Inflation Reduction Act Project Updates

New England Fishery Management Council

January 28, 2026

Michelle Bachman and Dr. Rachel Feeney, Council Staff

Angelia Miller, Maris Collaborative

Today's Presentation

- Purpose is to provide a comprehensive, but high-level update on the full portfolio of NEFMC IRA projects
- At the April meeting we'll do a deeper dive into some of these projects
- Additional details available in project briefs, workshop list, and governance project overview document
- Generally, these updates are for information, but feedback is welcome and will help to guide future work and messaging about project outcomes
- Thank you to the many staff and contractors who contributed to this update!

IRA 1: Risk Policy and ABC Control Rule Simulation Testing

Robin Frede, Staff project lead; University of Maine, Contractor

- Dr. Lisa Kerr, Dr. Roger Brothers, and colleagues at University of Maine are providing a separate presentation on this project
- Project Oversight Team met on 1/16 and provided feedback on scenarios
- Analysis relies on ongoing work of Risk Policy Working Group, meeting 1/23
- University of Maine's update will be posted in conjunction with RPWG materials for the Council meeting

IRA 2: Groundfish Management Transition

Robin Frede, Project lead

- As outlined in the Council's approved funding proposal, this project focused on working with industry to identify management strategies for a four-stock Atlantic cod complex
- Council staff recommend broadening this scope to include discussion of any opportunities to modernize the groundfish fishery to accommodate ongoing challenges and promote resilience
- In coordination with the Groundfish Committee, the Council will convene facilitated visioning sessions or focus groups to solicit ideas outside of regular FMP-development meetings
- New or revised management approaches could include adjustments to the sector management system, or to spatial management measures intended to promote conservation of groundfish species

  - *Does the Council have concerns about this revised scope?*
  - *Are there additional issues to explore through these sessions?*

IRA 3.1: Integrating Ecosystem Information

Andy Applegate, Staff project lead

Purpose:

- Continue developing ecosystem approaches for fisheries management with explicit consideration of climate drivers and dynamic environments
- Directly connect ecosystem information to management decisions

Objectives (all are currently underway):

- Source data to support factor scoring for the Council's updated Risk Policy.
- Map the Council's action development processes and identify specific on-ramps for climate and ecosystem information.
- Create modernized, automated, and integrated reports of fishery information to support decisions.
  - Prototype completed: Whiting Annual Monitoring and Fishery Performance Report, Dec. 2025
  - Next steps described in the Process Mapping section of this presentation

IRA 3.2: Dynamic Reference Points SSC Workshop

Dr. Jamie Cournane, Staff project lead; L. Singer, H. MacDonald, W. Goldsmith, Contractors

- Dynamic reference points can change through time in response to non-stationarity in fish populations.
- A steering committee, composed of Council staff, SSC members, NOAA and state scientists, and contractors, is planning a facilitated workshop for members of the SSC. The workshop is scheduled for June 1-2, 2026.
- This workshop will build on prior research and discussions to operationalize dynamic reference points in the New England region.
- Outcomes of the workshop will include a workplan for the SSC and the Council.

IRA 3.3: Ecosystem Component Species Evaluation

Julian Garrison, Staff project lead; Angelia Miller, Maris Collaborative, Contractor

- **Purpose:** Establish management strategies for ecosystem components (EC) in the New England region
- **Need:** Climate-driven changes in distribution, abundance, and productivity indicate that evaluation of EC status is warranted for several resources
- **Objective:** Analyze factors in MSA and NS Guidelines, as well as changes in environmental drivers and fishery data, to develop criteria and thresholds for designating Ecosystem Component Species (EC Species) within the NEFMC fishery management system
- **Deliverables:**
  - A guidance document for considering and evaluating an Ecosystem Component designation
  - Pilot evaluation of 8 NEFMC-managed species (S. Windowpane, Wolffish, Witch flounder, SNE/MA yellowtail, Thorny and Rosette skate, Red and offshore hake) and 2 unmanaged species (sand lance and cusk)

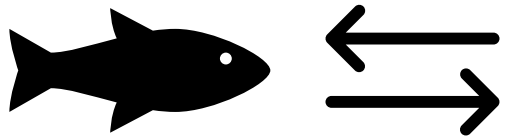
IRA 3.3: Ecosystem Component Species Evaluation

- **2025: Initial Planning and Literature Review**
  - *Reviewed use of EC Designations at other Regional Fishery Management Councils.*
  - *Selected the set of case study species including currently managed and unmanaged species.*
- **2026: Develop Guidance and Evaluate Candidate Species**
  - *For each species/stock, evaluate their cooccurrence, distributions, and food habits as well as their need for conservation and management based on the National Standard Guidelines.*
  - *Seek feedback on species evaluation and metrics in various venues (CESC meetings, Council meetings, EFH Review meetings, other expert opinion meetings as needed, etc.)*
  - *Recommend any case study species/stocks for EC Designation.*
- **2027 and later: Development and implementation of Council action(s)**

IRA 4.1 & 4.2: Governance

Michelle Bachman, Staff project lead

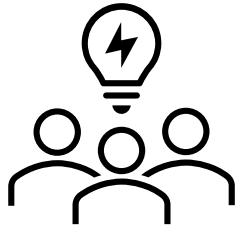
- **Governance, in this context:** Which groups and individuals are involved in management recommendations for particular resources, and their respective roles relative to one another
- **Need for change:** Environmental changes are causing range expansions, range contractions, or shifts in distribution for many fish stocks. These changes are posing challenges for current governance structures and arrangements, which were mostly established under the assumption that stock locations would remain relatively stable over time.



IRA 4.1 & 4.2: Governance

Objectives (building on scenario planning initiative action menu)

- Evaluate **advisory body structure, use, and decision-making**; consider representativeness of membership given shifting species distributions.
- Evaluate **joint management approaches** and consider the need to more clearly document and revise them.
- Evaluate opportunities to **combine fishery management plans** within or across Councils and consider the benefits and costs.
- Collaborate with partner organizations to develop regionally consistent approaches where possible.



Activities

- Workshop series engaging members and staff of East Coast Councils and Commission
- Staff and contractor-supported assessment of current approaches and adjustments
- Prepare report evaluating joint monkfish / skate processes
- Council action to revise operations / SOPPs

With oversight by the East Coast Coordination Group & support from the East Coast Core Team

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IRA 4.3: Regional Operating Agreement Update

Jonathon Peros, Staff project lead

- **Purpose:** Update the Council's 2014 operating agreement with NOAA GARFO, NEFSC, and OLE
- **Partners:** GARFO, NEFSC, and OLE. NEFMC updates will be aligned with MAFMC updates where possible & appropriate
- **Objectives:** Review terminology, roles, and consider needed revisions. Consider changes to procedural guidance (e.g., NEPA, ESA), and the evolving resource landscape in which the Council works
- **How and when:** A facilitated workshop in 2027, with staff and contractor planning and preparation during 2026

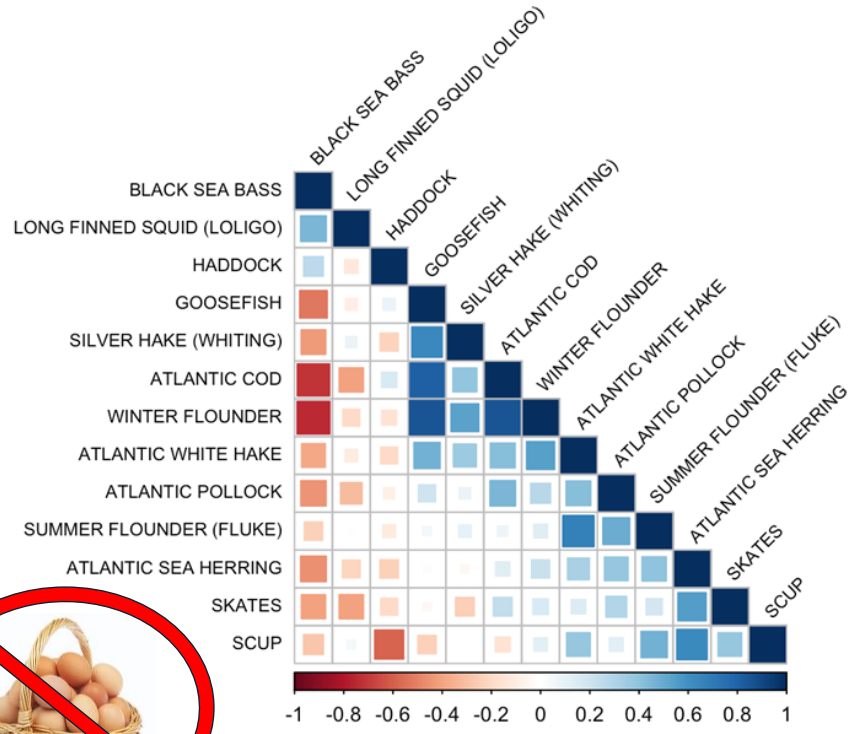
IRA 4.4: Portfolio Analysis

Jenny Couture, Staff project lead
Dr. Lauran Brewster and Connor Coscino, UMass Dartmouth SMAST, Contractors

Portfolio theory: Diversifying in uncorrelated or negatively correlated assets can reduce risk or increase revenue for desired level of risk

In a fisheries context…

- Fishers have high fixed costs (permits, gas, gear, bait, crew, debt) and require liquidity to operate
- Fisheries revenue has variability
  - Big swings in revenue can put fishers at risk of not meeting costs or liquidity needs
  - Big upside swings may indicate unsustainable harvest
- Fish stocks can be treated as financial assets
  - Can be harvested to generate revenue indefinitely



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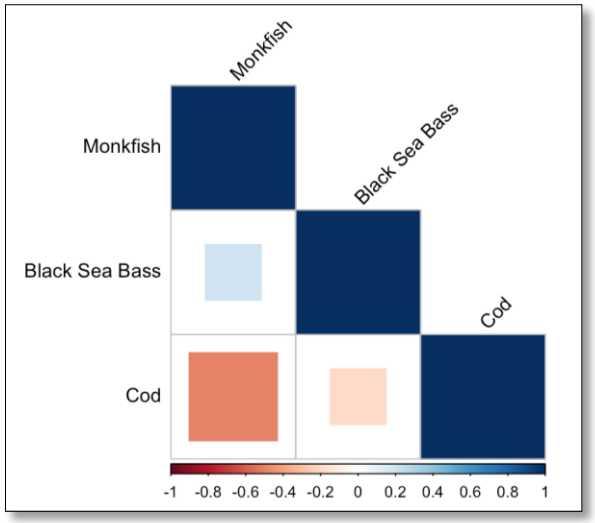
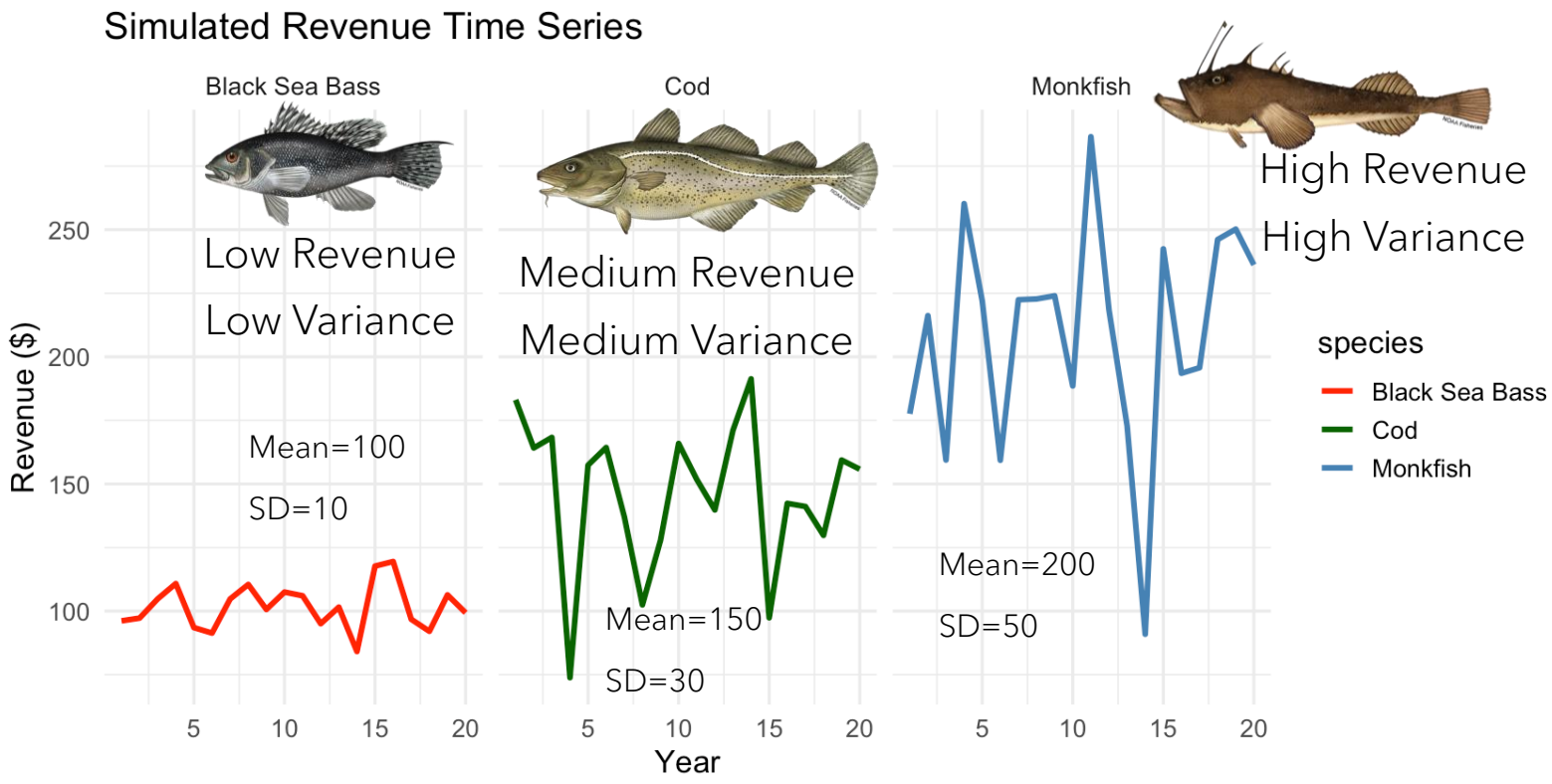
Portfolio Analysis Project Objectives

- Examine ecological, technical, and market interactions between harvested species using dynamic factor analysis and species distribution models.
- Evaluate different portfolio compositions under historical and present management and permitting structures, and estimate optimal harvest weights between species.
- Recommend next steps that the Council might take to adjust permits and optimize yield across species.

Illustrative example: Cod, Monkfish, Black Sea Bass

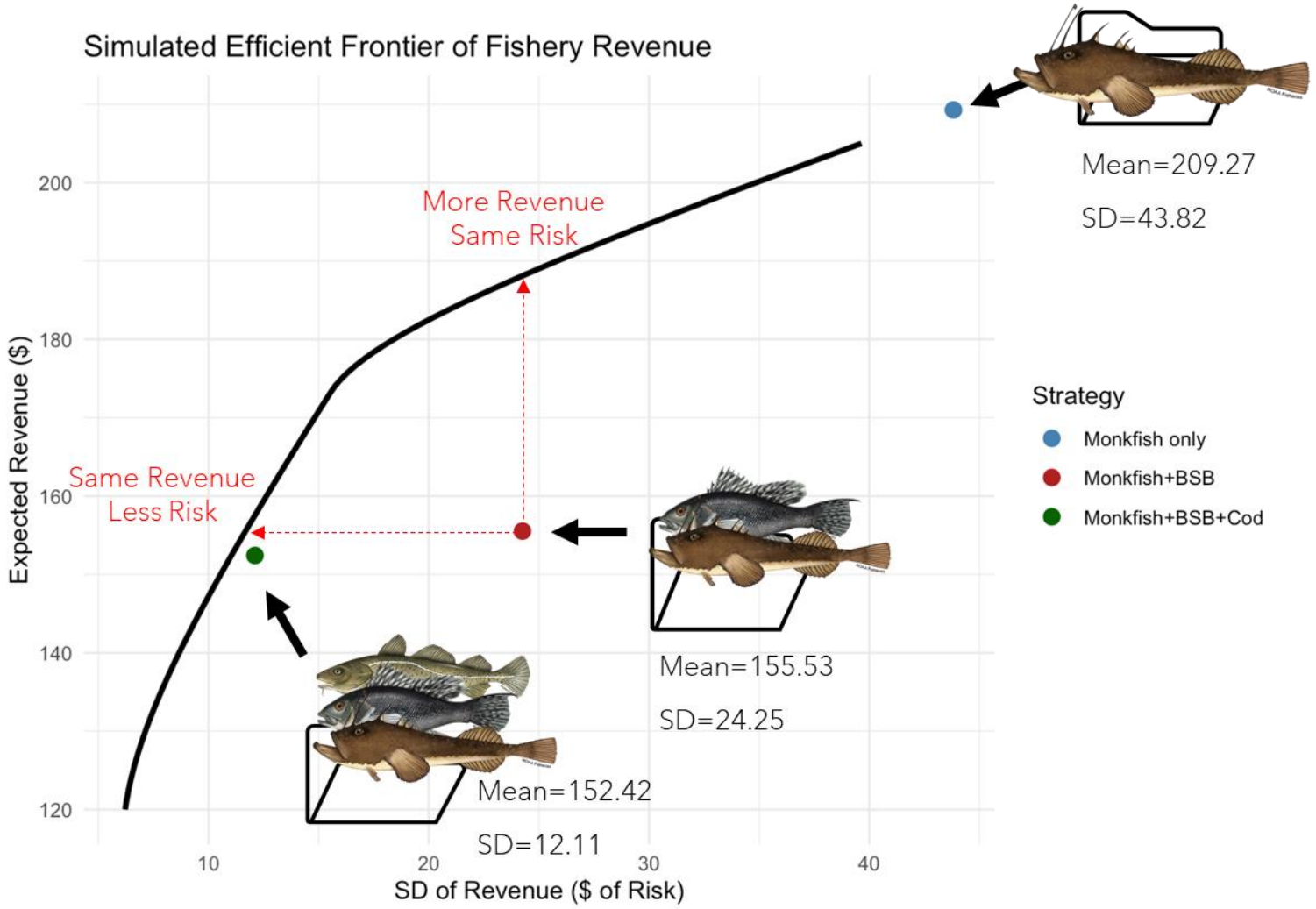
- Simulated revenue data for three species
- Simulated covariance structure
  - Monkfish / Cod: (-)
  - Monkfish / BSB: weak (+)
  - BSB / Cod: weak (-)





How do you allocate harvest under this scenario?

- Monkfish
- Monkfish + BSB
- Monkfish + BSB + cod



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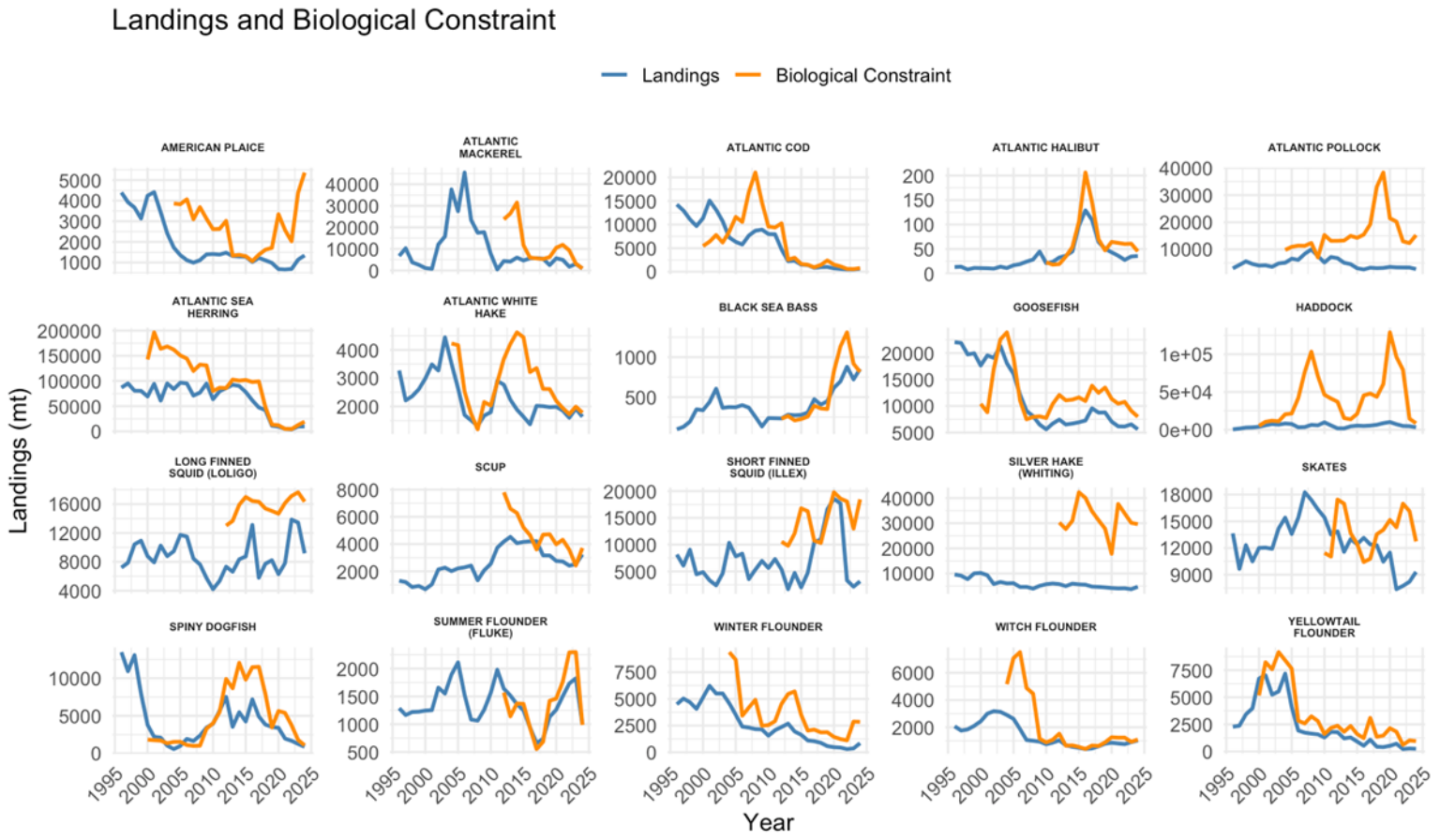
Progress Updates

$$Biological\ Constraint = \frac{Landings\ in\ data}{ACL\ or\ TAL\ or\ Quota\ Usage\ \%}$$

- Compiled database of annual specifications
- Management-based biological constraints identified and implemented in portfolio code



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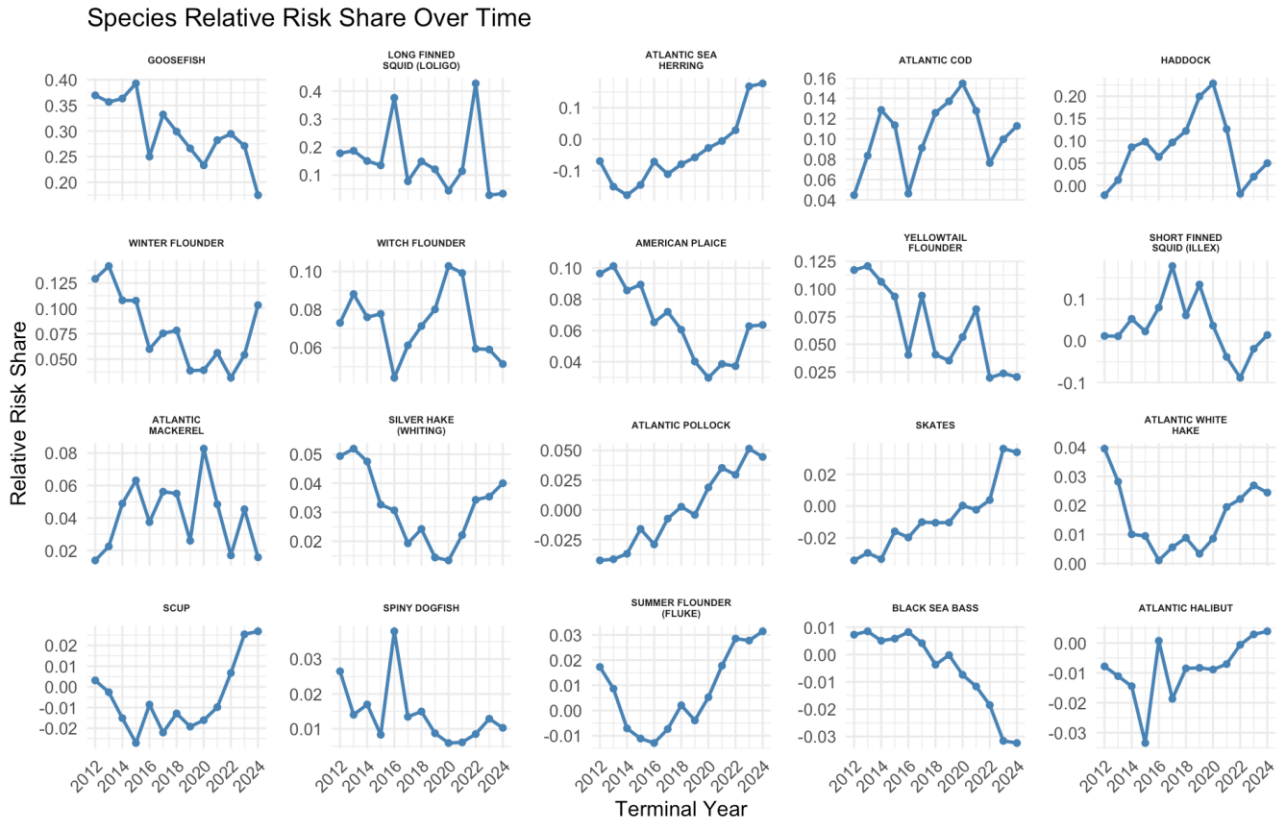
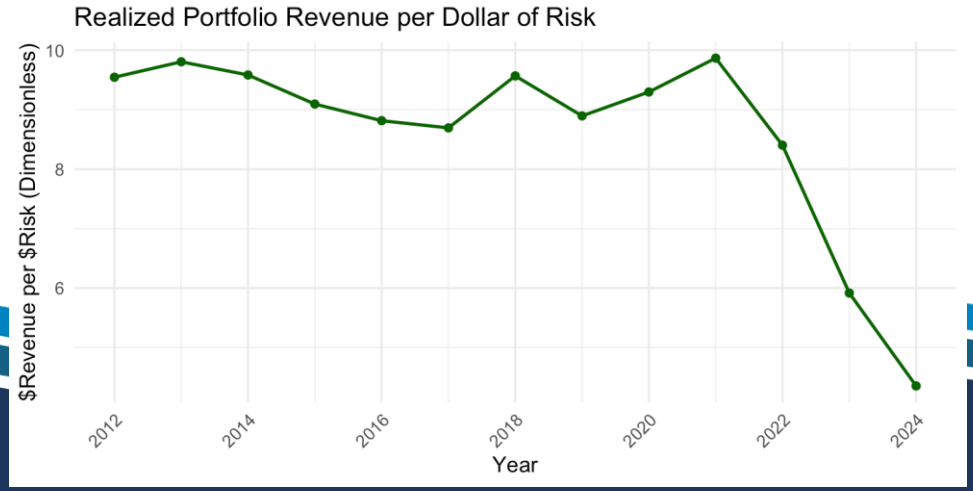
Progress Updates

- New portfolio diagnostics
  - Relative Risk Share: Who is contributing risk to the portfolio?
    - Negative removes risk
  - $ of revenue per $ of Risk





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Next Steps

- Exploring biological, technical, and market demand interactions with Dynamic Factor Analysis
- Awaiting Species Distribution Model results
- Will be looking at harvester-level permit/gear type portfolios
- Seeking broader feedback from permit holders, potentially after April Council meeting and before fall SSC review

More detailed update will be given tomorrow, January 29

IRA 5: Holistic Strategic Plan

Jonathon Peros, Staff project lead; Brett Wiedoff The Parnin Group, Contract lead

- The Parnin Group hosted a workshop for Council members and partners on January 6-7, 2026
- Developed aspirational **vision** statements for Council work and the fisheries we manage, as well as **strategic goals**
- Began to identify **strategies** for achieving goals as well as **key performance indicators** of success
- Overall sentiment was that work is challenging but worthwhile
- Parnin will deliver a completed draft of the plan in April

IRA 6: Enhancing Participatory Processes

Dr. Rachel Feeney, Initiative 6 lead

- Two integrated, staff-led efforts to:
  - Streamline workflows via automation and use of Artificial Intelligence tools (IRA 6.1) and
  - Improve public communications (IRA 6.2) via website updates and use of social media
- Planning and research occurred during 2025; moving towards implementation of new approaches in 2026

IRA 6.2: Public Communications

Dr. Rachel Feeney, PC Workgroup Chair

Problem Statement:

- The Council provides information through one-directional modes: website, press-releases, email distribution lists.
- Council documents can be 100s of pages long, difficult to navigate, user-unfriendly.
- The highly technical and flat-dimensional nature of communications can create barriers with the public.

Areas of focus:

- Website improvements (within current structure)
- Social media planning

Approach:

- Identify current challenges
- Develop potential solutions (pros and cons, caveats, guidelines)
- Solidify and implement solutions

IRA 6.2: Public Communications

Website Improvements (partial list!)

- Landing pages
  - FMP pages – brief overviews, highlight current work and ongoing actions
  - Council action pages – highlight action status (e.g., timeline, check list)
  - Considering a new cross-cutting topics page (e.g., Risk Policy, Strategic Plan, habitat, climate-related resources, omnibus actions)
- Written public comments
  - Process for receiving, organizing, and distributing public comments
  - Considering new Google form or other automation tools
- Topical story maps
  - Considering for cross-cutting topics, longer-term projects

IRA 6.2: Public Communications

Social Media Planning

- **DRAFT** objectives
  - Ease access to Council meetings/information
  - More real-time sharing of Council news
  - Foster connections with people and organizations
  - Promote transparency in the Council process
- Seek input from other Councils and public
  - Examined all Council websites for social media presence
  - Asking CCC Communications Workgroup for input
  - The Parnin Group survey (re. Holistic Strategic Plan) will have questions about this topic

IRA 6.2: Public Communications

Social Media Planning

- Potential social media platforms
  - YouTube - posting meeting recordings (audio and screen)
  - Other platforms - news, photos, infographics, human interest

- Develop norms for comments
  - Consistent with the Council's decorum standards (*Operation's Handbook* / SOPPs)
  - Content moderation process

IRA 6.1: Artificial Intelligence and Automation

Julian Garrison, AI Workgroup Chair

Problem Statement:

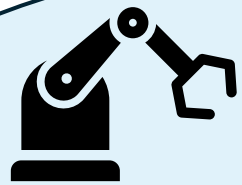
- Successful fisheries management is data-intensive and requires integrating information across the region and from different disciplines.
- Providing complex information to the public requires use of modern tools for visualization, translation, and communication.
- AI and imaging advancements can convey fisheries management information in new and highly visible ways.

Areas of focus:

- Develop guidance on AI and automation
- Explore tools to streamline workflows
- Identify training opportunities

IRA 6.1: Artificial Intelligence and Automation

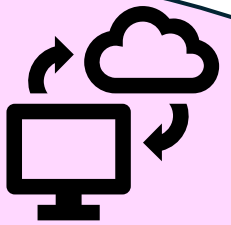
What distinguishes the two?



Automation

- Human sets rules/steps
- System performs repetitive tasks
- System can only adapt with human input

Spectrum of systems based on degree of human oversight



Artificial Intelligence

- Simulates human learning and decision-making in performing tasks
- Responds dynamically to new information and refines outputs

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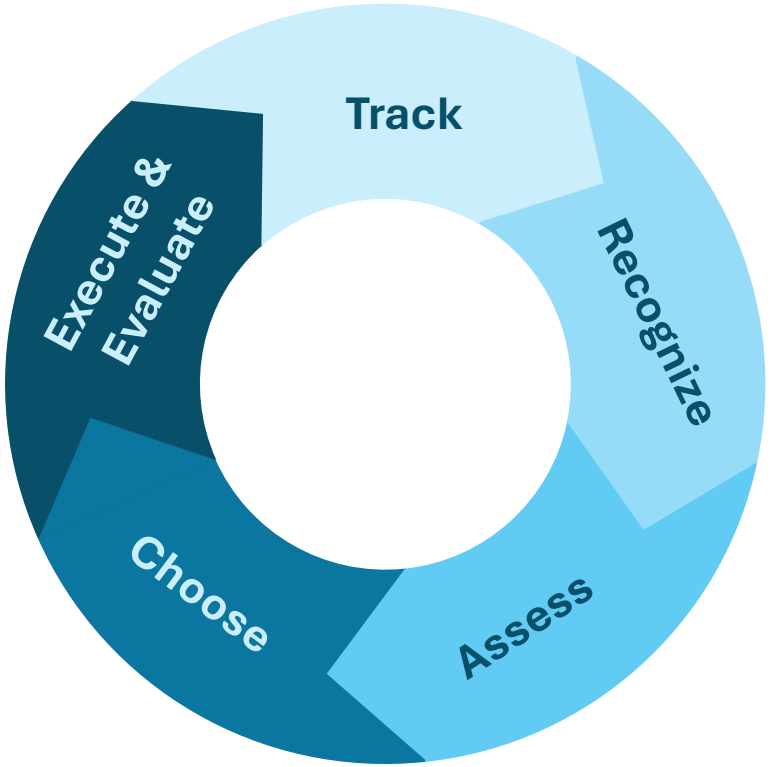
IRA 6.1: Artificial Intelligence and Automation

"T.R.A.C.E. Framework" informing our thinking

- **T**rack processes
  - *Observe tasks and processes; identify bottlenecks*
- **R**ecognize repetitive tasks
  - *Identify task recurrence and timing; determine automation potential*
- **A**ssess impact and feasibility
  - *Identify automation impacts and implementation feasibility*
  - *Identify potential risks or downsides*
- **C**hoose and prioritize
  - *Consider impact, feasibility and importance*
  - *Ensure implementation aligns with overall objectives*
- **E**xecute and evaluate
  - *Pilot implementation, gather feedback, scale successful solutions*



Adapted from North Light AI's TRACE Framework

IRA 6.1: Artificial Intelligence and Automation

Discovery phase (staff workgroup):

- Attending trainings on AI and automation
- Identifying processes and workflows where AI and automation could be helpful. In part:
  - Zoom Workplace for staff (chat, polls, scheduling, sharing news, etc.)
  - Discovering, summarizing, and referencing literature for FMP support
  - Creating meeting summaries
  - Data analysis and reporting

Next steps (ongoing):

- Solicit input from staff on specific needs, workflows
- Pilot exercise: develop data streams and workflows to support coordination between Risk Policy and fishery performance reporting
- Compile and draft recommendations for specific tools, workflows, etc.
- Identify and arrange for staff trainings, workshops

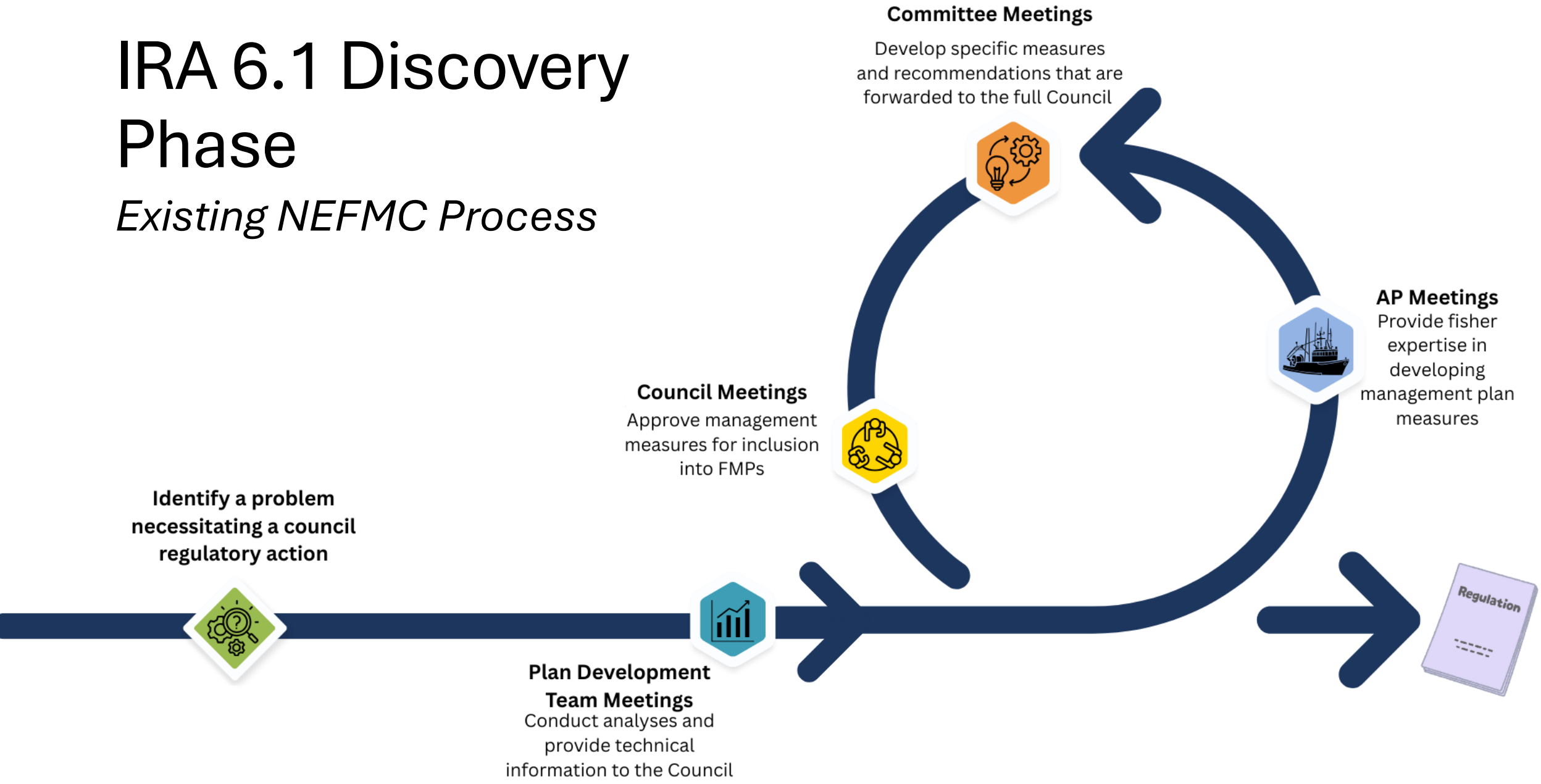
Process Mapping

Angelia Miller, Maris Collaborative

- **Goal of IRA initiatives:** To develop and implement actions that will support a sustainable shift in processes and procedures for the long term
- **Need:** To effectively use data inputs, efficiently assemble data products, and build flexible processes that are applicable across FMPs.
- **Objectives:** 1) Guide IRA Staff Leads under IRA 1, IRA 3.1, and IRA 6 to develop an integrated product that fills multiple uses within the Council's decision-making space; 2) Apply this framework across internal technical staff processes and documents as appropriate.

IRA 6.1 Discovery Phase

Existing NEFMC Process



Prototype Phase (2025)

Risk Policy Matrices

- Stock assessment information
- Fish Condition
- Climate vulnerability
- Economic trends
- Commercial effort trends
- Recreational effort trends

2025 risk policy matrices for:

- *Monkfish*
- *Skates*
- *Scallops*
- *Groundfish*

Fishery Performance and Risk Policy Factor Report

- Annual monitoring information
  - Utilization trends
  - Quota monitoring
  - Survey biomass
- Risk Policy factor information
  - Fish Condition
  - Economic trends
  - Commercial effort trends
  - Recreational effort trends

Prototype: Whiting Annual Monitoring and Fishery Performance Report, Dec. 2025

Transition Phase (2026)

Risk Policy Matrices

- Stock assessment information
- Fish Condition
- Climate vulnerability
- Economic trends
- Commercial effort trends
- Recreational effort trends

Fishery Performance and Risk Policy Factor Report

- Annual monitoring information
  - Utilization trends
  - Quota monitoring
  - Survey biomass
- Risk Policy factor information
  - Fish Condition
  - Economic trends
  - Commercial effort trends
  - Recreational effort trends

Affected Environment: Human Communities

- Utilization trends
- Quota monitoring
- Economic trends
- Commercial effort trends
- Recreational effort trends

Integrated Report

✓ MSA ✓ NEPA ✓ Risk Policy ✓ Fishery Information

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Timeline

Discovery Phase

Identifying processes under IRA 6.1 (Automation)

Prototype Phase

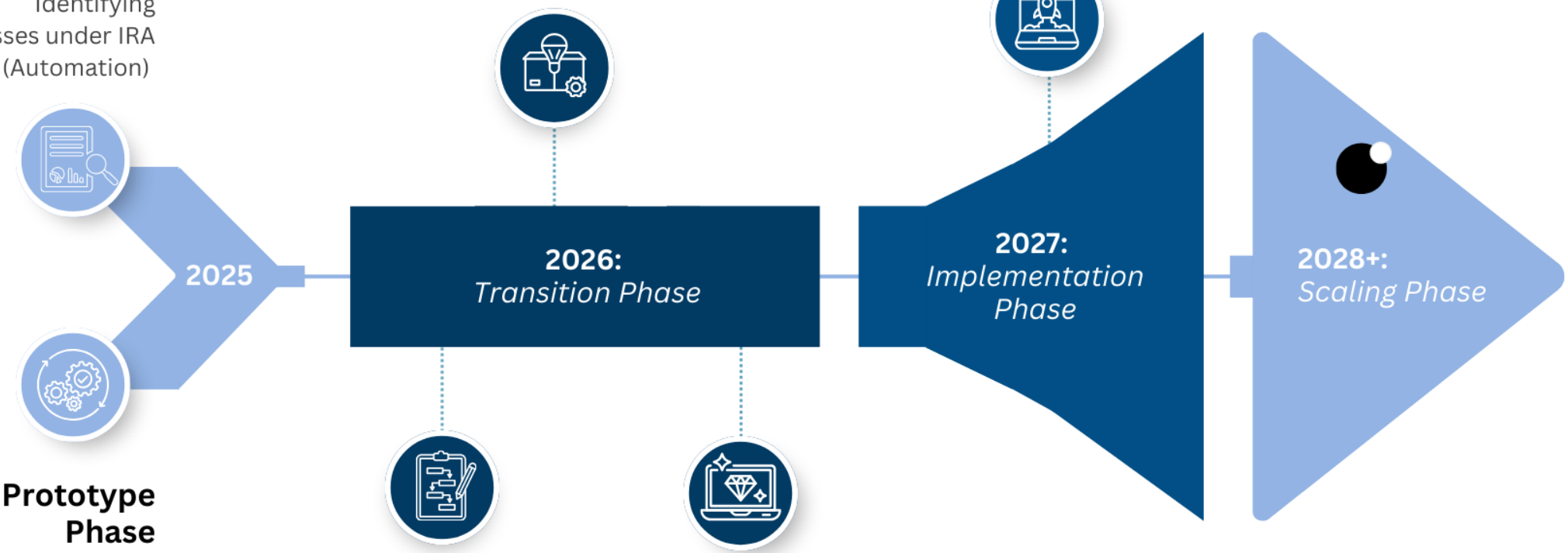
Using revised risk policy matrices and generating an automated prototype report

System Development

Build the report and automation processes based on the planning stage

Launch and Extend*

Fully implement within regulatory action process and across FMPs



Planning

Outline an integrated report based on data needs and regulatory constraints

Testing*

Test the flexibility of the report for a set of FMPs and actions

** Opportunities for feedback on products and their integration within Council processes will occur at various intervals within Phases.*

In summary

- Large portfolio of interrelated work
- Most contracts issued and underway
  - Continued planning needed for IRA 2 and IRA 4.3
- Staff directed work is all in progress
- Multiple meetings to coordinate within and across organizations
  - Joint governance and SSC workshop planning underway
- Targeting outreach and presentations to specific groups and to align with project milestones

Planned project check-ins during 2026 with key groups

Initiative	Council	Scientific & Statistical CTE	Climate & Ecosystem Steering CTE
1. ABC Control Rules	**Apr.** ABC CRs Results	**Mar.** ABC CRs Results	TBD, to support communication
2. Groundfish Management	TBD	None specifically planned	None specifically planned
3. Ecosystem Information	**Jun.** ECS framework and pilot results **Sep.** DRP workshop results	**Jun.** DRP Workshop	**Mar.** ECS framework and evaluation criteria **Mar., Jul.** On-ramps work **Jul.** DRP workshop results
4. Governance	**Apr., also Sep. or Dec.** Portfolio Analysis results **Dec.** Identify actions following governance workshops	**Fall (Oct. TBD)** Portfolio Analysis results	TBD
5. Holistic Strategic Plan	**Apr.** Review draft plan **Jun.** Review final plan	None specifically planned	TBD
6. Participatory Processes	**Apr.** Council update	None specifically planned	TBD
Process mapping	TBD, as products are developed		

Public engagement

- Directed outreach that is already planned for:
  - Portfolio analysis
  - Groundfish management transition
- Through Council, CESC, SSC, FMP Committee meetings
  - Projects on previous slide
- Public communication, integrated data products (Process Mapping) will be developed over time and considering a range of feedback

Questions?

- Michelle Bachman mbachman@nefmc.org
- Or reach out to staff project leads