

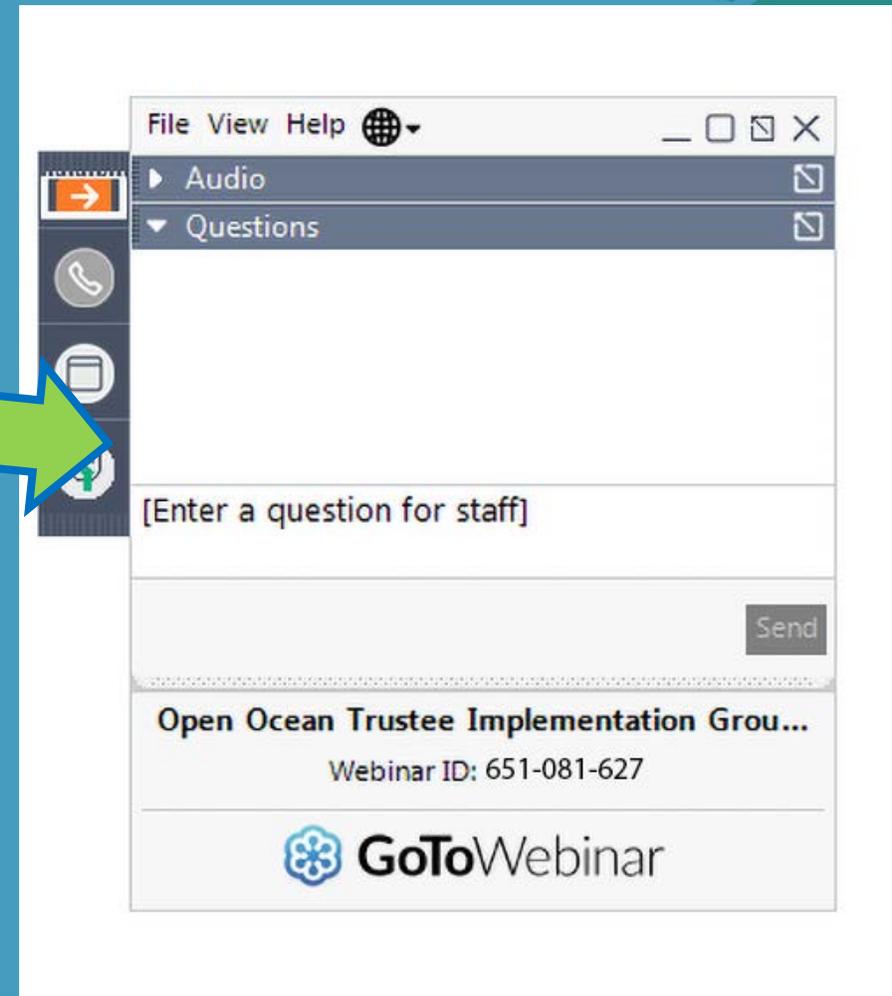


Open Ocean Restoration Area Monitoring and Adaptive Management (MAM) Priorities

July 22, 2020

Webinar Participation

- If you're using a phone, turn off your computer's microphone and speakers.
- When the Q&A session starts later, use the "Questions" box to type questions that you have for the Trustees.
- Presentation will be posted on www.gulfspillrestoration.noaa.gov.



Today's Agenda

- Introduction
- Summary of Open Ocean MAM Strategy
- MAM priorities
- Next steps
- Questions and answers



Open Ocean Trustee Implementation Group



NOAA	USDA	EPA	DOI
Chris Doley	Homer Wilkes	Gale Bonanno	Debora McClain
Laurie Rounds	Ron Howard	Treda Grayson	Ashley Mills

Resources Covered by the OO TIG



Sturgeon



Mesophotic and Deep Benthic
Communities



Fish and Water Column
Invertebrates



Marine Mammals

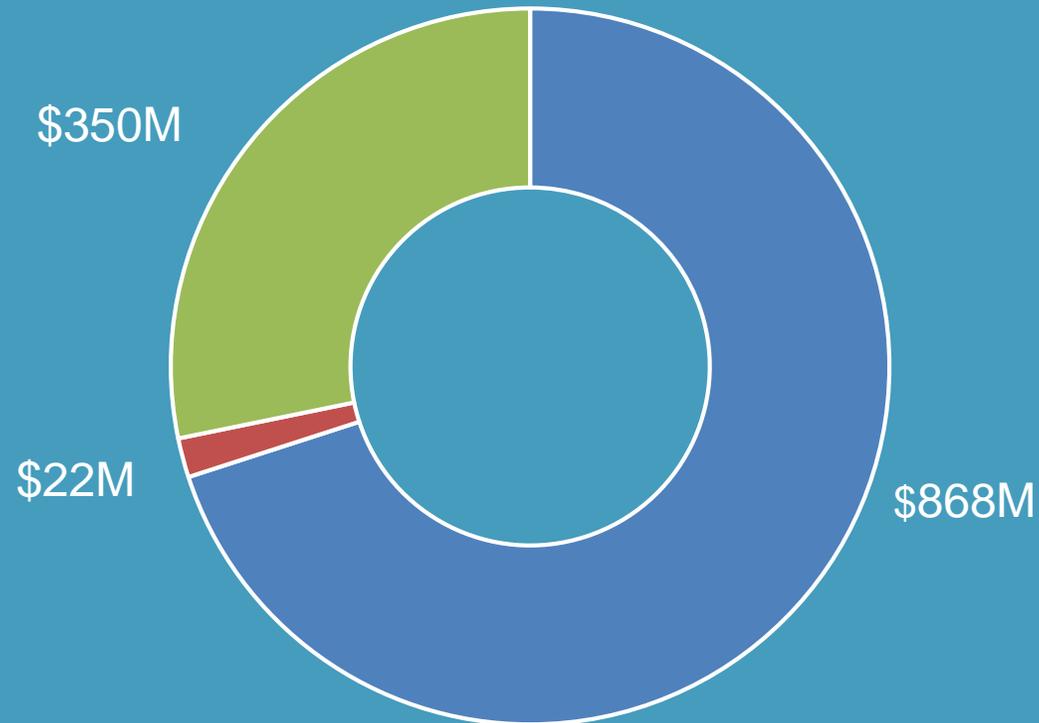


Sea Turtles



Birds

Open Ocean Settlement Allocation



□ Replenish and Protect Living Coastal and Marine Resources

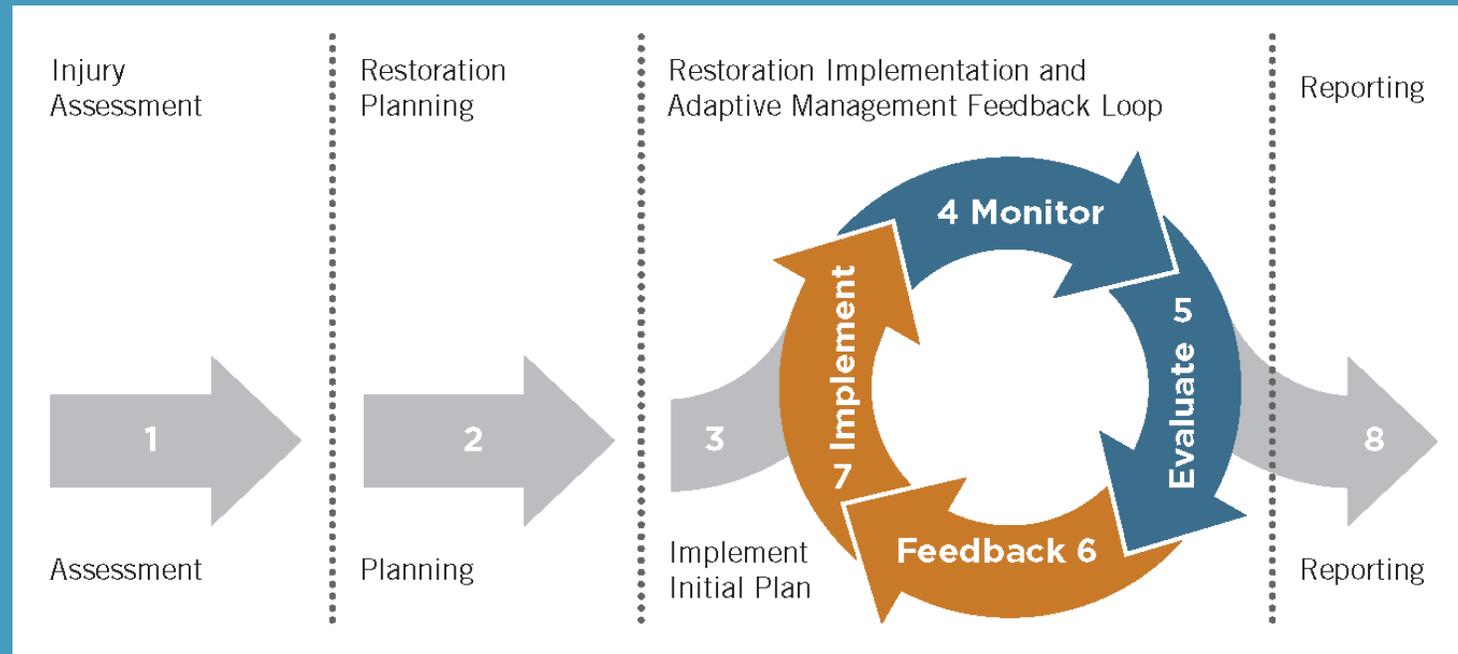
■ Provide and Enhance Recreational Opportunities

■ Monitoring, Adaptive Management, and Administrative Oversight

The Adaptive Management Process

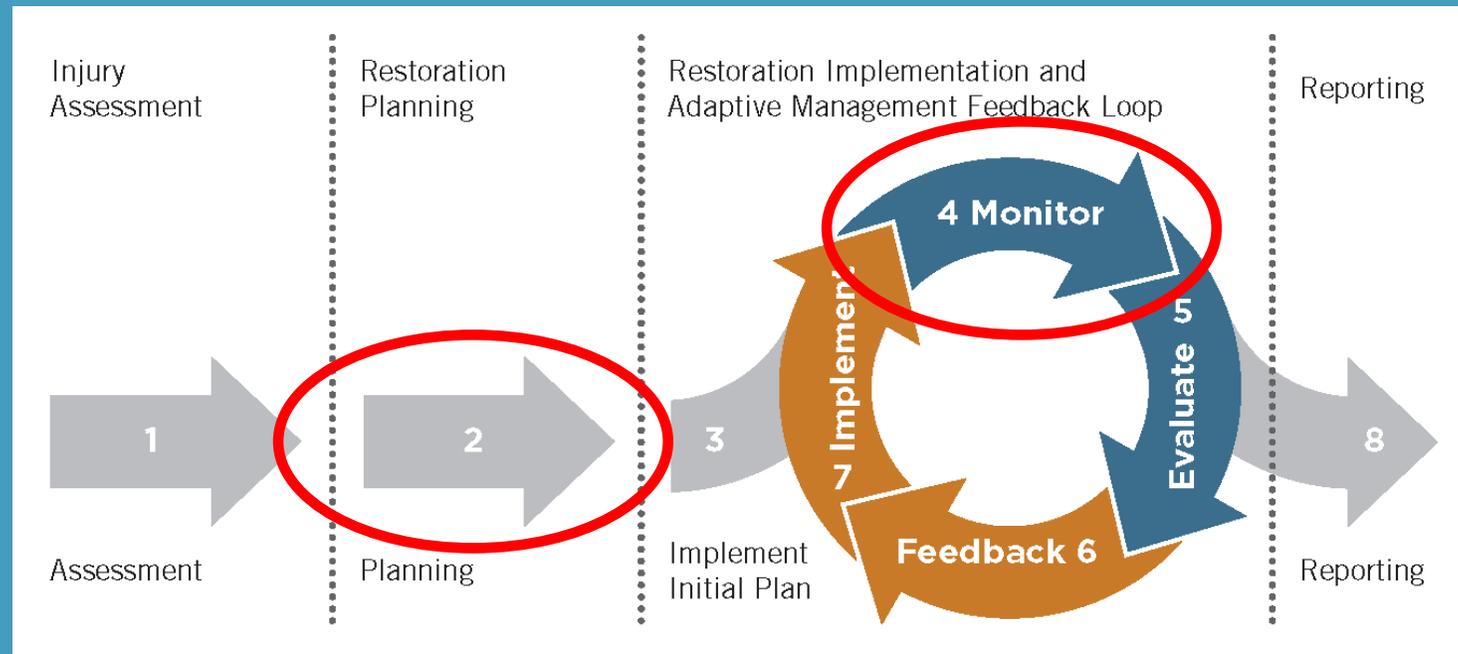
Applies at multiple levels:

Restoration Projects, Restoration Types (habitats and resources), Programmatic (e.g., across resources and areas).



Monitoring and Adaptive Management

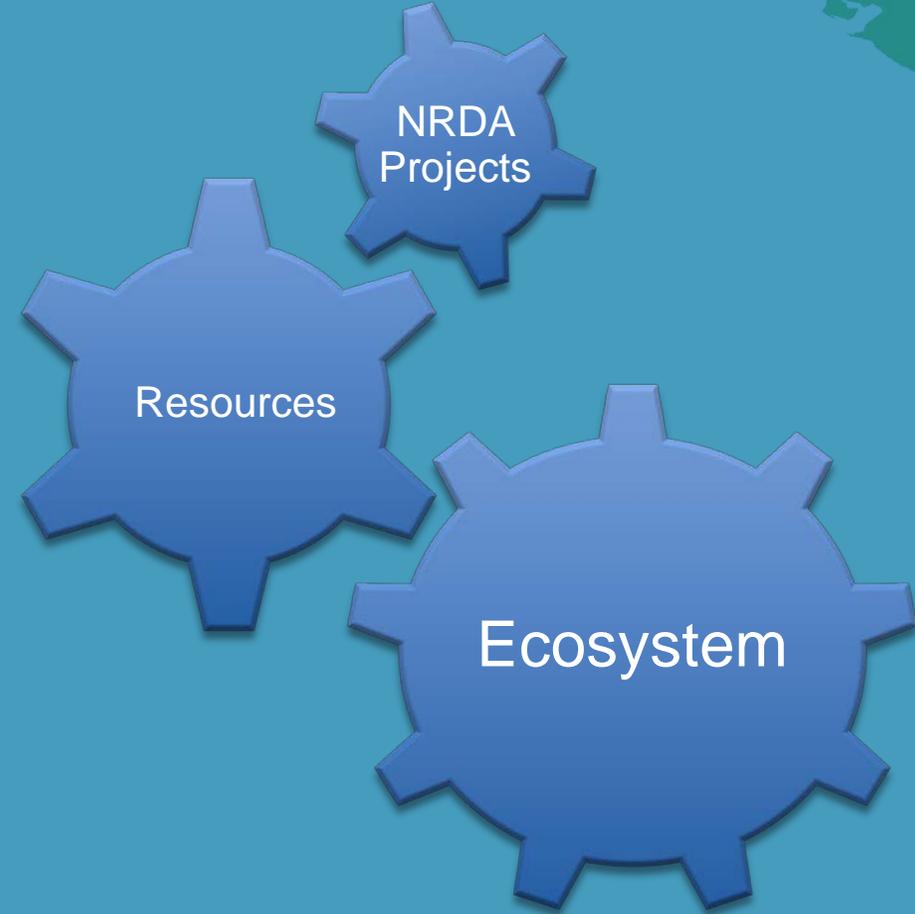
What should we monitor?



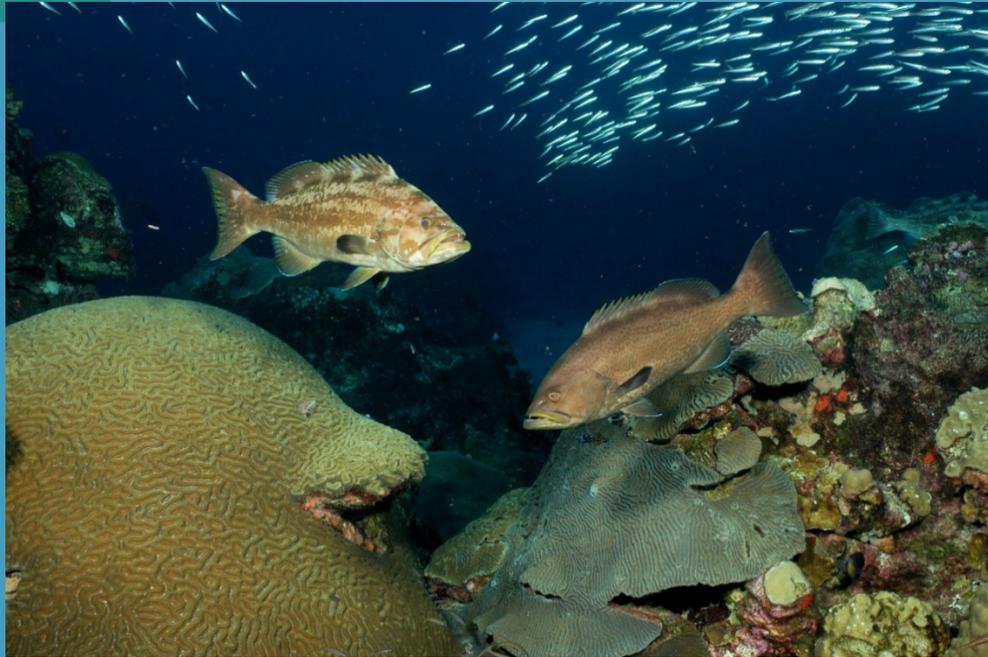
Why is MAM Important?

Deepwater Horizon NRDA:

- Dynamic, changing environment
- Unprecedented scale of the injury and required restoration
- Lengthy timeline of restoration implementation
- Matrix of restoration efforts in the Gulf of Mexico
- Currently unknown conditions may influence restoration outcomes



Identification of Data Gaps



- Information needed to more effectively plan, implement, and evaluate restoration for injured Open Ocean resources and services
- Data and/or applied science needed to develop future restoration projects or suites of projects

Evaluation of OO TIG Restoration Outcomes



- Evaluation of progress towards the restoration goals in the PDARP/PEIS
- Inform adaptive management decision-making over 15+ years of restoration implementation
- Contribute to reporting to the public on NRDA restoration progress and outcomes

OO TIG MAM Strategy

MAY 2019 STRATEGY

Describes the goals for Open Ocean MAM

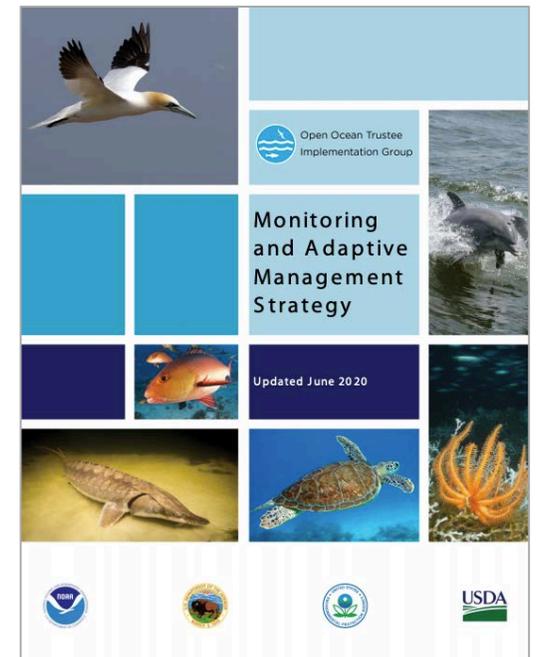
Provides a strategy for:

- identifying and prioritizing MAM needs
- developing and releasing MAM activities
- MAM coordination with other TIGs and external restoration programs

UPDATED STRATEGY: JUNE 2020

Describes initial set of Open Ocean TIG MAM priorities

Open Ocean MAM Strategy will be a living document



Identifying MAM Needs

- Consulted with subject matter experts
- Conducted targeted outreach
- Held workshops
- Reviewed existing management plans
- Reviewed existing conceptual models



Input From the Public

Example Themes

- Baseline data
- Conceptual models
- Mapping
- Connections among habitats
- Indicator species



Prioritizing MAM Needs

- Relevance
- Importance
- Feasibility
- Urgency
- Likelihood of success



Open Ocean TIG MAM Priorities

- Evaluate restoration progress
- Identify stressors
- Assess focal resources and important habitats



Open Ocean TIG MAM Priorities

**Evaluate
restoration
progress**

Identify
stressors

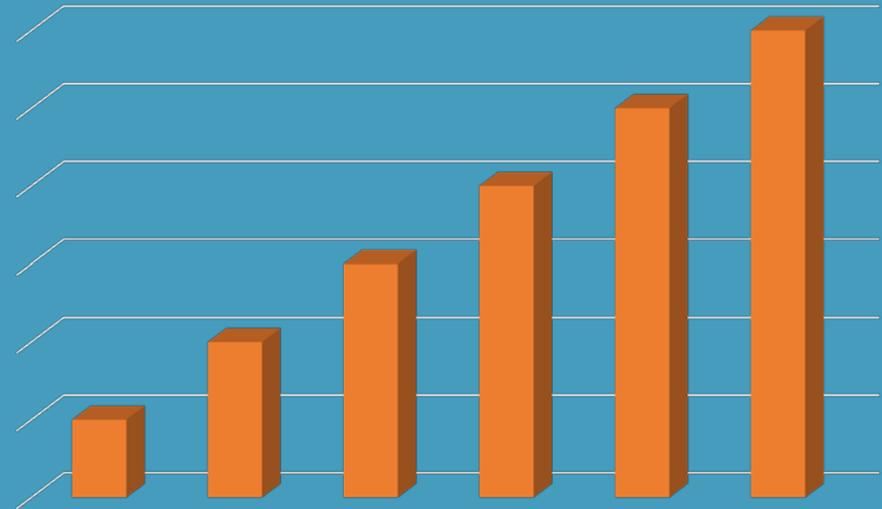
Assess focal
resources
and important
habitats

Priority: Evaluate Restoration Progress

Progress toward restoration objectives

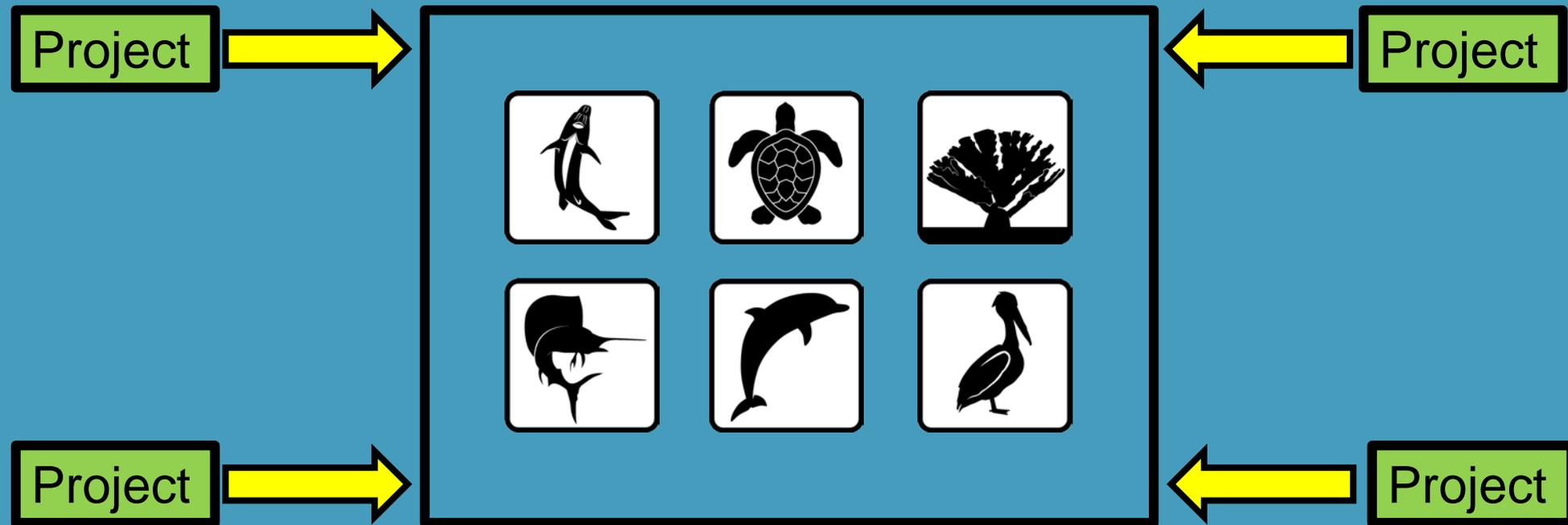


Photo by Ryan Hagerty, USFWS



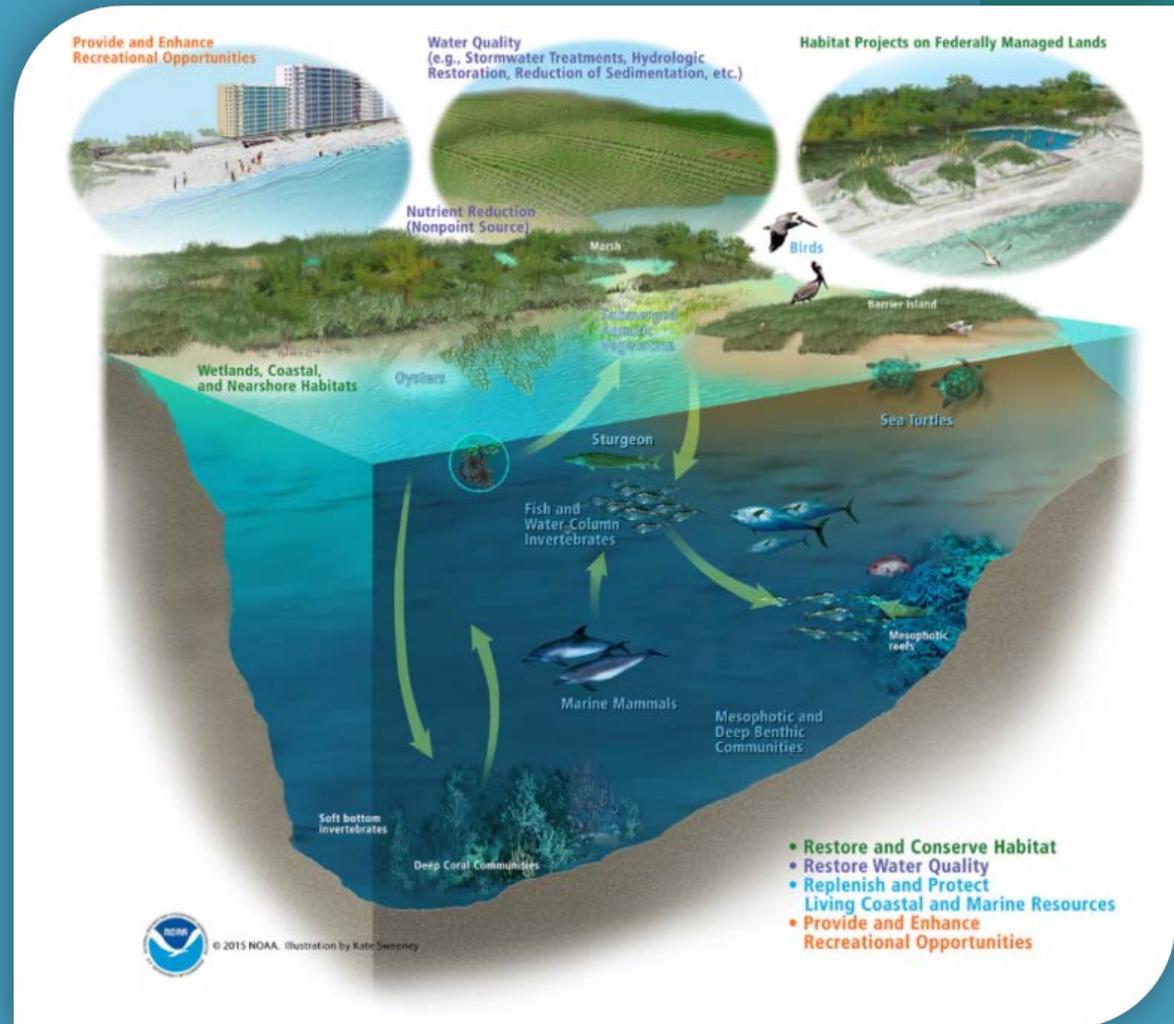
Priority: Evaluate Restoration Progress

Cumulative effects of multiple projects



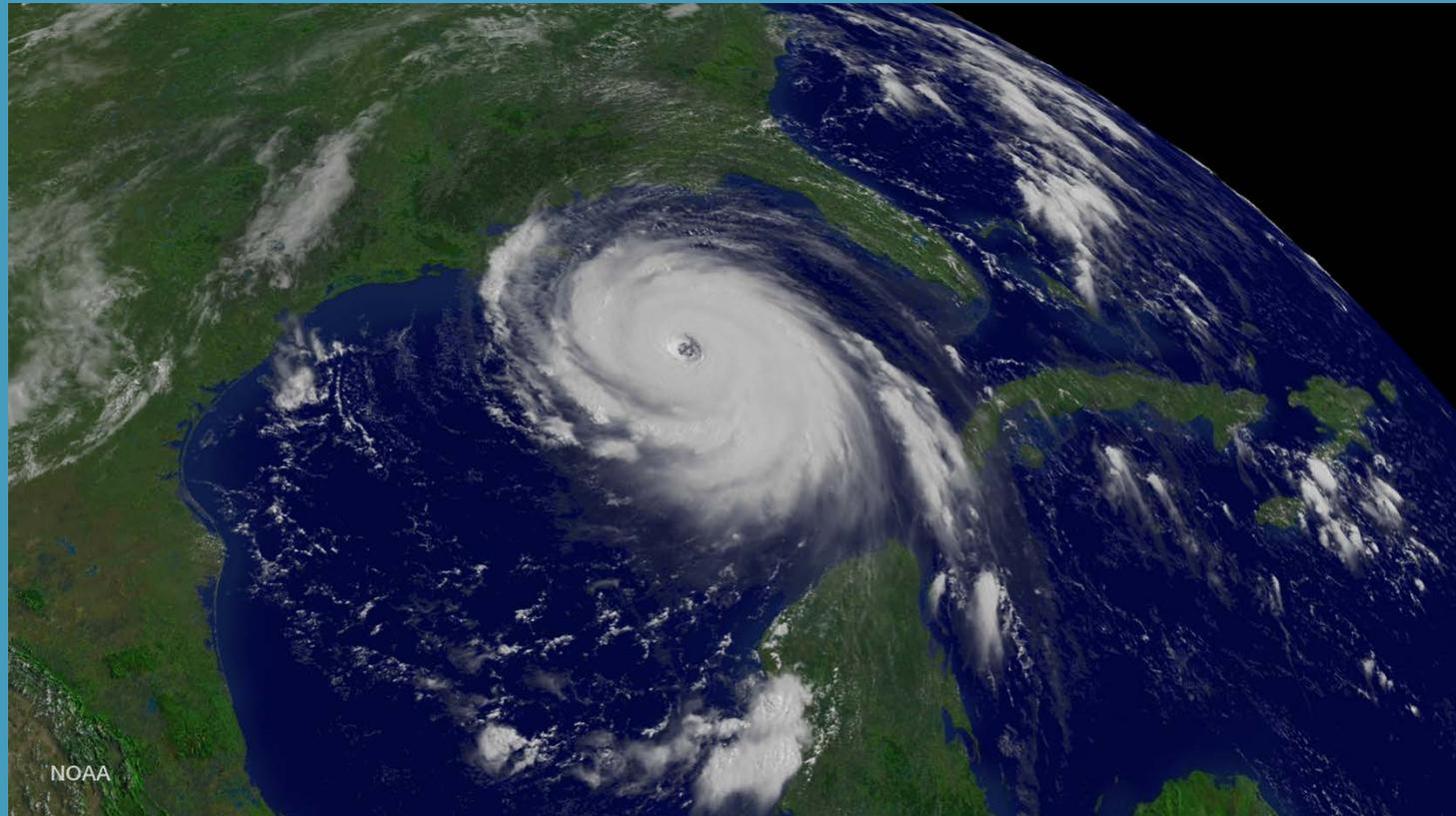
Priority: Evaluate Restoration Progress

Indirect impacts of restoration actions



Priority: Evaluate Restoration Progress

External factors



NOAA

Photo from NOAA NESDIS

Open Ocean TIG MAM Priorities

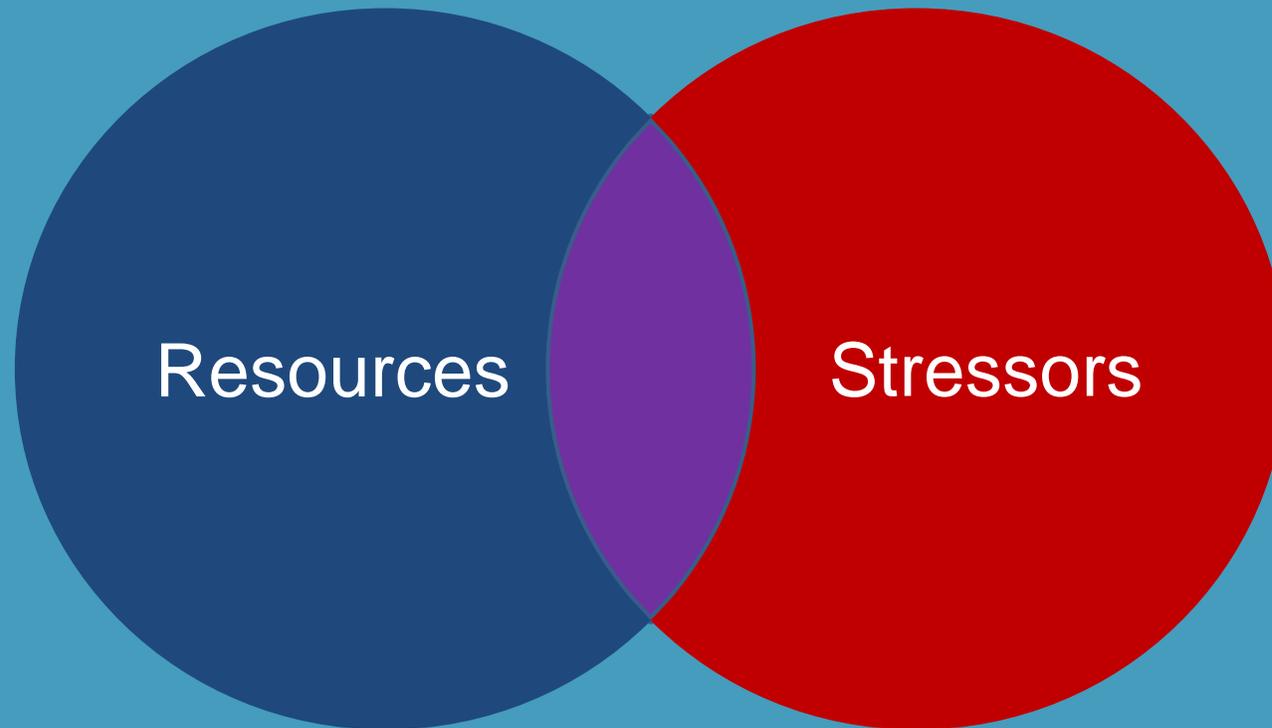
Evaluate
restoration
progress

**Identify
stressors**

Assess focal
resources
and important
habitats

Priority: Identify Stressors

Spatiotemporal overlap of Open Ocean stressors and resources



Priority: Identify Stressors

Fisheries interactions



Photo by NOAA-NMFS Southeast Fisheries Science Center

Priority: Identify Stressors

Marine debris
Vessel traffic
Underwater noise
Mineral extraction activities



Photo from Gulf of Mexico Marine Debris Collaborative

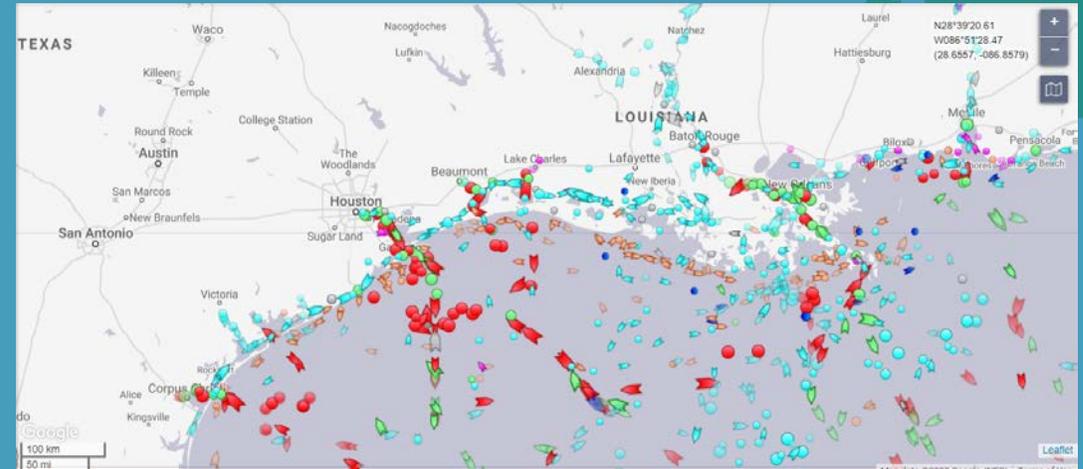


Image from marinetraffic.com



Image from NOAA ORR

Open Ocean TIG MAM Priorities

Evaluate
restoration
progress

Identify
stressors

**Assess focal
resources
and
important
habitats**

Priority: Assess Focal Resources and Important Habitats

Locations and characteristics of important habitats and areas of high productivity and/or biodiversity



Photo from FGBNMS/NURC-UNCW

Priority: Assess Focal Resources and Important Habitats

Distribution, abundance, health, and status of focal species



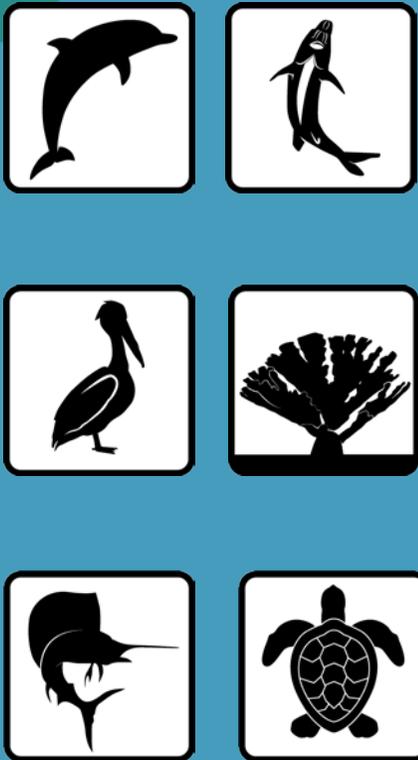
Photo by Woody Woodrow, USFWS

Next Steps

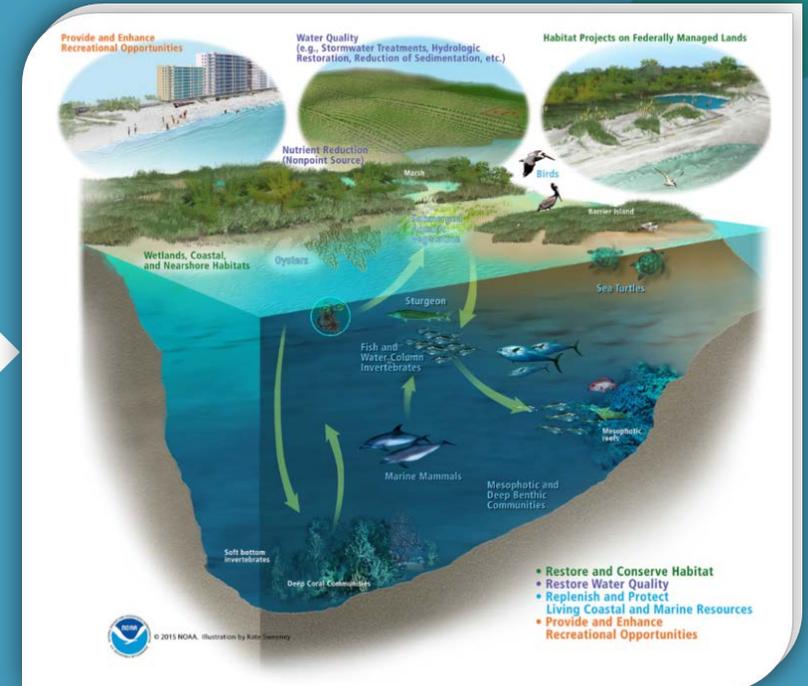
- Select a subset of MAM priorities for initial work
- Develop and evaluate activities to address priorities



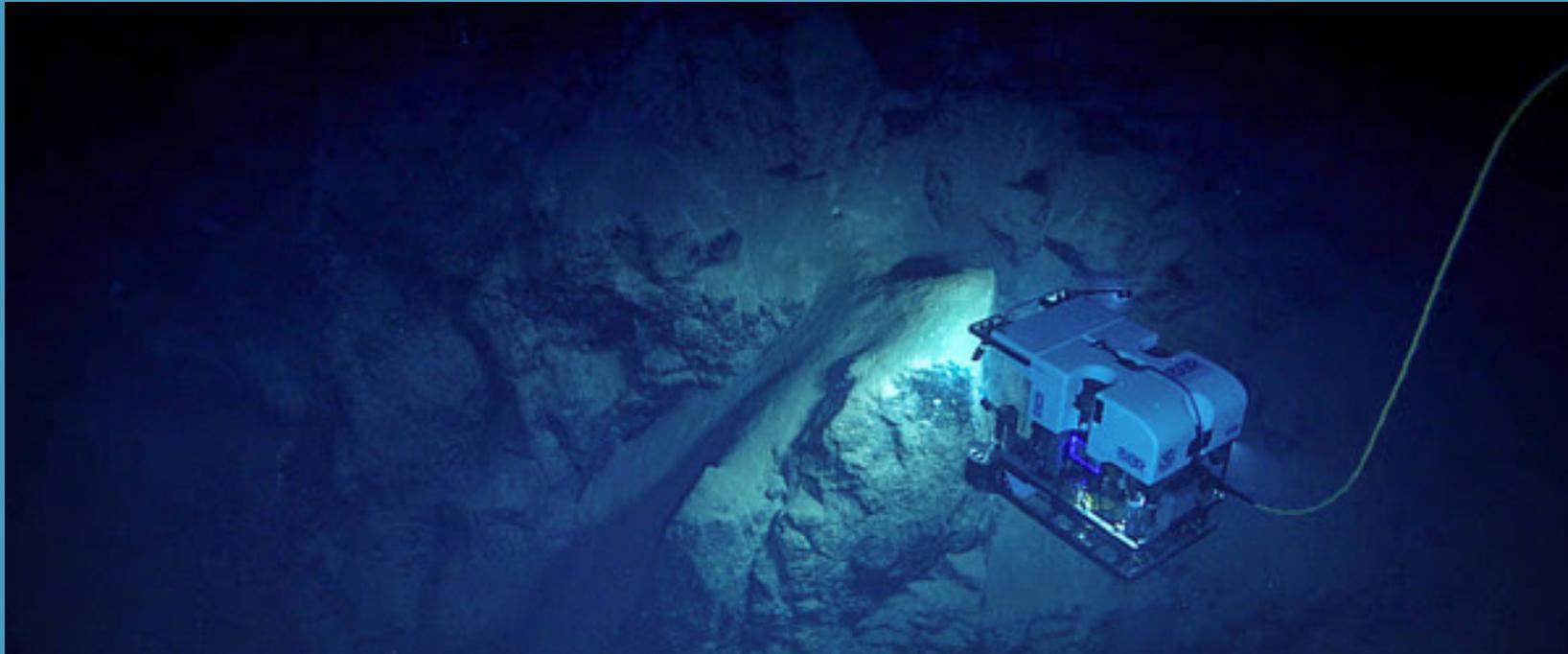
Summary



Planning/implementation
Evaluation
Adaptive management

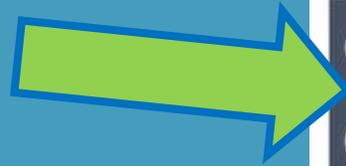


Questions



Questions

- Please type your questions in the “Questions” box.
- We may not get to them all.



A screenshot of the GoToWebinar interface. The window title is 'File View Help' with a globe icon and standard window controls. On the left is a vertical toolbar with icons for chat, audio, and questions. The main area shows a 'Questions' section with a text input field containing the placeholder text '[Enter a question for staff]' and a 'Send' button. Below the input field, the webinar title 'Open Ocean Trustee Implementation Grou...' and ID 'Webinar ID: 651-081-627' are visible, along with the GoToWebinar logo and name.



Thank you



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