establishment of a SEDAR Data Best Practice Standing Panel (a.k.a. "Standing Panel"). According to the workshop report<sup>1</sup>, this group would:

- Function similarly to the ICCAT working group on stock assessment methods.
- Meet annually, or as needed, via webinar(s) or workshop.
- Be chaired by SEDAR or SEFSC personnel.
- Establish a standing panel with representation similar to the SEDAR Data Best Practices Panel.
- Allow others to participate as needed, based on the topics to address.
- Put out a call for new topics annually, and establish the draft agenda of topics to discuss.

The PW07 panelists also recommend the Standing Panel be empowered to revise the SEDAR Data Best Practices when required, and be responsible to update the report as needed, and ensure that the most recent version is easily accessible on SEDAR website. To inform the decisions of the Standing Panel, individual SEDAR data workshop panels will provide feedback regarding the implementation and function of current best practice recommendations. When the need arises to reconsider current practice, or introduce new methods, the data workshop panelists are charged to pass that information to the Standing Panel for further consideration.

This document describes the establishment of the Standing Panel, accomplishments during the first year, and expected year 2 activities.

### 2. FOUNDATION OF THE SEDAR DATA BEST PRACTICE STANDING PANEL

The Standing Panel was established by the SEDAR Steering Committee in accordance with PW-07 panel recommendations. Specifically, the Panel was identified with representation similar to the SEDAR Data Best Practices Panel. Each "operator" (e.g. SAFMC, GMFMC, CFMC, HMS, ASMFC, GSMFC, SEFSC-Miami, SEFSC-Beaufort,

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<sup>1</sup> SEDAR. 2015. SEDAR Procedural Workshop 7: Data Best Practices. SEDAR, North Charleston SC. 151 pp. available online at: <http://sedarweb.org/pw-07>

SEFSC-Panama City) was invited to appoint a member(s) with technical expertise and/or SEDAR assessment experience. During 2016, Standing Panel members included:

<i>Chair, Shannon Cass-Calay</i>	<i>NOAA Southeast Fisheries Science Center, Miami</i>
Donna Bellais	Gulf States Marine Fisheries Commission
Karyl Brewster-Geisz	NOAA HQ Highly Migratory Species
Gary Fitzhugh	NOAA Southeast Fisheries Science Center, Panama City
Jeff Kipp	Atlantic States Marine Fisheries Commission
Sean Powers	Gulf of Mexico Fisheries Management Council SSC
Marcel Reichert	Chair, South Atlantic Fishery Management Council SSC
Steve Turner	NOAA Southeast Fisheries Science Center, Miami
Erik Williams	NOAA Southeast Fisheries Science Center, Beaufort
Richard Appeldoorn	Chair, Caribbean Fisheries Management Council SSC

The panel was also assisted by SEDAR Staff (Julia Byrd, Julie Neer, John Carmichael) and welcomed observers (Michael Drexler, Rusty Hudson, Ryan Rindone, Ken Stump, Bob Gill, Richard Malinowski).

### 3. PANEL MEETINGS AND ACCOMPLISHMENTS

The standing panel met by webinar four times during 2016: on [April 13](#)<sup>2</sup>, [June 6](#)<sup>3</sup>, [July 21](#)<sup>4</sup> and [September 1](#)<sup>5</sup>. Meeting minutes can be viewed by following the hyperlinks and are also reference in footnotes at the bottom of the page. Because 2016 was the first year of “Standing Panel” operations, the main objectives of the panel were to review, further develop and disseminate the Terms of Reference (**Appendix 1**), the [SEDAR Data Best Practice Living Document](#)<sup>6</sup> and the [SEDAR Data Issue Inventory](#)<sup>7</sup>. Each of these objectives were completed during 2016.

The **Terms of Reference** describe the purpose, composition and approach of the SEDAR Data Best Practice Standing Panel. The overall purpose of this group is to develop recommended best practices to support and streamline common SEDAR Data Workshop decisions for future assessments. The TORs are as follows:

1. Coordinate and review updates to the Data Issue Inventory of SEDAR Data Workshop datasets and common or recurring data and analysis issues.
2. Review and evaluate existing SEDAR Data Best Practice Recommendations, as needed, for data preparation and analysis.
3. Develop new Data Best Practice recommendations for data preparation and analysis for future benchmark, standard, and update assessments (or research and operational assessments, if approved for use).
4. Revise SEDAR Data Best Practices living document, as necessary, making sure the document is clearly versioned and dated.
5. Respond to requests from the SEDAR Steering Committee as necessary.

The panel composition and appoints are summarized below:

- The SEDAR Steering Committee is responsible for making appointments to Standing Panel with composition to be similar to the Best Practice Panel at the 2015 Data BP Workshop.
- The Standing Panel recommends three-year appointments with the opportunity for reappointment. Reappointments will be under the discretion of the SEDAR Steering Committee.
- The Standing Panel recommends allowing proxies if a Standing Panel member is not able to participate in a meeting. SEDAR staff and the Panel chair must be notified via email in advance of the meeting if a member will be sending a proxy.
- The Data Best Practice Standing Panel Chair will be chosen by Panel members.

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<sup>2</sup> [http://sedarweb.org/docs/page/SEDARDataBPStandPanel\\_WebSummary\\_4.13.2016\\_DRAFT.pdf](http://sedarweb.org/docs/page/SEDARDataBPStandPanel_WebSummary_4.13.2016_DRAFT.pdf)

<sup>3</sup> [http://sedarweb.org/docs/page/SEDARDataBPStandPanel\\_WebSummary\\_6.6.2016\\_FINAL.pdf](http://sedarweb.org/docs/page/SEDARDataBPStandPanel_WebSummary_6.6.2016_FINAL.pdf)

<sup>4</sup> [http://sedarweb.org/docs/page/SEDARDataBPStandPanel\\_WebSummary\\_7.21.2016\\_FINAL.pdf](http://sedarweb.org/docs/page/SEDARDataBPStandPanel_WebSummary_7.21.2016_FINAL.pdf)

<sup>5</sup> [http://sedarweb.org/docs/page/SEDARDataBPStandPanel\\_WebSummary\\_9.1.2016\\_FINAL.pdf](http://sedarweb.org/docs/page/SEDARDataBPStandPanel_WebSummary_9.1.2016_FINAL.pdf)

<sup>6</sup> [http://sedarweb.org/docs/page/SEDAR\\_DataBP\\_LivingDoc\\_WithAppendices\\_9.12.2016.pdf](http://sedarweb.org/docs/page/SEDAR_DataBP_LivingDoc_WithAppendices_9.12.2016.pdf)

<sup>7</sup> [http://sedarweb.org/docs/page/DataIssueInventory\\_9.12.2016.xlsx](http://sedarweb.org/docs/page/DataIssueInventory_9.12.2016.xlsx)

- The Standing Panel recommends have a rotating chair with a two-year term.

Additional details regarding the approach and procedures of the Standing Panel are described in **Appendix 1**.

The **SEDAR Data Best Practice Living Document** houses all of the Data Best Practice recommendations and will be updated, as necessary, into the future. It includes all of the current data best practice recommendations, data templates, and process tools, as well as describes the role of the Standing Panel and the process for modifying or creating new Data Best Practice recommendations.

The **SEDAR Data Issue Inventory** contains a running list of the identified SEDAR data issues. The inventory includes the issues identified during the June 2015 workshop and will be updated in the future as new issues are identified. The original inventories developed for the June 2015 workshop remain available on the [Procedural Workshop 7 webpage](#)<sup>8</sup>.

### ***3.1 Summary of the April 13, 2016 Standing Panel Meeting***

- During this meeting, the group selected a chair for the first two-year term (Shannon Cass-Calay), then began to develop the terms of reference specifying its purpose and function.
- The group also considered the priority of upcoming procedural workshops.
  - The Stock ID and Meristics Procedural Workshop was given the highest priority by panel members. Although the SEDAR Steering Committee had recommended holding this meeting in 2016, the Standing Panel suggested deferring this workshop somewhat to allow more time to prepare, and to enable consideration of a larger number of species. The Standing Panel also identified members to serve on an organizing committee.
  - The panel also considered “Discard Mortality” and “The Effect of Reproductive Inputs on Reference Points” to be of high priority for future procedural workshops. To complement ongoing research activities regarding reproduction and reference points, the panel recommended a broader Procedural Workshop on Reference Points; reproductive input would be part of that discussion.
  - The panel also recommended two lower priority topics for future consideration
    - Gulf of Mexico Shrimp Bycatch Estimation
    - Data Limited Method Improvements/Best Practices
- Key points from these discussion can be found in the meeting [minutes](#).

### ***3.2 Summary of the June 6, 2016 Standing Panel Meeting***

- Prior to the June 6th meeting, the draft Terms of Reference and Approach were shared with the SEDAR Steering Committee, which provided feedback and suggested revisions. The Standing Panel reviewed these revisions, and updated the Terms of Reference.
- The Standing Panel then began the development of the Data Best Practice Living Document; the 2015 Data Best Practices Procedural Workshop Report was provided to the Panel to serve as a starting point for these discussions.
- Key points from these discussion can be found in the meeting [minutes](#).

### ***3.3 Summary of the July 21, 2016 Standing Panel Meeting***

- SEDAR staff notified the Standing Panel that SEDAR Data Best Practice webpage (<http://sedarweb.org/sedar-data-best-practices>) was created on SEDAR website. This website will serve as the repository of the living document, data issue inventory, etc. as these products are completed.
- The Standing Panel continued to develop the Terms of Reference and Approaches document.
- The Standing Panel continued to develop the SEDAR Data Best Practices Living document.
- The Standing Panel discussed the approach for reviewing and updating the Data Issues Inventory.

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<sup>8</sup> <http://sedarweb.org/pw-07>

- Key points from these discussion can be found in the meeting [minutes](#).

### 3.3 Summary of the September 1, 2016 Standing Panel Meeting

- SEDAR Staff updated the Standing Panel on the progress of the Stock ID & Meristics Procedural Workshop. The Organizing Committee (OC) has developed draft ToR and species recommendations which will be reviewed at the fall 2016 SEDAR Steering Committee meeting. The OC noted the need to ask the Steering Committee for additional guidance when biological stock structure and/or assessment unit stock recommendations do not align with existing management units.
- The Standing Panel noted that changes in stock boundaries could affect scheduling/planning in multiple regions and therefore recommended that management personnel participate in Stock ID workshops.
- The Standing Panel finalized the SEDAR Data Best Practices Living document, and recommended it be posted to the SEDAR Data Best Practice webpage, and that SEDAR Data Best Practices workshop participants be notified of its availability.
- The Standing Panel discussed continued to develop the Data Issues Inventory, adding the following new issues:
  - **Combining Data from Multiple Sources:** Panel members noted that there have been problems merging datasets from multiple agencies, sampling programs, research projects, etc.; duplicate records can exist for individual fish in multiple data sources which can lead to double reporting when trying to merge records. This was specifically mentioned as an issue for length and age data. There is a need to develop standardized methodology on how/when data are reported in state and federal databases. This is becoming a larger issue as more entities provide data and goes back to how data is recorded at the source.
  - **Late data delivery** – Panel members indicated late data delivery has been an issue for recent assessment projects. It could be helpful to develop a decision tree for how to best handle late data delivery and identify critical data bottlenecks (e.g. what data can we proceed without versus what will cause a project delay).
  - **Age determination** – There is a need to develop best practices for age determination to include processing and reading age structures, age calibration, age variability and bias estimates, validation methods, etc. to help ensure this is being handled consistently between assessments.
  - **Updating Life History Parameters** – There is a need to develop guidance for how often/when life history parameters (growth, maturity, etc.) should be updated.
- The Standing Panel was also made aware that a [consolidated list of research recommendations](#)<sup>9</sup> from SEDAR projects is currently available on website and is updated annually by SEDAR staff.
- To inform the SEDAR Steering Committee selection of 2018-2019 Procedural Workshops, the Standing Panel was asked to review and update their recommendations for Procedural Workshop topics. The group reviewed a list of identified potential workshop topics (see list below; entity listed in parentheses indicates who identified each topic)
  - Reference Points – estimation & influences (Standing Panel)
    - Will include effects of reproductive inputs
    - Initially recommended during the April 2016 meeting
  - Assessment Best Practices (Steering Committee)
  - Stock ID / Metistics: Shark Species (SEDAR staff)
  - Estimating Commercial Directed Discards (Data BP Workshop)
    - A Panel member noted SEFSC Data Section has contracted work to help address this topic.
  - Indices Construction (Data BP Workshop)
  - Maturity Estimation (Data BP Workshop)
  - Reconvene SE US histological workshops (Data BP Workshop)
  - Uncertainty in Commercial Landings (Data BP Workshop)
  - GoM Shrimp Bycatch Estimation (Standing Panel)
    - A panelist noted that this topic is being addressed outside of SEDAR within the next ~6 months
  - Data Limited Methods Improvements/Best practices (Standing Panel)

<sup>9</sup> [http://sedarweb.org/docs/page/Consolidated\\_Research\\_Recommendations\\_January\\_2016.pdf](http://sedarweb.org/docs/page/Consolidated_Research_Recommendations_January_2016.pdf)

- A panelist noted that SEFSC is trying to obtain funding to address this topic outside of SEDAR
  - Natural Mortality (Standing Panel)
    - Panel identified this as a potential topic due in part to the Then et al. 2014 estimation methods; time sensitive issue since M estimation methods could potentially impact all assessments; Panel member noted some SSC's have identified this as a priority topic and it could potentially be addressed through joint SSC discussions
  - Combing Data from Multiple Sources/Merging Datasets (Standing Panel)
    - Panel members noted this is becoming a larger issue and may be a topic for a future Procedural Workshop topic; was noted there likely needs to be further discussion to decide how best to approach this issue
- Of these topics, the Standing Panel recommended two as highest priority due to their significant impact management advice derived from stock assessments,
  - Reference Points
  - Natural Mortality
- The Standing Panel also noted the need to promote “SEDAR Continuing Education” and participation by federal and non-federal partners by identifying workshop locations that are cost effective and easy to travel to.

#### **4. EXPECTED YEAR 2 ACTIVITIES**

Although Year 2 objectives were not specifically addressed by the Standing Panel, the terms of reference require specific activities each year. Therefore, the panel can be expected to:

1. Continue to review updates/revisions to the Data Issue Inventory.
2. Continue to review and evaluate existing SEDAR Data Best Practice Recommendations.
3. Develop new Data Best Practice recommendations, as needed.
4. Revise SEDAR Data Best Practices living document, as needed, and ensure the document is clearly versioned and dated.
5. Respond to requests from the SEDAR Steering Committee as necessary.
6. Prepare a report of 2017 SEDAR Data Best Practice Standing Panel activities.

## APPENDIX 1: Standing Panel Term and Reference and Procedures

### SEDAR DATA BEST PRACTICE STANDING PANEL

7/21/2016

The SEDAR Data Best Practices Standing Panel is established by the SEDAR Steering Committee. The Panel's overall purpose and approach are outlined below.

**PURPOSE:** Develop recommended best practices to support and streamline common SEDAR Data Workshop decisions for future assessments.

#### **TERMS OF REFERENCE:**

1. Coordinate and review updates to the Data Issue Inventory of SEDAR Data Workshop datasets and common or recurring data and analysis issues.
2. Review and evaluate existing SEDAR Data Best Practice Recommendations, as needed, for data preparation and analysis.
3. Develop new Data Best Practice recommendations for data preparation and analysis for future benchmark, standard, and update assessments (or research and operational assessments, if approved for use).
4. Revise SEDAR Data Best Practices living document, as necessary, making sure the document is clearly versioned and dated.
5. Respond to requests from the SEDAR Steering Committee as necessary.

#### **APPROACH:**

##### **Panel Composition and Appointments**

- The SEDAR Steering Committee is responsible for making appointments to Standing Panel with composition to be similar to the Best Practice Panel at the 2015 Data BP Workshop.
  - The Standing Panel recommends three-year appointments with the opportunity for reappointment. Reappointments will be under the discretion of the SEDAR Steering Committee.
  - The Standing Panel recommends allowing proxies if a Standing Panel member is not able to participate in a meeting. SEDAR staff and the Panel chair must be notified via email in advance of the meeting if a member will be sending a proxy.
- The Data Best Practice Standing Panel Chair will be chosen by Panel members.
  - The Standing Panel recommends have a rotating chair with a two-year term.

##### **Timing**

- The Standing Panel will meet at least once per year but could meet more frequently if needed. Meetings may be in-person, via webinar, or via conference call, as appropriate.

## **APPENDIX 1: Standing Panel Term and Reference and Procedures**

### **Data Issue Inventory & Identification of New Issues**

- The Data Issue Inventory developed for the 2015 Data Best Practice Workshop includes a number of issues that were not addressed at the initial workshop.
- Potential new issues will be identified by reviewing recent SEDAR Data Workshop reports. SEDAR staff will review Data Workshop reports and update the Data Issue Inventory with input from data management and assessment staff as needed.
  - The Standing Panel was supportive of adding a section to the current DW report outline where each working group can identify Data Best Practice recommendations or topics for the Panel's consideration, as well as, identify any problems related to the use of Best Practices.
  - The Standing Panel was supportive of having all working groups review and recommend updates, as necessary, the 'Roles & Responsibilities' table at each DW.
- The updated Data Issue Inventory should be publically available on the SEDAR website.

### **Issue Prioritization and Selection**

- Within the Panel's scope of responsibility, the prioritization and selection of issues to be addressed will be under the Standing Panel's discretion.

### **Issue Review and Evaluation**

- The Standing Panel is responsible for making the final Data Best Practice recommendations. If issues are not fully fleshed out in the DW reports, additional topical experts would be invited to provide guidance to the Panel on the issues under discussion.
- The decision on whether the Panel will meet in-person or via webinar to develop Best Practice recommendations will be dependent on the topics to be addressed.
- The Standing Panel will be responsible for developing and revising, as necessary, the Data Best Practices living document.
- The Standing Panel can recommend to the SEDAR Steering Committee if specific Data Best Practice recommendations need an independent review.

### **Monitoring Progress**

- The Standing Panel will provide a brief annual report describing their progress on Data Best Practice issues.
- Panel will review DW reports on the use of Best Practices and evaluate problems identified
- Panel will consider qualitative info on the use of Best Practices in standard and update assessments
- Panel may consider additional metrics which may include: the number of assessments using Data Best Practice recommendations; the use of similar Data Best Practice approaches for update or standard assessments (or 'operational' assessments, if approved); the number of changes to the Data Best Practice recommendations over time; the number of analytical or research related Best Practice procedures established; the number of assessments that followed the SEDAR Data Process Timeline and met data delivery deadlines; rate of deviation from the Best Practice ( i.e., # of deviations from BPs/ # of occurrences of BP issues in SEDARs)