

Tab Q, No. 5(a)

# Pilot Fishery Ecosystem Issue: Red Tide



June 2025

# Red Tide as a Pilot FEI



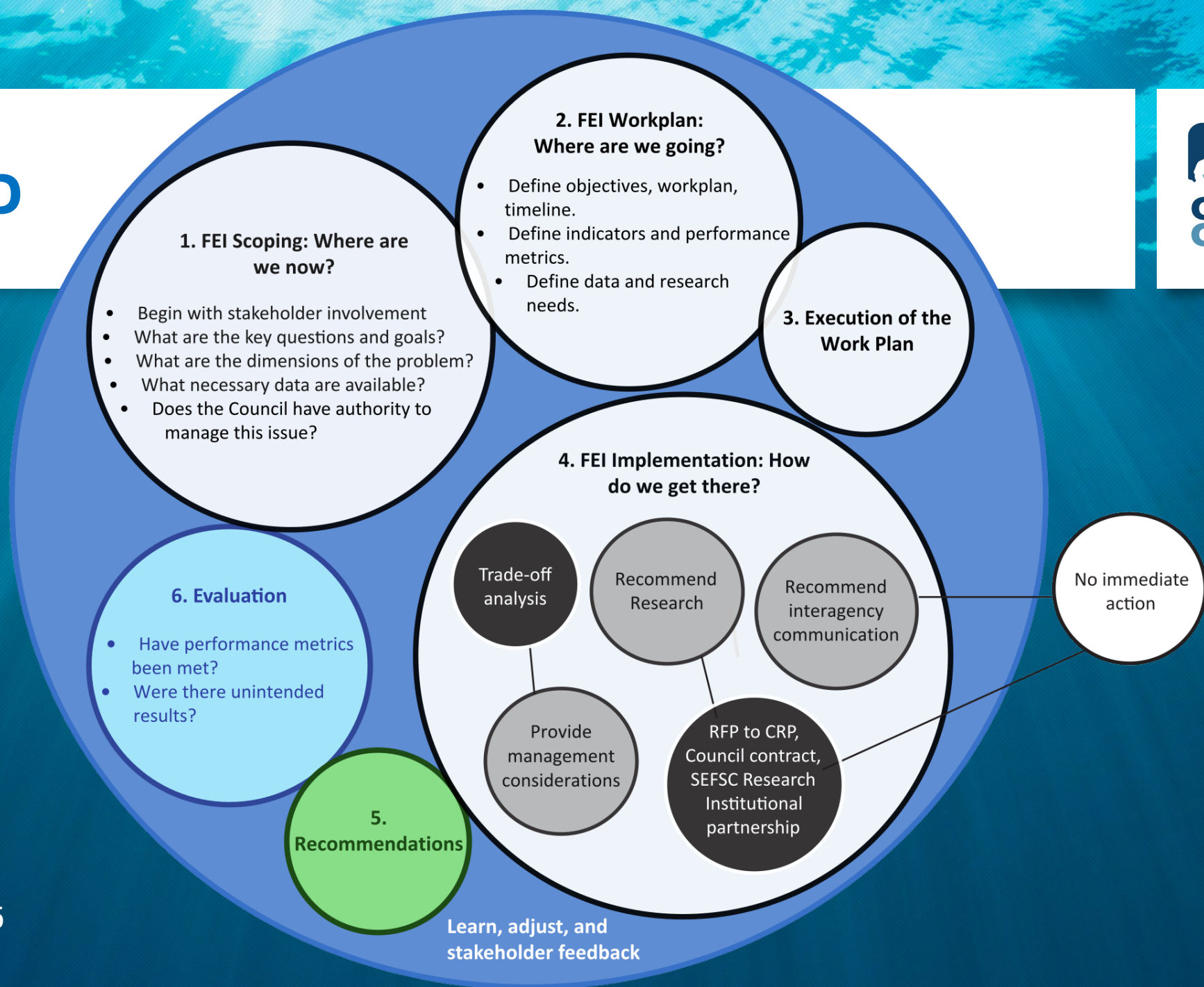
## ETC Motion - September 2023

The Ecosystem Technical Committee (ETC) recommends to select one pilot Fishery Ecosystem Issue (FEI) in order to help develop the Fishery Ecosystem Plan process and the FEI loop procedures. The ETC recommends that Red Tide be the FEI that is initially piloted.

## Council Motion - October 2023

The Council supports the Ecosystem Technical Committee's approach utilizing red tide as the initial FEI that will articulate potential management applications to the Council.

# FEI Loop



# Range of Prospective Red Tide FEI Goals Discussed by the ETC



What do we hope to achieve by embarking on the red tide FEI?

Be more responsive to red tide mortality when setting catch advice

Mitigate the impacts of red tide events on the fishing industry

Prevent red tide events from occurring

Inform and educate stakeholders about how red tide factors into fisheries management

Develop a more comprehensive data infrastructure to respond to red tides

# Ongoing SEFSC Research Efforts Related to Red Tide Impacts on Fisheries



1. Predict extreme red tide events and create an early warning system for industry
  - Biogeochemical modeling to build subseasonal-to-seasonal red tide and hypoxia warning system (AOML)
2. Impacts of red tide events on fish populations
  - Operationalizing WFS Ecosystem Model (RESTORE)
  - Estimates of red tide mortality for use in stock assessments

# Ongoing SEFSC Research Efforts Related to Red Tide Impacts on Fisheries



## 3. Account for red tide when adjusting catch limits

- Evaluate how reference points are affected by red tide episodic mortality and future uncertainty (RESTORE)
- Simulation modeling to test different approaches for red tide incorporation into stock assessments

## 4. Impacts on industry

- Assessing patterns of resilience following red tide disturbances
- Fine-scale analysis of fleet behavior in response to red tide

## 5. Red tide synthesis paper

# ETC Recommendations following the Red Tide FEI Pilot Exercise



- Piloting the FEI process
  - FEI Loop performs as intended thus far
  - ETC approves FEI Loop for the Gulf FEP
- Red Tide FEI
  - Work is just beginning on identifying management onramps for red tide research products

## ETC Motion - May 2025

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.

# Next Steps for the Red Tide FEI



- Technical working group (SEFSC, Council staff)
  - Synthesize ongoing red tide research for ETC consideration and identification of management onramps
- Work with ETC to identify appropriate format for Red Tide FEI reporting
  - Different from traditional Council documents
    - Example of reporting for [PFMC Ecosystem Initiatives](#)
  - FEI process itself is non-regulatory
  - Iterative process