

This attachment describes the details of the "Actions" tab and can act as a legend and explanation of the content of the columns. The first and second column include the Themes and the Description of Recommended Actions from the PFMC STAR Evaluation Report. The remaining columns are described below.

There are also responses to each action that include anticipated level of workload, category of where the action would be documented, who would be responsible for accomplishing the action, and a response by Council staff.

Workload Color (Column D): The action description column is color coded to reflect the anticipated workload required to accomplish the action. It is important to note that some of these actions can be interpreted differently. This is the interpretation of Council staff and there is room for discussion.

The light gray actions are those that exist or are already part of the process.

Bright green actions are being worked on or integrated into development of TOR or other processes.

Light green actions are those where workload would be relatively minimal and would require limited coordination.

Yellow actions are those that would require moderate workload additions and some collaboration or coordination with our partners.

Red actions are those that would require substantial additions to workload and substantial collaboration and coordination with our partners.

Category (Column E): The actions have been sorted into four categories: TOR, COPs, website, and miscellaneous. Actions that would require changes to the TOR and COPs would be reviewed through the Council process. Changes to the website are those that can be made through Council staff with different levels of collaboration and coordination with partners (NMFS, ABs, etc.) Actions that are categorized as miscellaneous do not fit in the previous categories and include a range of places where changes may occur.

Responsible Party (Column F): The responsible party options include Council staff (staff), NOAA staff (NOAA), Scientific and Statistical Committee (SSC), Advisory Bodies (ABs),

Response (Column G): This is a brief response to each action often outlining the high level steps that would need to occur in order to achieve the action as stated.

Theme	Description of Recommended Actions	Category	Responsible party	Response
Transparency				
1a. Clarity in Process Navigation	1a-i. Create plain-language visual maps of the full assessment cycle.	website	Staff	Staff and NMFS are coordinating to ensure visual maps accurately portray the cycle.
	1a-ii. Continue and improve clarity of one-page assessment summaries.	TOR	NOAA/SSC	This is an ongoing process and improvements will continue.
	1a-iii. Simplify TOR introductions and clarify when and how they are developed.	TOR	SSC/Staff	Ongoing and will be integrated as part of the TOR for 2027-28. Preliminary action scheduled for June 2026.
	1a-iv. Publish “How to Engage” guide, specifying when and how stakeholders and the public will be engaged.	website	Staff	There is a "How to Engage" Fact Sheet along with other resources on the website. We are also working on a stock assessment process specific figure that will include the specific points where stakeholders could engage in the process. pouncil.org/documents/2019/10/fact-sheet-2-getting-involved.pdf
	1 a-v. Develop and maintain audience-specific communication tools that explicitly support the non-fishing community.	misc	Staff	See response to 1a-i.
1b. Information Accessibility	1b-i. Centralize records on a single online portal.	website	Staff	The “PAM” Site now hosts the current stock assessment cycle, including links to pre-assessment workshop materials, STAR panels, and additional reviews. The Stock

				Assessment Page on the Council website hosts historical records.
	1b-ii. Standardize metadata and file naming conventions.	misc	Staff	Staff can adopt file names for reports and request NOAA adopt specific file naming conventions for additional files.
	1b-iii. Maintain current contact lists with quarterly updates	website	Staff	These contact lists are typically made available to STAR panels, reps, and STAT teams. Council staff developed a “Proposed Meeting Schedule” to provide updates on deadlines and locations (the 2025 schedule can be found here: https://pam.pcouncil.org/2025-review-cycle/). This could be expanded to include contacts.
	1b-iv. Provide documents embedded within the Council's summary of agenda items	website	Staff	The Briefing Book provides links to documents for Council Meetings and the PAM site holds documents relevant to all STAR Panels and other stock assessment related meetings, such as the post-assessment workshop.
1c. Meeting Accessibility	1c-i. Continue employing hybrid meeting formats that combine remote accessibility with in-person interaction.	misc	Staff/ Council	Council staff plan to continue this format (web broadcast, with the ability for remote public comment).
	1c-ii. Develop virtual facilitation protocols and rules.	website	Staff/ Council	There are existing Code of Conduct documents for each AB which outline protocols and rules. The SSC Code of Conduct needs to be finalized.
	1c-iii. Train chairs and moderators in online deliberation/ facilitation techniques.	misc	Staff/ Council	Full training would require increased capacity within Council Staff and/or NMFS to develop and maintain specific trainings beyond those already provided for new Council members. This would also increase the time commitment for those leading meetings.

	1c-iv. Improve and standardize technical capacity for virtual meetings to minimize issues and interruptions during discussion.	misc	Staff	The Council Meetings and related meetings are all hosted on the same platform if virtual attendance is allowed with some exceptions if meetings are hosted by NOAA.
Communication				
2a. Scientific Communication (e.g., Uncertainty, Risk, P*)	2a-i. Standardize the expression of uncertainty, brief risk summaries, and intuitive definitions of misunderstood terms, etc.	website/misc	Staff/ SSC/ NOAA	Some of this is already done and explained in resources mentioned in 2a-ii. Other items could be explained with additional resources on the website. Working to expand the list of terms and definitions would take noticeable effort to ensure all terms are gathered and explained without using jargon.
	2a-ii. Include brief, intuitive definitions of technical terms in public reports.	misc	SSC/ Staff	There is a webpage with acronyms and definitions for many general terms (https://www.pcouncil.org/acronyms/) and a video by Jason Cope also covers a number of additional terms and concepts specific to stock assessments and the harvest policy (https://www.youtube.com/watch?v=AYK79AHQ1rU&feature=youtu.be)
	2a-iii. Adopt plain-language pre-briefings deliberations relevant to assessment outputs	COPs	Staff/ SSC/ NOAA	There are existing pre-briefings for the assessment outputs that are available to the public. These occur prior to the assessments being considered by ABs and the Council.
	2a-iv. Provide optional communication training modules for new participants.	misc	Staff/ SSC	There are resources available from PFMC, MREP, and NOAA on this process and the terms used throughout.
2b. Intra-Council Communication	2b-i. Include dedicated “BSIA Briefings” during Council meetings, using concise,	COPs	SSC	See response to 2a-iii.

and BSIA Determinations	plain-language (see Appendix B).			
	2b-ii. Establish a technical referral protocol that allows the Council to request the SSC to reevaluate determinations when new information arises.	TOR	SSC/ Council/ NOAA	The SSC has the authority under the MSA to determine BSIA for stock assessments. The Council then adopts the assessment for use in management. NMFS then makes a final BSIA determination. In the past, for select assessments, the Council has tasked the SSC with an additional review, but this has primarily only happened in a ad hoc manner when the SSC has also raised questions beyond the level of their usual inquiries (e.g. widow rockfish).
	2b-iii. Host cross-body workshops to align expectations and understanding.	misc	Staff/ All ABs/ NOAA	This would require increased workload for AB members, STAR Panelists, Council Staff, and NOAA. Also, see response to 2a-iii.
2c. Advisory Body Orientation and Onboarding	2c-i. Develop recurring “Advisory Body Bootcamp” programs (see Appendix C).	misc	Staff/ SSC	This would add substantial workload to Council Staff and NOAA staff (and any other facilitators) and would take substantial time to create these trainings and keep them updated.
	2c-ii. Rotate advisory body alumni as informal mentors for new members	misc	All ABs	This would need to be formalized with each AB and would extend a participant's commitment to providing their expertise to the PFMC.
	2c-iii. Encourage Council staff to host periodic “office hours.”	misc	Staff	The Council staff are available to engage with stakeholders during work hours and can direct them to appropriate resources to answer questions.
	2c-iv. Develop a concise Advisory Body Handbook.	misc	Staff/ SSC	The COPs outline the operational guidelines for each AB. Each AB also has their own operational guidelines available on their webpage. The SSC will need to finalize theirs.
Stakeholder Engagement				

3a. Early Integration of Local and Cooperative Data and Perspectives	3a-i. Prioritize two-tiered, early data workshops preceding assessment cycles.	TOR	SSC	There are two workshops before the STAR panels that include the Data Coordination Workshop and the Pre-Assessment Workshop. Adding two more workshops would increase the workload for both NOAA and Council staff. Final assessment choices are typically made only a year out (June of even years). Available data is provided by the NWFSC (https://www.pcouncil.org/documents/2026/02/d-8-supplemental-attachment-2-summary-of-vailable-northwest-fisheries-science-center-survey-data-to-support-assessments-of-u-s-west-coast-groundfish-stocks.pdf) on available lengths and ages by species and potentially commercial and recreational sources.
	3a-ii. Develop “data-use memos” showing how inputs were applied (see Appendix D).	TOR	NOAA/ Staff	This would increase workload for NOAA. It would be related to 3a-i, so would likely be moderate workload.
	3a-iii. Offer training in interpreting and incorporating LEK.	misc	Staff/ SSC/ NOAA	This would add to the workload of Council Staff and NOAA. NOAA has limited guidance on integrating LEK. There may be an opportunity to combine this action with a portion of Council Special Project 1. https://sab.noaa.gov/wp-content/uploads/2021/08/SAB-Mtg-Apr2017-ILEK-report-to-NOAA.pdf
	3a-iv. Encourage NMFS to cultivate cooperative data collection and/or research programs for groundfish fisheries.	misc	NOAA/ Staff	There is existing support for this type of collaborative data collection or sharing.
3b. Pre-Assessment Engagement	3b-i. Continue (and increase) investment in pre-assessment workshops.	TOR	NOAA/ Staff/ SSC	This would require a higher workload and increased support from NOAA to increase investment in additional workshops.
	3b-ii. Encourage engagement points for	misc	NOAA/ Staff/ SSC	See response to 1a-i, 2b-iii, 2c-i, and 3a-i.

	stakeholders with the STAT.			
	3b-iii. Partner with the Marine Resource Education Program (MREP) or similar programs to adapt early learning modules for stakeholder audiences.	misc	Staff	This is an ongoing process and improvements will continue.
3c. Assessment Education and Training	3c-i. Institutionalize education sessions (e.g., MREP).	misc	Staff/ NOAA	These types of sessions exist and are ongoing.
	3c-ii. Standardize “Data Workshop Packets” summarizing data and decisions.	TOR	NOAA/ Staff	This would add workload to NOAA in order to respond to each data type suggested and have to explain each decision while developing the assessment.
	3c-iii. Develop educational videos or briefing papers.	misc/webs ite	Staff/ NOAA	There are resources on the PFMC and NOAA websites that support understanding of this process. To develop additional resources would require additional workload to Council Staff and NOAA.
Assessment Process Cadence				
4a. Resource Constraints	4a-i. Further integrate workload planning processes.	misc	Council/ Staff/ NOAA	This is ongoing and consistently on the Council Meeting agenda.
	4a-ii. Streamline review layers and reduce redundancy.	TOR	SSC/ Staff	Resources constraints have encouraged Council and stock assessment efficiencies. This is an ongoing improvement.
	4a-iii. Request multi-year/rotating funding structures.	misc	NOAA	This would require a change to the NMFS appropriations from Congress.

	4a-iv. Expand scientist cross training.	misc	NOAA	West coast assessments are completed by multiple authors across agencies that should provide adequate cross training and coverage in the event of turnover.
4b. Process Fatigue	4b-i. Rebalance workload through a three-stage STAR process.	TOR	SSC	The description of this action blurs the lines between the existing Pre-assessment workshop, role of the STAR Panelists, and the SSC. The current process involves the steps describes without overlapping the roles described in the TOR.
	4b-ii. Limit redundant review steps.	TOR	SSC/ Staff/ Council	See response to 4a-ii.
	4b-iii. Formally schedule rest periods.	misc	SSC/ Staff/ Council	There are limits that are put on the number of STAR panels and therefore stock assessments each year to address capacity concerns as well as provide rest between times of intense work.
	4b-iv. Rotate review participation.	COPs	Staff/ SSC	While it is not always successful, review participation rotation is always considered, but not always possible based on capacity and expertise.
4c. Stock Assessment Prioritization	4c-i. Publish annual prioritization lists with rationale.	misc/webs ite	SSC/ NOAA/ Staff	The prioritization process is conducted through the SSC, appropriate ABs, and discussed on the Council floor in terms of prioritization and thought process. Each time it is discussed at an AB meeting or on the Council floor, public comment is welcome. Final recommendations are documented in the Decision Summary Document at the relevant meetings.
	4c-ii. Use prioritization lists as justification for alternative approaches.	misc	Staff/ NOAA	This is being addressed at least partially through developing a 10-year plan for stock assessments. By developing the long term plan, stock assessments can be prioritized, upgraded or downgraded depending on various factors. Alternative methods are also being proposed.
	4c-iii. Reinforce transparent scoring criteria.	TOR	Staff/ SSC/ NOAA	The prioritization process is part of the current TOR and is conducted through the SSC, appropriate ABs, and discussed on the Council floor in terms of prioritization and thought process. Each time it is discussed at an AB meeting or on the

				Council floor, public comment is welcome. Here is a link to tool that provides more information on stock assessment prioritization: https://connect.fisheries.noaa.gov/pfmc-groundfish-assessment-prioritization/
	4c-iv. Link prioritization to workload planning.	misc	Staff/ SSC/ NOAA	This is part of discussions on all topics, particularly stock assessments.
4d. Assessment Categorization and Evolution of Approaches	4d-i. Emphasize the continuum of stock assessments based on data availability	TOR	Council/ SSC/ NOAA	The Council currently delineates assessments as data poor, data moderate, catch-only projections, update assessment, and benchmarks based on criteria as outlined in the TOR. Changing the names could result in confusion for stakeholders who are used to the conventions, but could provide additional clarity for the broader Council stakeholder group on their ability to inform management.
	4d-ii. Explain data usage and rationale when reviewing assessments using these methods.	TOR	SSC	These explanations are provided through the stock assessment process and in the report and related review documents.
	4d-iii. Encourage STATs to continue employing these assessment approaches	misc	NOAA	See response to 4d-i.
	4d-iv. Develop outreach materials on these methods.	website	Staff	NOAA has resources describing the various models and the data required for each. An update to the PFMC website can include a link to that resource. https://www.fisheries.noaa.gov/insight/stock-assessment-model-descriptions
Feedback				
5a. Transparency Feedback	5a-i. Conduct earlier, iterative feedback check-ins (e.g., through the pre-assessment workshop and additional touch points).	TOR	SSC/ Staff/ Council	There are mutiple places in the stock assessment process where feedback from the public.

	5a-ii. Proactively solicit feedback following each assessment cycle.	TOR	SSC/ ABs/ Staff/ NOAA/ Council	Every December/January following the stock assessment cycle, the Process Review meeting is held by the Groundfish Subcommittee of the SSC. The meeting is attended by STAR panel chairs, CIE reviewers, GMT/GAP reps, and STAT team members. A report is produced to support changes for the next stock assessment cycle.
	5a-iii. Integrate feedback reviews to include evaluations of hybrid meeting formats.	TOR	Staff/ Council	Feedback, including that about meeting formats, is summarized in the post-assessment workshop report.
	5a-iv. Public summarize feedback themes and resulting adjustments.	TOR	Staff	See response to 5a-iii.
5b. Communication Feedback	5b-i. Develop feedback communication guidelines.	COPs	Staff/ Council	There are code of conduct and decorum guidelines that would cover communication expectations.
	5b-ii. Establish cross-body workshops to exchange feedback.	COPs	Staff/ SSC/ Council	It is unclear what "cross-body" specifically refers to. Integrating AB-STAR workshops would substantially increase the time required to complete the stock assessment process and would require increased capacity of Council staff, AB members, and STAR panelists.
	5b-iii. Encourage leadership to model communication practices.	misc	Council/ SSC leadership	This can be communicated to Council, SSC, and STAR Panel leadership at the start of each meeting.
	5b-iv. Emphasize effective feedback examples.	website	Staff/ SSC/ Council	These can be used in conjunction with 5c-iii to provide an outline of appropriate and constructive feedback.
5c. Engagement Feedback	5c-i. Create a public engagement feedback tracker and the Council or SSC's corresponding response.	misc	Staff/ SSC	Tracking of public feedback and response from the Council or SSC would require substantial increased workload to Council Staff and NOAA.

	5c-ii. Incorporate responses to public input in meeting minutes.	misc	Staff/ SSC	Incorporating responses to every public comment would substantially increase workload to STAR panelist participation and Council staff workload. This would also create additional paperwork to the process.
	5c-iii. Explicitly encourage participants to provide engagement feedback in a constructive and specific way.	website	Staff	A note can be added to engagement diagrams outlining a model of constructive feedback. A reference to that resource can also be mentioned at the beginning of meetings where public engagement is encouraged.
	5c-iv. Include updates to the Council on how input shaped processes.	misc	Staff	Reports from post-assessment workshops are provided to the council which outline the discussion and any anticipated changes to the process.
5d. Assessment Process Feedback	5d-i. Develop an internal feedback archive or tracking spreadsheet, emphasizing outcomes from post-STAR retrospectives.	misc	SSC/ NOAA/ Staff	Feedback provided through the post-assessment workshop is integrated into the TOR the following cycle. If additional tracking is needed, this would require increased workload to Council Staff and NOAA.
	5d-ii. Use findings to update TORs and training.	TOR	Staff/ SSC	This is done through the post-assessment workshop. Feedback provided through that workshop is integrated into the TOR the following cycle.