

Climate and Ecosystem Steering Committee

September 2, 2025
Via Webinar



Agenda

10:00 am	Welcome and review agenda (John Pappalardo)
10:10 am	Inflation Reduction Act project updates (staff and contractors)
12:00 pm	Lunch break
12:30 pm	Subcommittee updates (Michelle Bachman)
1:15 pm	Northeast Fisheries Science Center updates (Joe Caracappa and Andrew Ross)
2:15 pm	Wrap up and other business (John Pappalardo, Michelle Bachman)
2:30 pm	Adjourn

May 6 meeting: Key outcomes and next steps

- State of the Ecosystem discussion highlighted the need for better integration with management decisions at individual stock and ecosystem levels
- Steering Committee committed to exploring Changing Ecosystems and Fisheries Initiative products in the context of Council work
- Steering Committee reiterated need for clear communication of Risk Policy concepts as implementation proceeds and recommended maintaining flexibility around defining factors and the metrics used for factor scoring
- Approved SOPPs and refined workplans for the Process Mapping and Communications Subcommittees

Steering Committee Membership

Denotes engagement with:

C = Communications Subcommittee

PM = Process Mapping Subcommittee

RP = Risk Policy Working Group

ECCG = East Coast Coordination Group

SSC = Scientific and Statistical Committee

- John Pappalardo* (Chair)
- Geoff Smith* (Vice Chair)
- Katie Almeida, C
- Dr. Joe Caracappa, C, ECCG
- Dr. Jeremy Collie
- Tony DiLernia
- Travis Ford, PM, ECCG
- Michelle Bachman – Staff coordinator for CESC, C, PM, ECCG
- Andy Applegate – Ecosystem-Based Management, IRA 3.1, C, RP
- Jonathon Peros – Staff lead for Risk Policy and Holistic Strategic Plan contract, RP
- Dr. Lisa Kerr, PM, RP, SSC
- Dr. Gareth Lawson, PM, SSC
- Dr. Kathy Mills, PM
- Dr. Jocelyn Runnebaum, PM
- Dr. Michelle Staudinger, PM, SSC
- Megan Ware*, RP
- Peter Whelan*, PM

Reminder: CESC Goal and Objectives

- **Goal:** Provide overarching guidance and support for design and implementation of climate-ready management approaches across the Council's fishery management plans.
 - **Objective 1:** Advise the Council on priorities, processes, and management approaches to address climate change, environmental factors, and ecosystem considerations across fishery management plans;
 - **Objective 2:** Develop recommendations for management approaches that consider tradeoffs related to scientific uncertainty, socioeconomic effects, and ecosystem function and productivity; and
 - **Objective 3:** Evaluate and develop recommendations for governance structures to support climate-resilient and ecosystem-based management approaches.

NEFMC Inflation Reduction Act Initiatives

1. Acceptable Biological Catch Control Rules for Northeast Multispecies

3. Operationalizing Ecosystem Approaches to New England Fisheries Management

3.1 Integrating Ecosystem Information
3.2 Dynamic Reference Points
3.3 Ecosystem Component Spp.

2. Atlantic Cod Management Transition

4. Operationalizing the East Coast Scenario Planning Initiative

4.1 Advisory body structure and use
4.2 Joint management approaches
4.3 Regional operating agreements
4.4 Portfolio analysis

5. Holistic Strategic Plan for Climate Resilient New England Fisheries Management

6. Enhancing Participatory Processes for Climate Resilient Fisheries

6.1 Artificial Intelligence
6.2 Public Communications

Summary of projects



New England
Fishery Management
Council

Acceptable Biological Catch Control Rules for Northeast Multispecies

IRA 1 Project Overview

Description

This project will modify the current Acceptable Biological Catch (ABC) control rules for Northeast Multispecies (groundfish) stocks through an adjustment to the Northeast Multispecies Fishery Management Plan (FMP). It will include contracted simulation testing of different control rule options within the context of the Council's recently revised Risk Policy, focusing on select stocks with diverse assessment types and management considerations. Testing will be followed by Scientific and Statistical Committee review and a Council action.

Objectives

1. Evaluate Risk Policy scoring factors and existing groundfish ABC Control Rules.
2. Modify an existing MSE model framework to make it suitable for evaluating alternative ABC Control Rules in the context of the updated Risk Policy and conduct simulation testing for representative groundfish stocks.
3. Use results of simulation testing to inform management plan revisions.

Management Applications

1. Updated ABC control rules for groundfish stocks
2. Knowledge that can be applied to ABC control rules in other Council FMPs

Project Oversight Team

Contractor: Lisa Kerr, Roger Brothers, and Jamie Behan, University of Maine

Oversight Team: Robin Frede, Gareth Lawson, Angelia Miller, Jonathon Peros

Project Timeline

2025 ▶ CONTRACTED SIMULATIONS

- ✓ **Jan.** - Request for proposals released.
- ✓ **Feb.** - Proposals reviewed and contractor selected.
- ✓ **Mar.** - Project Oversight Team formed
- ✓ **Apr.** - Kickoff Project Oversight Team meeting with contractors
- Aug.** - Evaluate risk policy and demonstrate factor scoring and integration with control rules
- Sep.** - Develop Management Strategy Evaluation Modeling Framework
- Oct.-Nov.** - Co-develop scenarios and conduct simulation testing
- Dec.** - Present results to SSC and Council

2026 ▶ COUNCIL ACTION

- Jan.- Dec.** - Draft ABC Control Rule alternatives with Groundfish Committee
- Dec.** - Final Council action

2027 ▶ IMPLEMENTATION

Implement at start of 2027 fishing year

Progress as of August 2025

- Program planning and organization
 - Council staff assignments made; tracking staff effort (hours) per project
 - Templates for proposal evaluations, action plans, contract milestone tracking, workshop budgets
 - Outreach materials prepared (project briefs and timelines)
 - Budget tracking
- Major analytical contracts have been awarded and are underway
- Oversight teams formed for most projects, with staff, contractors, CESC members, others as needed
- Planning timing and logistics of 2026 workshops
- Staff and contractors are providing updates to and seeking feedback from the Council, Climate and Ecosystem Steering Committee, and other groups as needed

Next Steps

- Consider necessary facilitation contracts for various workshops and prepare RFPs
- Establish workshop steering committees and augment project oversight teams as needed
- Consider alignment of project timelines with future Committee and Council workplans to ensure capacity to apply project results to management actions
- Consider a path forward for Initiative 2, Atlantic Cod Management Transition

Workshops, trainings – 2026, 2027

- Identify opportunities for improving management outcomes and resilience in the groundfish fishery (IRA 2) - *Details TBD, may refine scope of initiative*
- Guidance and best management practices related to dynamic reference points (IRA 3.2)
- Joint East Coast governance workshops on advisory body use and joint management arrangements (IRA 4.1 and 4.2)
- Workshop to review and update the Council's operating agreement with NOAA Fisheries (IRA 4.3)
- Workshops or focus groups with northeast fishery permit holders to explore opportunities for modernizing the permit system (IRA 4.4) - *Details & timing TBD*
- The Council also plans to train staff through a contract or training facility to improve operational efficiencies using artificial intelligence (IRA 6.1)

Acceptable Biological Catch Control Rules for Northeast Multispecies

Initiative #	1 (related to 3.1)
Objectives	<ul style="list-style-type: none">• Evaluate risk policy factors and existing ABC Control Rules• Establish modeling framework and conduct simulation testing• Revise Groundfish FMP
Management outcomes	<ul style="list-style-type: none">• Updated ABC Control Rules for groundfish• Lessons to apply to other plans
Contractor	University of Maine
Oversight team membership	Robin Frede (staff lead), Lisa Kerr (contract lead), Jamie Behan, Roger Brothers, Gareth Lawson, Angelia Miller, Jonathon Peros

Current activities and feedback requested:

- Factor evaluation
- Determining focal species for modeling
- Developing modeling tools / framework
- No specific feedback requested at this point

** Separate presentation on these topics*

Atlantic Cod Management Transition

Initiative #	2
Objectives	<ul style="list-style-type: none">• TBD
Management outcomes	<ul style="list-style-type: none">• Changes to sector management system• Revised spawning protection measures for cod
Contractor	TBD
Oversight team membership	Robin Frede (staff lead), TBD

Current activities and feedback requested:

- Planning is paused while we work to resubmit Cod Stock Structure action
- Will consider in the coming months whether a formal change in scope is needed, or if we can proceed with the project as planned

Mechanisms to Include Ecosystem Information in Council Decisions

Initiative #	3.1
Objectives	<ul style="list-style-type: none">• Work with NEFSC on data to support Risk Policy factor development• Process mapping / on-ramps• Automate report preparation
Management outcomes	<ul style="list-style-type: none">• Risk Policy implementation• Improved information flow• Modernized monitoring reports
Contractor	U. Maine – ABC CRs TBD; possible to support training, other analytical needs with smaller contract if needed
Oversight team	Andy Applegate (staff lead), Jonathon Peros

Current activities and feedback requested:

- Council staff directly engaged with NEFSC staff on risk policy data support
- Council staff working on report automation
- CESC subcommittee work on process mapping diagrams / table summarizing on-ramps
 - Discuss how to move this work forward (afternoon agenda item)

** Separate presentation on this topic*

Dynamic Reference Points

Initiative #	3.2
Objectives	<ul style="list-style-type: none">• Identify work required to operationalize concepts, issues discussed during recent workshops• Host SSC workshop to develop ideas, plan next steps
Management outcomes	<ul style="list-style-type: none">• To facilitate use of phase HCRs• Evaluate scientific, management uncertainty buffers• Performance review of projection methods
Contractor	TBD for facilitation
Steering committee membership	Jamie Cournane (staff lead), Rachel Feeney, Lisa Kerr, Ed Camp, others TBD

Current /near term activities and feedback requested:

- Forming steering committee
- Begin developing agenda, identify presenters, workshop logistics
- No specific feedback requested at this point

Ecosystem Component Species Evaluation

Initiative #	3.3
Objectives	<ul style="list-style-type: none"> Analyze factors to determine criteria and thresholds for ecosystem component species Apply joint species distribution models to understand ecological relationships
Management outcomes	<ul style="list-style-type: none"> Council policy on EC species Revisions to Council FMPs
Contractor	Maris Collaborative
Oversight team membership	Julian Garrison (staff lead), Angelia Miller (contract lead), Michelle Bachman, Robin Frede, Chris Haak

Current activities and feedback requested:

- Project planning and report development
- Identify specific uses for SDMs in evaluation
- Review use of EC species at other Councils
- List of possible candidate species - feedback requested on candidate species list

* Separate presentation on these topics

** Feedback requested

Cross-Jurisdictional Governance

Initiative #	4.1 – Advisory bodies 4.2 – Joint management
Objectives	<ul style="list-style-type: none">• Evaluate advisory body structure, use, and decision-making• Evaluate joint management approaches and consider needed revisions• Evaluate opportunities to combine management plans
Management outcomes	<ul style="list-style-type: none">• Revisions to SOPPs and Operations handbook• Potential management actions to combine plans
Contractor	The Parnin Group, Monmouth University
Oversight team membership	Michelle Bachman (staff lead), Jamie Cournane, Jenny Couture, Rachel Feeney, Jonathon Peros

Current activities:

- Workshop planning
- Developing questionnaire about current practices w/TPG

Feedback requested:

- Nothing specific at this time

Review Regional Operating Agreements

Initiative #	4.3
Objectives	<ul style="list-style-type: none">• Review terminology, general and specific roles, consider revisions• Consider recent changes in NEPA guidance• Consider current resource landscape during updates
Management outcomes	<ul style="list-style-type: none">• Revised Regional Operating Agreement between NEFMC and GARFO
Contractor	TBD for facilitation
Oversight team membership	Jonathon Peros (staff lead), others TBD

Current activities:

- Early-stage planning, timeline integration with other projects

Feedback requested:

- None at this time

Portfolio Analysis

Initiative #	4.4
Objectives	<ul style="list-style-type: none">• Examine ecological and technical interactions between species• Evaluate different portfolio compositions and estimate optimal harvest weights• Recommend potential next steps to adjust permits and optimize yield
Management outcomes	Potential revisions to permit system to increase resilience and fishing opportunities
Contractor	University of Massachusetts Dartmouth
Oversight team membership	Jenny Couture (staff lead), Lauran Brewster (contract lead), Connor Coscino, Geret DePiper, Chris Haak, Kathy Mills, Naresh Pradhan

Current activities:

- Data assembly and preparation
- Model development
- Focal species and fleet identification

Feedback requested:

- Focal species
- Focal gear types, areas, or fleets

** Separate presentation on these topics*

*** Feedback requested*

Holistic Strategic Plan Development

Initiative #	5
Objectives	<ul style="list-style-type: none">• Document current management approaches• Identify drivers of successful vs. unsuccessful approaches and link to existing and alternative processes• Develop a strategic plan including implementation roadmap and metrics
Management outcomes	A Holistic Strategic Plan that the Council can use to build dynamic fisheries management systems that improve fishing community resilience.
Contractor	The Parnin Group, with Lynker Corporation
Oversight team membership	Jonathon Peros (staff lead), Michelle Bachman, Connor Buckley, Emily Bodell, Travis Ford, Emilie Franke, John Pappalardo, Mary Sabo, Mike Simpkins

Current activities:

- Interviews and focus groups
- Benchmarking
- Surveying staff and committee leadership on advisory bodies and joint management

Feedback requested:

- None at this time
- Brett Wiedoff (TPG) available for questions

Enhance Participatory Processes

Initiative #	6.1 – Artificial Intelligence 6.2 – Public Communications
Objective	Develop tools for enhancing the participatory process of the New England Council under a rapidly changing environment.
Management outcomes	<ul style="list-style-type: none"> • Sustained application of efficient strategies in activities and actions • Integration of modern tools to visualize climate-resilient options • Streamline processes to reduce barriers and complexity • Align our services with community characteristics • Streamline routine tasks, saving time for more complex work
Contractor	The Parnin Group, with Lynker Corporation; Training contract TBD
Oversight team membership	Rachel Feeney (staff lead), Emily Bodell, Connor Buckley, Alex Dunn, Julian Garrison, Sherie Goutier, Chandler Nelson

Current activities:

- Evaluate public communication strategies used by other Councils
- Inventory and test available AI tools
- Training in AI tools for selected team members
- Assess public sentiment about Council communications (with TPG)

Feedback requested:

- Nothing specific at this time
- Open to hearing about successes with specific tools or processes

Risk Policy Implementation (related to IRA 3.1)

- The Council's new Risk Policy became effective on January 1, 2025.
- Two inter-related phases are happening concurrently.

ALPHA Phase 2025-2026

- Seven factors have been identified.
- Initial factor data sources developed.
- Risk Policy matrices completed by PDTs with focus on data assembly.
- No factor scoring or weighting.
- Qualitative application to FY 2026 catch advice.

BETA Phase In active development for 2027

- Simulation testing (IRA project).
- Factor scoring guidelines developed and refined.
- Adjust factors and data inputs.
- Council establishes official factor weights.
- PDTs estimate quantitative factor scores.
- Quantitative application to FY 2027 catch advice (direct connection to harvest control rules).

How does this relate to automation?

The need to routinely assemble data and estimate indicators relevant to factor scoring led to a focus on automation.

There is a relationship between the risk policy matrices and monitoring reports.

IRA 3.1 – Ecosystem Information

Automating Fishery Reports

- Address new needs
 - Fishery performance
 - Data summaries for risk factor evaluation
- Standardization and efficiency
 - Less partner support
 - More efficient process
 - Follows our own schedule
 - Consistent format



Previous annual monitoring workflow

Provide timelines and deadlines for analyses and text

Badger PDT members and others to complete work

- Conduct PDT meeting

Assemble document by hand, Word or Power Point

Send draft document out for review

Incorporate edits and comments by hand

New workflow, Word or Power Point report

Run prepared code

- Update data using Roracle, create tables using Flextable and graphs using Ggplot
- Standard text in R document, prepared by staff and PDT

Render text, tables, and graphs in draft report

- Quarto (runs quickly in R)

PDT review and evaluation – modify text in R file

Re-render final report

- Adjust formatting

IRA Project Presentations

- University of Maine – ABC CRs / Risk Policy
- Maris Collaborative – Ecosystem Component Species
- University of Massachusetts Dartmouth – Portfolio Analysis

Subcommittee updates

- Overarching discussion questions:
 - What tasks do we want to focus on through the end of 2025?
 - Where do these overarching communications / process mapping tasks fit into the IRA portfolio?
 - How do they relate to other Council initiatives and actions?
 - Which subcommittee members can assist with development of specific products?

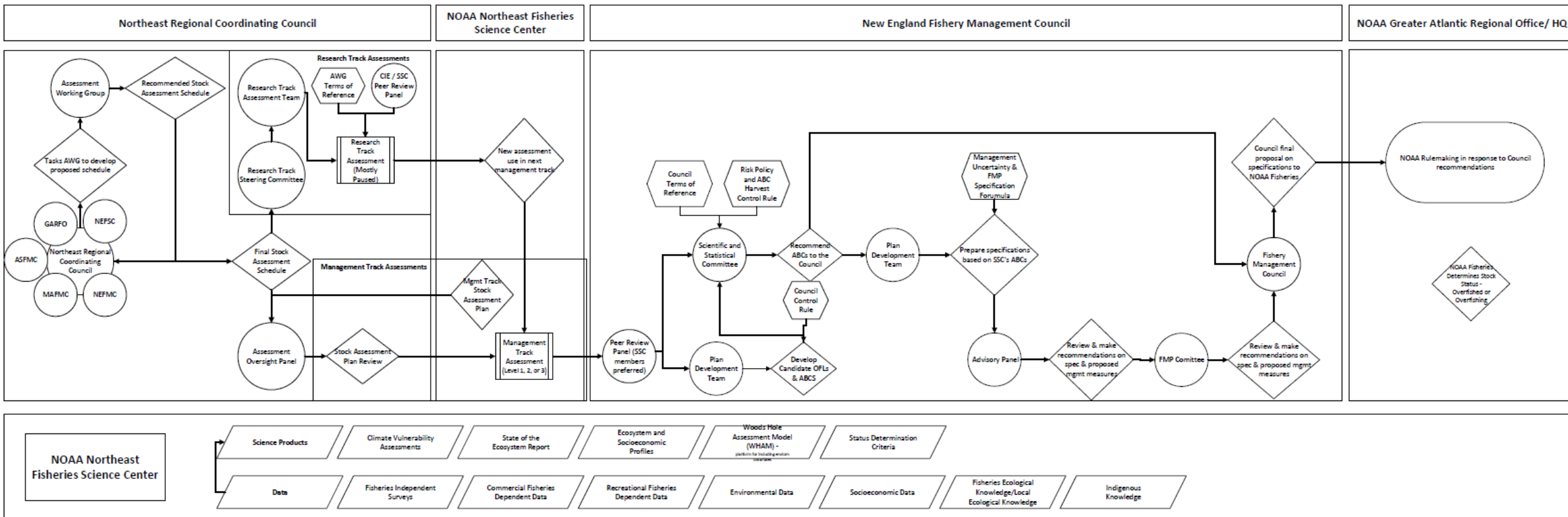
Process Mapping Subcommittee

- Met as a full group on June 5
 - Reviewed draft flowchart and on-ramps table
 - Revised table structure / elements
 - Agreed to prioritize specifications process flowchart
- Additional brainstorming sessions between Jocelyn, Michelle; some of us met during the June Council meeting
- Jocelyn worked to refine the specifications process map during / after the Council meeting; shared latest version of the table and flowchart in July
- Have not discussed the revised flowchart as a group, but has been thoroughly vetted
- Need a plan for filling out the table

Process Mapping Subcommittee

Activity 1: Refine draft process mapping diagrams specific to the New England Council

- Assessment / catch advice process (completed)
- Amendment process, Framework process (to be completed)



Process Mapping Subcommittee

Activity 2: Identify on-ramps for climate and ecosystem information

- Identify points in the process where information would be used, information sources, groups and individuals who would need to be involved
- What types of information does this include? For example, species and oceanographic modeling outputs, food web dynamics, local ecological knowledge, place-based knowledge, etc.
- Are these pathways currently being used? Partially, or fully?
- If not being used, or only partially used, what challenges or obstacles are preventing the use of this pathway?
- How could the Council's process or outcomes be improved by including additional ecosystem and climate information via these on-ramps?

For each on-ramp, identify:

- Part of the Fisheries Science to Management Process
- Specific on-ramp (e.g., Science Product)
- Current Practice
- Change Needed to Incorporate Climate, Ecosystem or Place-Based Knowledge
- Expected Benefit (e.g., why is this a good thing?)
- Who is Involved
- Frequency/ Timing
- Examples (e.g., publications, Council documents, or theoretical ideas)
- Source

Process Mapping Subcommittee

Activity 3: Interact with other groups nationwide to understand their examples of process mapping / on-ramp identification work that we may apply

- There is a team working on a more general, national version of this; Jocelyn is/ was participating in both efforts
- Are there other ongoing activities we should consider?

CESC Discussion – Process mapping

- Is there agreement with the structure of the on-ramps table?
- Who has the capacity to assist with filling out the on-ramps table?
- Should we continue development of process maps for framework, amendments, or focus on on-ramps for now?

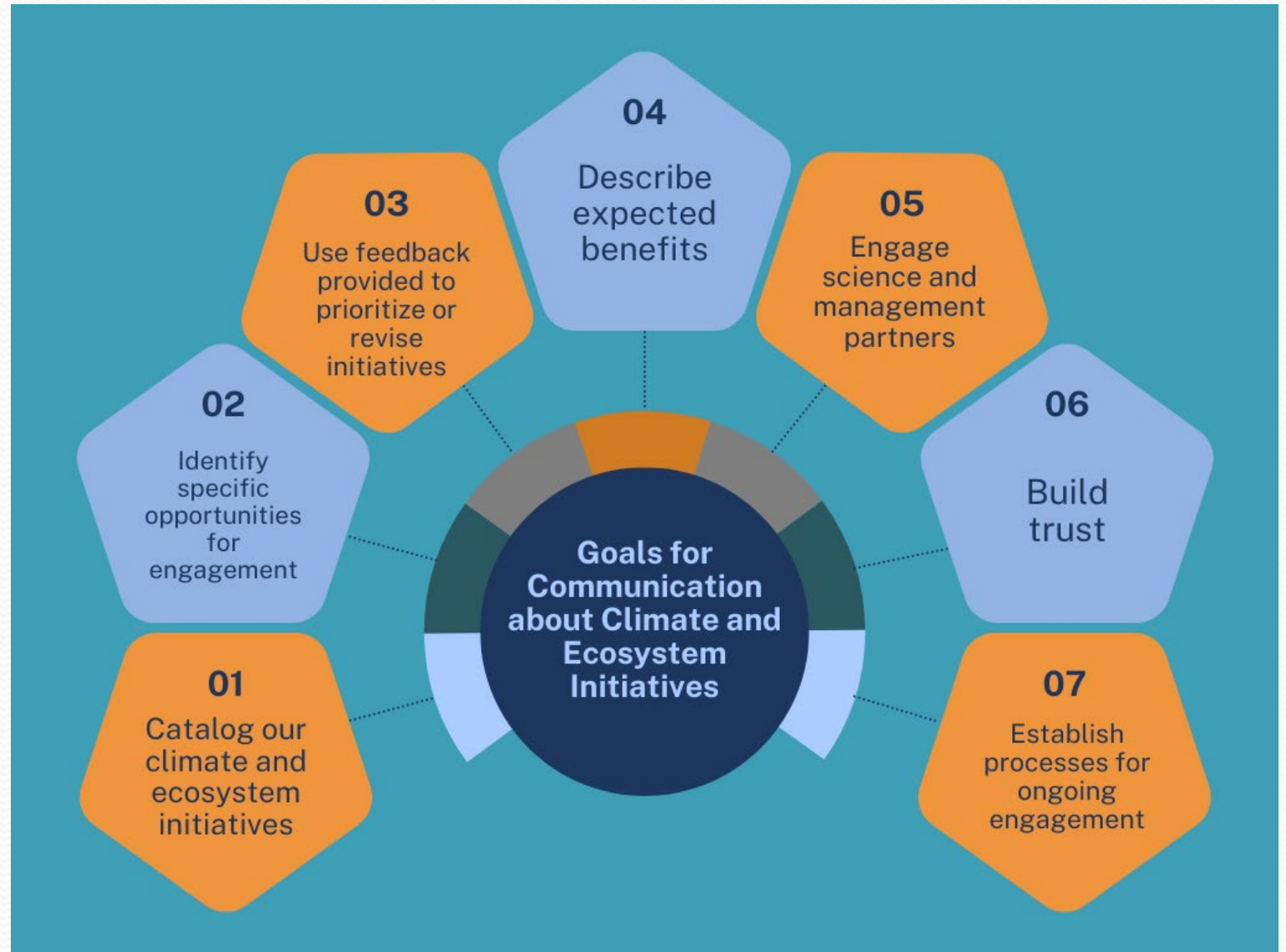
Communications Subcommittee

- Met on June 5 to review and update the workplan which includes:
 1. Clarify goals – *developed a list – feedback from CESC welcome*
 2. Evaluate lessons learned – *not started beyond identifying past efforts*
 3. Create outreach materials – *in progress – discuss IRA products*
 4. Standardize language for CEFI products – *not started at the subcommittee – are other working on this?*
 5. Describe Risk Policy process – *not started at the subcommittee – are other working on this?*
 6. Work with Project Oversight Teams on specific opportunities for IRA outreach – *not started*
 7. Plan and host stakeholder engagement sessions – *not started*

Communications Subcommittee

Activity 1: Clarify overarching goals for these communication initiatives

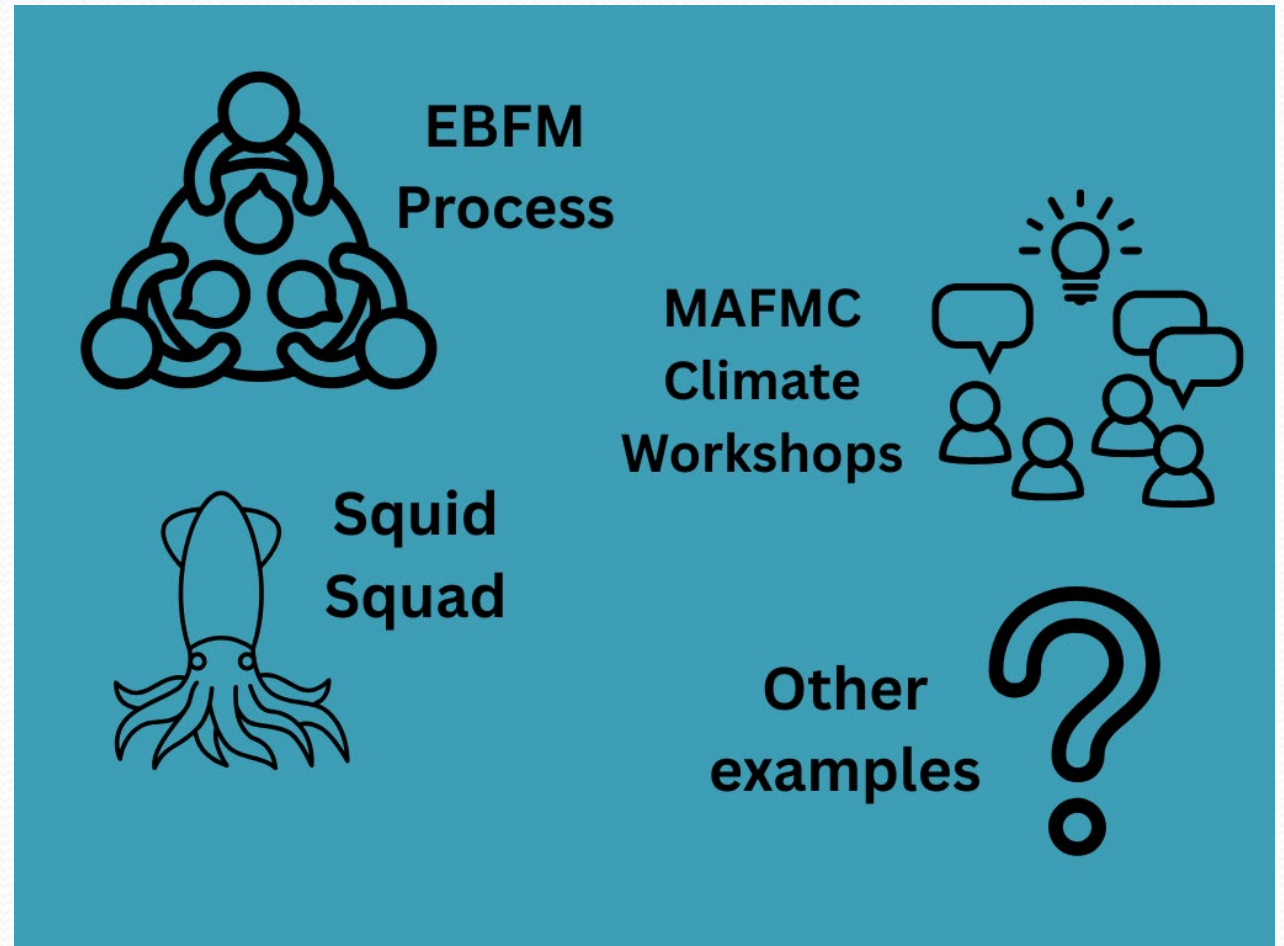
- *Is there agreement on these?*
- *Do they need to be clarified?*



Communications Subcommittee

Activity 2: Evaluate lessons learned from past processes

- *What is the best way to complete this evaluation?*
- *Might the Holistic Strategic Planning evaluation be of assistance here?*



Communications Subcommittee

Activity 3: Create content summarizing IRA initiatives

Activity 4: Identify specific IRA outreach opportunities

Activity 5: Develop standard language for CEFI products

Activity 6: Describe the Risk Policy initiative

- *What work is already being done in these areas?*
- *What are the near-term priorities?*
- *How do we move forward?*

Communications Subcommittee

Activity 7: Plan and host stakeholder engagement sessions

- a) Identify objectives for holding stakeholder meetings
- b) Identify topics of interest to stakeholders that would encourage participation in meetings.
- c) Recommend timing, location, size, and format of outreach meetings.
- d) Suggest participants, including groups and organizations or individuals that should be included in outreach efforts.
- e) Identify appropriate speakers or panelists for outreach sessions.
- f) Develop a scope of work for any facilitators contracted to support outreach sessions.
- g) Describe and support the development of written materials or web-based tools that provide background or resources needed to support participation in outreach meetings.
- h) Summarize outreach session findings and communicate them back to the full Steering Committee and NEFSC CEFI decision support team.

Key questions:

- ***What are our objectives?***
- ***What is the right timing for these sessions?***

Northeast Fisheries Science Center

- Short versions of Ecosystem and Socioeconomic Profiles
- State of the Ecosystem Report updates
- Share recent CEFI forecast

Wrap up and next steps

- Recap decisions / recommendations made today
- Identify near term follow up work
- Plan next meetings of full CESC and subcommittees