

**Gulf Council
Ecosystem Technical Committee
Meeting Summary
May 9, 2025
Tampa, FL**

The meeting of the Gulf Fishery Management Council's (Council) Ecosystem Technical Committee (ETC) was convened at 8:30 AM EDT on May 9, 2025. The ETC approved the meeting agenda and the summary from the August 2024 meeting as written.

Gulf Fishery Ecosystem Plan (FEP) Status Review and Inflation Reduction Act project update

Council staff presented an update about progress to date on the Gulf Fishery Ecosystem Plan (FEP), including recent funding through the Inflation Reduction Act (IRA) to support the Council's efforts to complete the FEP. IRA funding opportunities were made available to the regional fishery management councils to support the development of climate-ready fisheries management strategies. In addition to one IRA project aimed at Gulf FEP development, staff also outlined a second IRA project geared toward streamlining regulatory processes to build the capacity for the Council to respond more rapidly to updated scientific information as Gulf fisheries continue to face challenges from a changing environment. For this project, the Council will work with consultants to conduct a program review to identify novel and efficient regulatory processes used by other regional management councils. The consultant is tasked with identifying processes and procedures used in other regions that could be applied in the Gulf to provide a more flexible and streamlined regulatory development and implementation process. ETC members were supportive of the plans to identify creative ways to improve efficiency in Gulf fisheries management while acknowledging the unique data limitations of the region.

Discussion of Communications Plan for FEP and Red Tide Fishery Ecosystem Issue

Council staff provided an overview of the Communications Plan for the FEP and Red Tide Fishery Ecosystem Issue (FEI), which was developed with the Outreach and Education Technical Committee (O&E) and presented to the Council at its January 2024 meeting. The Red Tide FEI Communications Plan outlined a symposium to bring together a range of affected stakeholders and experts to address the issue of red tide in fisheries management in a holistic manner; however, Council staff reported that the proposed symposium was not supported and thus not funded because reviewers could not identify a tangible management outcome via the IRA funding objectives. ETC members discussed the potential value of a red tide symposium for informing fisheries management and whether it would be worth pursuing the symposium despite lack of IRA funding. ETC members agreed that many research groups are already studying red tide from different angles, but that these efforts are often disconnected and a symposium could be useful in connecting the pieces and identifying the intersection of ongoing research with federal fisheries. The ETC highlighted the disconnect in red tide information between state and federal waters, in particular. ETC members debated the benefits of a comprehensive symposium

versus one with a narrower focus. Some ETC members thought that it would be important to have a targeted symposium to guide existing red tide information toward fisheries-management oriented goals (e.g., fishery disaster declarations, examining red tide impacts on landings and catch rates) to differentiate the symposium from other red tide work. Other ETC members thought that a symposium was an opportunity for a more holistic evaluation of red tide and should remain broad in focus. Mr. Kevin Anson (Council representative) contributed that the Council prefers to remain focused on its own jurisdiction, and that identifying specific outcomes that may be useful to the Council would likely be the best approach.

The Red Tide Communications Plan also recommended the production of a report summarizing the social, biological, and economic impacts that red tide has on federal fisheries, with the aim of communicating specific impacts on federal fisheries to stakeholders and extra jurisdictional partners. ETC members were particularly interested in highlighting the economic impacts of red tide to federal fisheries, information which the group felt has been lacking in the past. The ETC discussed the need for the report to reach multiple audiences, and thought that both a detailed technical document and a plain-language description of red tide impacts might be necessary. An O&E representative said that executive summaries like those produced for stock assessments were a useful model for how to communicate complex technical information to stakeholders.

Discussion of social science consultant to support FEP

Next, Council staff outlined plans within the FEP-focused project to contract a social science consultant to help develop and conduct stakeholder engagements for the FEP, gather stakeholder-driven FEIs, and evaluate the impacts of FEIs. ETC members discussed the need to develop more specific objectives for the stakeholder engagements prior to recruiting the social science consultant, particularly because economists and anthropologists have vastly different skillsets and capacity to address different aspects of FEI impacts. An ETC member stressed the importance of engaging with a social science consultant with experience communicating with fishermen, as well as the need to conduct engagements in enough geographic regions to capture the diversity of stakeholders. Some ETC members expressed trepidation about conducting a large effort to gather stakeholder-driven FEIs when the Council has limited capacity to address these issues. ETC members agreed that stakeholders could become disenfranchised if they participated in a process that did not result in tangible outcomes and discussed the need to manage expectations. An ETC member questioned whether the stakeholder engagement efforts could identify FEIs that have not already been considered, and other ETC members stressed that scientific perception of issues is often different from industry perspective. Council staff highlighted the need for balance in the timing of stakeholder engagements, with some FEP and FEI progress necessary to demonstrate the concepts but remaining early enough in the process to allow for meaningful stakeholder input.

The ETC discussed the Paperwork Reduction Act (PRA) and the limitations that it could place on a social science consultant's efforts to quantitatively assess FEI impacts. ETC members discussed the lengthy PRA approval process required to conduct social science surveys, and

suggested that the process has been further delayed by recent changes in the Office of Management and Budget (OMB), which oversees PRA clearance. An ETC member discussed previous success in using approaches that do not require PRA approval, such as participatory modeling and focus groups. Council staff contributed that the Council's Fishermen Feedback Tool has PRA clearance and could potentially be modified for FEP stakeholder engagement use after undergoing an abbreviated approval process. ETC members inquired whether independent contractors were required to adhere to the same PRA requirements as federal agencies, and while ETC members discussed that it seemed likely, staff stated that they would confirm with NOAA General Council. ETC members discussed the tradeoffs between survey-based approaches and non-survey approaches, and that the specificity and quality of information gained from survey-based approaches may be worth seeking PRA approval. Council staff concluded that seeking clarification on PRA requirements and determining whether to seek survey or non-survey based approaches would be necessary before formally soliciting a social science consultant.

Pilot Fishery Ecosystem Issue: Red Tide

Council staff provided a presentation to guide the ETC through the Red Tide Pilot Fishery Ecosystem Issue (FEI). The Council previously approved of red tide as a pilot issue to serve as proof of concept to demonstrate the utility of the FEI Loop and identify issues that may interfere with FEI Loop success. Staff began by outlining the FEI Scoping for red tide, which is the first step of the FEI Loop and includes stakeholder involvement, defining key questions and goals, identifying the dimensions of the problem, evaluating data availability, and assessing the Council's authority to address red tide. The ETC discussed the prospective goals of the red tide FEI, which could be initially identified from a range of perspectives such as: (1) properly accounting for red tide mortality when setting catch levels, (2) mitigating the impacts of red tide events on the fishing industry, and (3) preventing red tide impacts from occurring.

When discussing the first goal, ETC members acknowledged that while critical for accurate stock assessments, properly accounting for red tide mortality when setting catch levels would likely be unsatisfying to stakeholders if it were the sole outcome of a red tide FEI because it can give the impression that the industry is being punished for something that is outside of fishery management control. Incorporating red tide mortality into stock assessments is often perceived as only leading to reductions in access due to uncertainty, despite the incorporation of red tide mortality in the most recent red grouper stock assessment (SEDAR 88; 2025) that ultimately resulted in an overall increase in the overfishing limit and acceptable biological catch. O&E representatives and ETC members agreed that improved communication was necessary to increase buy-in from the industry. An ETC member suggested that the first goal be revised to (1) 'be more responsive to red tide mortality when setting catch advice' to broaden the focus from stock assessments, which are not conducted frequently enough in the Gulf to respond to events on the water and to allow for consideration of developing near-term actions.

An ETC member suggested that the second goal would be the most important to stakeholders, and recommended investigating onramps for the stakeholder-proposed management solutions

(e.g., facilitating access to substitute species) from the NOAA Red Tide Oral History Interviews that were reviewed as part of the Red Tide Pilot FEI scoping process. ETC members discussed removing the third goal of the red tide FEI because the Council cannot prevent red tide impacts from occurring. Other ETC members thought that the goal of preventing red tide impacts should remain in place to help communicate expectations about what the Council can and cannot do, to communicate with extra jurisdictional partners about the impacts of red tide on federal fisheries, and to support stakeholders in recognizing the causes of red tide.

ETC members discussed adding a red tide FEI goal to (4) develop a more comprehensive data infrastructure to respond to red tides, which could include engaging fishermen to conduct real-time data collection to both fill data gaps and increase stakeholder buy-in. Stakeholder buy-in was further discussed by the ETC, and members suggested that stakeholders might be reluctant to provide information to management to further reduce catch when red tide is already impacting their bottom line. Because the themes of stakeholder buy-in and communication were common throughout the discussion of red tide FEI goals, an ETC member suggested an additional goal to (5) inform and educate stakeholders about how red tide factors into fisheries management. In summary, the ETC recommended five draft goals for the red tide pilot FEI which represent a range of perspectives that could serve as the focal point(s) of a full red tide FEI.

Next, the ETC discussed the FEI Workplan, which is the second step of the FEI Loop and includes defining objectives and timelines, identifying indicators and performance metrics, and defining data and research needs. Dr. Mandy Karnauskas (Southeast Fisheries Science Center [SEFSC], ETC Chair) provided a presentation on the ongoing research efforts related to red tide impacts on fisheries at the SEFSC, NOAA Atlantic Oceanographic & Meteorological Laboratory, and partner institutions. These include efforts to predict red tide events and build a red tide and hypoxia warning system for the West Florida Shelf (WFS), operationalize the WFS ecosystem model to develop estimates of red tide mortality for use in stock assessments, evaluate how reference points are affected by episodic red tide mortality and future uncertainty in episodic events, and conduct sensitivity analyses using simulation modeling to ensure that management advice is robust to red tide uncertainty. There are also ongoing efforts to assess patterns of resilience in fishing communities after major disturbances such as hurricanes and red tide, analyze fleet dynamics in response to red tide events, and develop a synthesis paper to outline red tide as a FEI Loop case study. An ETC member asked whether the synthesis paper would function as the red tide federal fisheries report outlined in the Red Tide Communications Plan. Council staff recognized the overlap in objectives and suggested that collaboration between the two efforts would be necessary but highlighted that an additional objective of the report was to extract high-level information to communicate key points about red tide impacts directly to stakeholders.

Council staff presented an overview of preliminary efforts to develop an updated annual index of red tide severity and evaluated the preliminary index against landings and possible environmental drivers of red tide. ETC members cautioned against attributing fluctuations in commercial quota landed to red tide severity, as there is often additional social and economic

context for such changes. An ETC member suggested that an annual index of severity for the WFS was too broad to be of utility given the wealth of spatially explicit data on red tide, and thought that regional indices or measures of red tide overlap with habitat could be more informative. The ETC then broadly discussed the potential use of indicators as early warning signals to inform risk tolerance when setting catch limits. ETC members discussed additional approaches that the Council could use to be more responsive to red tide events. An ETC member inquired if it would be possible to extend fishing seasons if quotas are not met due to red tide events. Council staff responded that currently, there are accountability measures in place that allow for extended red snapper seasons if the quota is not met, but applying similar in-season adjustments for red tide events could be problematic because red tide events are presumed to incur mortality, not just lost fishing time.

The ETC discussed what it would mean to build fishing community resilience in the context of red tide and highlighted the difficulty in defining and measuring resilience. ETC members suggested that resilience to red tide needed to balance ecological stability with social, economic, and cultural stability. ETC members emphasized the need to develop social and economic indicators to measure resilience and track red tide FEI performance. ETC members also suggested that tangible evidence of resilience to red tide could be measured in days on the water, pounds landed, and intact seafood supply chains following severe red tide events, and that evidence of no reduced opportunities or businesses lost would indicate that management efforts are valuable. ETC members discussed the fact that multiple stressors are often operating on fisheries and fishing communities simultaneously, and that indicators of red tide resilience may be confounded with other issues. The ETC briefly discussed the remaining steps of the FEI Loop (Execution of the Workplan, Implementation, Management Recommendations, and Evaluation) but agreed that more progress on a full red tide FEI would need to be made to be able to address these steps in detail.

Next Steps to Develop and Operationalize the Gulf FEP

The ETC recommended minor modifications to the draft FEP document outline and suggested that some of the chapters be reordered to improve the flow of the document. An ETC member inquired about the rationale for removing a chapter from the draft FEP developed by LGL Ecological Research Associates that was focused on expanded research infrastructure to support FEIs. Other ETC members recalled that the group previously decided to de-emphasize the broad generalization of research infrastructure because each FEI will have specific research needs that will be defined within the scoping process. The ETC also recommended minor modifications to the FEI Loop, suggesting that the ‘Management Recommendation’ step in the loop be changed to ‘Recommendations’ to allow for more flexibility exploring potential FEI outcomes. Staff suggested changing ‘Provide Management Options’ in the ‘FEI Implementation’ step of the Loop to ‘Provide Management Considerations’ to avoid confusion with the amendment development process and requirements of the National Environmental Policy Act (NEPA). The ETC discussed the need for the Council to regularly revisit the FEI list (i.e., annually) and for regular updates on FEI progress to be provided so that work on ecosystem issues remain visible.

Next, the ETC discussed how to move forward with the Red Tide FEI Pilot. The ETC thought that as a test the FEI Loop process, the pilot was complete. The ETC did not identify any road blocks in the FEI Loop through the piloting process and thought that the FEI Loop was an appropriate vehicle for evaluating FEIs through a structured process within the FEP. However, the ETC acknowledged that work on red tide as a FEI was just getting underway, and that a dedicated red tide FEI working group would be necessary to make progress toward addressing red tide in fisheries management. The ETC also acknowledged that the format for documenting an FEI had yet to be defined, which would be necessary to further inform whether work was completed on the red tide pilot FEI. After further discussion, the ETC made the following motion.

Motion: Upon discussion of the Fishery Ecosystem Issue (FEI) process in the context of red tide the Committee recommends the Council appoint a task force to carry out this initiative.

Motion carried with no opposition.

Update on Ecosystem Status Reports for the Gulf

Dr. Karnauskas provided an overview of the new process for developing and updating Ecosystem Status Reports (ESR) for the Gulf. Previously, ESRs were developed manually in an inefficient process that slowed the production of ESR updates. The updated workflow for ESRs includes using a centralized data repository and automating ecosystem indicator creation, indicator visualization, and report generation, which will allow for reports to be updated quickly. Reports will be more concise than in previous versions of the ESR, and will aim to tie indicators to management objectives. The SEFSC recently completed development of the Caribbean ESR using this method, and work is underway to build the framework for automating ESRs in the Gulf. Dr. Karnauskas stated that ESRs remain a high priority for the SEFSC, despite recent losses of staff. An ETC member recalled previous requests from the Council for annual ESR updates, and ETC members applauded the efforts to modernize ESR updates. The ETC looks forward to the next iteration of the Gulf ESR.

Public Comment

None received.

Other Business

No other business came before the ETC.

The meeting was adjourned at 4:23 PM EDT on May 9, 2025.

Meeting Participants

ETC Members Present

Mandy Karnauskas, Chair
Casey Streeter, Vice Chair
Eric Brazer, Jr.
David Chagaris
Jennifer Cudney
Michael Drexler
Matt McPherson
Jim Nance
Dan Petrolia
Steven Saul

Council Representative

Kevin Anson

O&E Technical Committee Members

Dylan Hubbard
Eric Weather