Observations and Monitoring

Vision

Mission

Strategy
A coordinated and sustained ecosystem monitoring and analysis system that supports an economically and ecologically healthy and sustainable region.
Mission

The Gulf of Mexico Alliance seeks to develop a coordinated and sustained ecosystem monitoring and analysis system that supports an economically and ecologically healthy and sustainable Gulf of Mexico region.
Goals

To cultivate a collaborative effort to share data between local, state and federal agencies, academia, NGOs and private businesses

To develop an inventory of current data collection and analysis capacity and capability that is available to the public and identifies datasets that are not currently collected or available but are necessary to achieve the vision.

To understand the connection of ecosystems and the value of the services provided by them and for resource managers to make decisions based on that understanding
Goal #1: Partnerships / Collaboration
To cultivate a collaborative effort to share data between local, state and federal agencies, academia, NGOs and private businesses

Short-Term Outcomes
- Members of the Collaborative are identified and coordinated between academia, local, state, federal, private and NGO’s
- Data sharing incentives exist
- Collaborative has committed members who agree to work together

Mid-Term Outcomes
- The Collaborative shares data
- The Collaborative consolidates accessibility
- The Collaborative works together to expand membership and data providers

Long-Term Outcomes
- Partnerships exist, communicate well, share data, use data and leverage programs to reduce duplicative work

Output: A collaborative partnership exists that works to share data and make it available to users
**Goal #2: Data**

To develop an inventory of current data collection and analysis capacity and capability that is available to the public.

**Short-Term Outcomes**
- An inventory of current data collection and analysis capacity and capability for data collection in the Gulf is available to partners.
- A portal or dashboard of shared data on Gulf resources exists.
- Data is quality assured and controlled so that information is defensible.
- Data gaps are understood.

**Mid-Term Outcomes**
- A multi-purposed system that strategically increases spatial and temporal coverage and data collection consistency.
- A collection of shared QA QC data of GOM resources is available through a portal for scientists, modelers, decision makers and managers.
- Models developed that allow expanded use of resources while protecting and restoring critical habitat.
- We have the data, we can access and use it to understand and research processes and predict outcomes so that we can use the resources wisely, reduce losses and protect the ecosystems, economies, and cultures of the Gulf of Mexico.
- Data gaps are prioritized and funded when opportunities exist.

**Long-Term Outcomes**
- The state of the oceanic health of the Gulf is known.

**Output #1:** A comprehensive, data dashboard that links users to and promotes the sharing of data and analysis.

**Output #2:** An inventory of specific observation and monitoring systems.

**Output #3:** A list of priority data gaps for funders to use when developing requests for proposals.
Goal #3: Decision Making
To understand the connection of ecosystems and the value of the services provided by them and for resource managers to make decisions based on that understanding.

**Short-Term Outcomes**
- Data exists to characterize habitats
- Resource managers understand the current state/baseline conditions
- Anthropogenic impacts are monitored
- Managers can demonstrate the baseline environmental and socio-economic condition
- Managers have the information they need to respond to issues in the Gulf States
- Ability to predict pivotal aspects of the Gulf ecosystem's response to changes allows for better management of resource extraction, efficient navigation, and protected health of ecosystems and humans

**Mid-Term Outcomes**
- Resources are protected and losses are avoided
- Models accurately predict the impacts from environmental disasters
- System recommends step to remediate adverse and emerging conditions
- The current environmental and socioeconomic health of Gulf ecosystems has been characterized
- Accurate predictions of effects from environmental disasters exists
- Resource managers use the information to plan conservation and track injured resources and recovery

**Long-Term Outcomes**
- Community Resilience increases with no decrease in the health of the environment
- Resources used for economic benefit do not decrease the health of the ecosystem
- Social, economic and environmental losses are reduced

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**Short-Term Outcomes**
- Decision makers have the information needed to restore a sustainable ecosystem and economy
- Managers routinely provide operational data and information that enables significantly increased understanding of all processes (physical, biological, chemical and socio-economic)
- System provides a scientific basis to implement adaptive management plans
- Use the data to inform resource use

**Mid-Term Outcomes**
- Managers respond to ongoing threats and opportunities
- Community residents understand the connection between their actions and the health of the ecosystem, and vice versa
- Managers have access to the information needed to make an assessment of seafood safety
- Stakeholders develop a “Gulf Report Card” to understand current conditions
- Resource Managers can use the best current science to restore habitats and species of concern

**Long-Term Outcomes**

Output #1: Models that provide comprehensive understanding of living marine resources, food web dynamics, and habitat utilization

Output #2: Communication system for delivering data and model results to resource managers, industry and the public