# Illex Research Track Working Group (IRTWG) Meeting 1 Agenda

January 5, 2021 1:00-4:00 PM (EST)

- 1) Working group member introductions (All)
- 2) Research Track Assessment Process Overview (Terceiro; excerpt of Assessment Process doc below)
- 3) Operating Procedures for Working Groups (Terceiro; excerpt of WG Function doc below)
- 4) Brief (10 min max) overview of history of assessments and status of current assessment (Hendrickson)
- 5) Review Research Track Terms of Reference (Terceiro; TOR doc)
- 6) Discuss potential contributions, work products, and timing (working paper deadline of June 1) by WG members (Terceiro, Hendrickson, all others)
- 7) Agree on a meeting process going forward and schedule the next couple of meetings (Terceiro)
- 8) Anything else? (All)

### **Research Track Process**

# **Research Track Assessments and Topics**

Research track assessments and topics are complex scientific efforts focused either on (a) assessments of individual stocks with comprehensive evaluation of new data streams and model changes or (b) research topics that apply to assessments of several stocks. Generally speaking, applied scientific efforts in the fish stock assessment arena lie along a continuum from "research" to "research track" to "management track," with each step informing the next and getting closer to directly informing management decisions. Generic "research" may be designed to inform the research track, but typically is not designed to directly inform the management track. Research track efforts, on the other hand, are designed to directly inform future management track assessments, but may not immediately inform management decisions. Research track efforts can inform management track assessments by, among other things, (a) direct examination and development of an assessment or (b) tackling analytical, data, or other issues facing multiple assessments.

...

### Step 2: Working group(s)

...

For stock-specific research track assessments, a formal stock assessment working group will likely be convened in addition to, or instead of, a broader steering committee. Those working groups would be formed following the process established for past Stock Assessment Workshop working group protocols.

Research track working groups, both topical and stock-specific, will be tasked with developing and implementing the research plan and terms of reference based on scoping. The research plan should indicate which outputs will be applied, and how, to future management track assessments and/or management actions. This is most critical for research topics, where the terms of reference at the start should clearly indicate what outputs will inform future management track assessments, and how they would do so. For stock specific research track assessments, consideration should generally be given to development of alternative approaches to providing management advice if a research track or future management track assessment should be deemed unsuitable for use in management, i.e., development of "plan B" assessment advice approaches. In most, if not all cases, such "plan B" approaches would be evaluated by the peer review panel after the panel completed its review of the research track assessment; "plan B" approaches should be considered as backup plans for any future problems with an assessment, not an alternative to the developed research track assessment, unless of course that assessment is rejected for use in management advice. In situations where a "plan B" approach has been developed and approved through a research track peer review, the expectations are that approach would be applied in future management track assessments as a backup, and the AOP would not need to repeat the review and approval of that "plan B" approach.

### Step 3: Research

Once the research plan and terms of reference are established, the steering committee and/or working group guides and/or carries out the necessary research and compiles the results to inform the research track effort, incorporating public planning, data, and analytical meetings as appropriate. In some cases,

funding, staff, or other resources may limit research efforts, and, in those cases, the steering committee or working group should set priorities and ensure the most critical research is accomplished. When resources are limiting, the steering committee or working group should also inform the NRCC, whose members may be able to seek out additional resources to support the required work.

In order to promote an effective and innovative research track, topics and stock-specific assessments in this track typically will be carried out over longer time frames and with fewer requirements for using the most recent data, etc. In the two-track approach, the research track is intended to be the opportunity for extensive and comprehensive research and analysis, so it is helpful to remove timing constraints as much as possible. This is different than the management track, which is very much driven by the need to meet specific management timelines and apply the most recent data feasible. As appropriate and feasible, the research and management track schedules will be designed to have management track assessments for specific stocks immediately follow research track assessments for those stocks, which allows for the comprehensive and innovative research to occur with less limitations but ensures immediate application of the research results with the inclusion of the most recent data in a management track assessment.

### Step 4: Comprehensive peer review

Research track peer reviews are considered to be "comprehensive" peer reviews, in contrast to the expedited and enhanced peer reviews carried out for management track assessments. These reviews generally require 1.5-4 days and are intended to consider all aspects of the research topic or stock-specific assessment and provide advice on the validity of the research and analyses conducted as well as provide recommendations as to whether the outputs are suitable for use in future management track assessments and/or to inform future management actions. Typically, but not exclusively, peer review panels would be provided through the Center for Independent Experts (CIE) and would include at least one relevant SSC member to provide continuity with later Council, Commission, and SSC reviews and actions. As mentioned previously, in some cases it may be preferable to convene a research track peer review panel outside of the CIE process; in those cases, the relevant SSCs, NEFSC, and/or ASMFC Assessment Science Committee will nominate panelists, which will be reviewed and confirmed by the NRCC Deputies.

•••

### 3. Guidance on how SAW WGs function

## 3.1. WG formation, composition, and participation

WG formation is described in section 2.1.2. Criteria for WG membership are based on independence, expertise, and education. Size of the WG, and balance and diversity of WG composition may also be considered in establishing the WG (see Sections 2.1.1, 2.1.2, and 2.2.1). WG membership requires a high level of commitment. WG's should achieve a balance of opinions and expertise in the main areas relevant to the stock being assessed. An imbalance of membership may lead to over-emphasis on one area of the assessment or excessive advocacy for a certain position. Members are strongly encouraged to participate in all of the SAW WG meetings used to develop the assessment. To ensure efficient progress and timely delivery of the assessment, in general WGs should not revisit decisions that they made at an earlier WG meeting. Likewise, unless an error needs to be corrected, a subset of WG members should not engage after a WG meeting to overturn decisions made earlier by the full WG (e.g., about data set inclusion/exclusion, or model specification and selection decisions).

### 3.2. Invited collaborators

As noted earlier (Section 2.1) the SAW WG is not intended to include every expert or researcher involved in every assessment issue. However, the WG process may benefit from including some invited collaborators who can contribute particular information. The WG Chair may invite individuals to attend all or part of WG meetings to contribute research papers, or who have particular expertise and present information to the WG as appropriate. These invited collaborators are not WG members, and while they may engage in a full discussion with the WG at appropriate times during WG meetings, they may not participate in WG consensus decisions. It is the responsibility of the SAW WG chair to run the meeting in this manner. All WG meetings are to be public, and the SAW WG may take comments from the public. Like members of the public, invited collaborators may participate during public comment or when addressed by the SAW WG, but they are not directly involved with the WG when the WG makes its decisions.

# 3.3. Wide net for sources of data

When a SAW WG is formed, the lead assessment scientist, with support from the WG chair, should seek to acquire all data relevant to the TORs for that stock assessment. This may include new sources of information, as well as data not collected by the NEFSC. Acquiring such data sets can be done in various ways (e.g., sending email requests, phone calls, or holding a public meeting with industry/academia to discuss the strategy for conducting the stock assessment, and any major issues related to the assessment). If relevant peer-reviewed publications exist, the WG chair and lead scientist may want to contact the author(s) to indicate that this published information is being considered for use in the assessment. When new data sets are obtained, the WG should review the quality of those data and determine whether the data meet scientific standards for inclusion in the assessment. If the data do not meet these standards, the WG should

not include the data in the assessment, but should document that the data were considered and explain why the data were not included.

Ideally, research to support a stock assessment should begin after the previous benchmark assessment is completed, based on the research recommendations.

### 3.4. How the WG makes decisions

- --"Consensus decision-making" defined: "Consensus decision-making" is a group decision-making process that seeks the consent of all participants. Consensus may be defined professionally as an acceptable resolution, one that can be supported by the WG members, even if not the "favorite" of each individual.
- --On Consensus: SAW WGs should strive to achieve consensus. This is because SARC reviewers are generally very adept at evaluating whether an analysis presented to them is technically appropriate, but they struggle with resolving complex issues that a SAW WG was unable to resolve. The SARC generally respects the expertise and time devoted to these issues by the SAW WG, but the SARC has limited time to resolve or delve deeply into contentious issues that may have caused dissension within a WG.
- --On Minority opinions: During SAW WG meetings the WG chair should seek out, but not force, a consensus of the WG on major assessment issues. If a SAW WG is unable to reach consensus on an assessment topic, a minority opinion can go forward to the SARC only if more than one WG member has the minority opinion. During the SARC peer review the SAW WG Chair, rather than a WG member, will be responsible for explaining the minority opinion and describing how it differs from the majority report.
- --On Documentation of WG decisions: The WG chair should keep a log of the decisions made during each day of a WG meeting. The WG Chair's daily log should describe the decision, the logic and reasons behind the decision, the number of WG members who supported the decision, and the names and number of WG members in attendance at each meeting.

# 3.5. Dealing with single best model or with multiple models

For any TOR in which one or more models are explored by the WG, the WG report should provide a detailed account of the "best" model, including inputs, outputs, and the diagnostics of model adequacy, and sensitivity analyses that evaluate the robustness of model results to assumptions. In less detail, all other models and sensitivity analyses evaluated by the WG should be described and the strengths, weaknesses and results of the other models and analyses explained in relation to the "best" model.

Ideally the WG will be able to decide on and select a "best" model. However, when this is not possible, the alternative model(s) should also be described in detail, and the relative utility of

each model summarized, including a comparison of results. It should be highlighted whether any of the models represents a "minority" opinion (see Section 3.4) of the SAW WG.

For the "best model", include one or more tables that describe the model structure (for example: model type or name (including version and date of compilation), age- or length-based, sex-based, types of landings and discard data, length-weight parameters, maturity parameters, size bins, time bins, M assumptions, surveys used, model years for surveys and catch, etc.).