Gulf Coast Ecosystem Restoration Science, Observation, Monitoring, and Technology Program

NOAA RESTORE Act Science Program:

Advancing a Holistic Understanding of the Gulf of Mexico

Conference on Ecological and Ecosystem Restoration
July 29, 2014
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• Authorization and Legislative Requirements
• Funding
• Coordination
• Program Organization and Administration
• Science Planning
  — Vision and Mission, Goal, Priorities
• Initial Federal Funding Opportunity
• Challenges and Opportunities
RESTORE Act of 2012
- Section 1604 authorizes NOAA to establish a Gulf Coast Ecosystem Restoration Science, Observation, Monitoring, and Technology Program (NOAA RESTORE Act Science Program)

“...to carry out research, observation, and monitoring to support, to the maximum extent practicable, the long-term sustainability of the ecosystem, fish stocks, fish habitat, and the recreational, commercial, and charter fishing industry in the Gulf of Mexico.”
Legislative Requirements

- Coordinate with the United States Fish and Wildlife Service (USFWS)
- Consult with Gulf States Marine Fisheries Commission (GSMFC) and Gulf of Mexico Fishery Management Council (GMFMC)
- Priority shall be given to integrated, long-term projects that address management needs
- Funds may not be used for
  - any existing or planned research led by NOAA,
  - implementation or initiation of new NOAA regulations, and
  - development of or approval of a fisheries catch share program.
Distribution of Clean Water Act Civil Penalties per the RESTORE Act

$1B Transocean settlement

Civil Penalties

$800M

80% Gulf Coast Restoration Trust Fund

35% Equally distributed to 5 Gulf States (AL, FL, LA, MS, TX) - $280M

30%* Gulf Coast Ecosystem Restoration Council - $240M

30% Impact based distribution to 5 Gulf States (AL, FL, LA, MS, TX) - $240M

2.5%* Gulf Coast Ecosystem Restoration Science, Observation, Monitoring, and Technology Program - $20M

2.5%* Centers of Excellence - $20M

$200M

20% Oil Spill Liability Trust Fund

*Supplemented by interest generated by the Gulf Coast Restoration Trust Fund

(50% to Gulf Coast Ecosystem Restoration Council, 25% to Science Program, 25% to Centers of Excellence)
RESTORE Act Partnerships in the Gulf of Mexico
(Funded by 80% of Civil Penalties)

1603 RESTORE Council Members

1603(1) State Allocation & Expenditures 35%

1603(2) Council Establishment & Allocation 30%

1603(3) Oil Spill Restoration Impact Allocation 30%

Oil Spill Liability Trust Fund 20% of Civil Penalties

Natural Resources Damage Assessment Trustee Council

FEDERAL & INTERNATIONAL

1604 Gulf Coast Ecosystem Restoration Science, Observation, Monitoring & Technology Program 2.5%

1605 CENTERS OF EXCELLENCE 2.5%

NGO

Funded by Criminal Penalties
Why the focus on engagement?

• To be successful, this program must support high-quality research that addresses the knowledge gaps and management needs in the Gulf of Mexico.

• Frequent and constructive engagement with the larger research and resource management community is required to identify these gaps and needs and attract high-quality proposals to address them.
Vision

Long-term sustainability of the Gulf of Mexico ecosystem and the communities that depend on it.

Mission

To initiate and sustain an integrative, holistic understanding of the Gulf of Mexico ecosystem and support, to the maximum extent practicable, restoration efforts and the long-term sustainability of the ecosystem, including its fish stocks, fishing industries, habitat, and wildlife through ecosystem research, observation, monitoring, and technology development.
The direction of the program has and will continue to be informed by stakeholder input, existing plans and activities addressing the Gulf of Mexico ecosystem, and by the science needs of our partners.
Goal

Support the science necessary for better understanding and management of the Gulf of Mexico ecosystem, specifically:

- healthy, diverse, sustainable, and resilient estuarine, coastal and marine habitats;
- healthy, diverse, sustainable, and resilient coastal and marine resources, including fisheries;
- resilient and adaptive coastal communities.
Priority Identification
Process

- Reviewed existing documents to identify research needs
- Consolidated priorities
- Identified management needs supported by each priority
- Identified key activities and anticipated outputs and outcomes
Science Plan (Draft) Priorities

- Forecasting, analysis and modeling of climate change and weather effects on the sustainability and resiliency of Gulf ecosystems.
- Construct accurate, actionable and accessible ecosystem models for the Gulf of Mexico.
- Quantify sediment, nutrients, contaminants, and water flow interrelationships, variability and consequent impacts to health and function of coastal habitats.
- Provide a more comprehensive understanding of life histories of living marine resources, food web dynamics, and habitat utilization (e.g., connecting habitats, ontogeny, and food webs) as guidance for living marine resources management.
• Coordinate and integrate existing Gulf monitoring to develop a network of living marine resources monitoring systems including fisheries dependent and independent data collection.

• Develop and implement advanced engineering, tagging and biological technologies to improve monitoring.

• Collect information and develop decision support tools needed to implement, monitor and adaptively manage habitat including coastal and marine protected areas.
• Create an integrative, unified, and easily accessible data framework that tabulates, synthesizes and provides opportunity for analysis of new and existing social and environmental data in order to develop long-term trend information.

• Develop a better understanding of ecosystem services and other determinants of resilience for coupled social and ecological systems.

• Identify or develop state of health indicators for the Gulf of Mexico ecosystem, including the socio-economic component.
Initial Federal Funding Opportunity (FFO): Short-term Priorities

• Comprehensive inventory and assessment (i.e., strengths/weaknesses) of ongoing ecosystem modeling efforts (conceptual and quantitative);

• Identification of currently available health/condition indicators of Gulf of Mexico ecosystem components, including humans, followed by comparative analysis of strengths and weaknesses and design/testing of additional indicators;

• Assessment of monitoring and observation needs and development of recommendations to build off existing assets to establish a Gulf wide monitoring and observation network.
Challenges and Opportunities

- The funding uncertainties necessitate that we take a tiered and iterative approach.

- There are several new science initiatives focused on the Gulf of Mexico which when combined with existing science activities represent an extraordinary opportunity.
  - Coordination is key.

- This program is a science initiative within the RESTORE Act, not the science initiative for the RESTORE Act.

- There are many research needs in the Gulf of Mexico and this and other related programs will have to prioritize these needs.
  - We need our partners’ wisdom and an open process.
Questions?

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BACKUP SLIDES
Current Activities

- Complete draft science plan
- Finalize initial FFO around short-term priorities

Future Activities

- Science plan public comment period and engagement sessions
- Release initial FFO
- Finalize science plan
NCCOS Director – Ms. Mary Erickson (mary.erickson@noaa.gov)

Program Director (Acting) – Mr. Russ Beard (russ.beard@noaa.gov)

Associate Program Director – Vacant

Science Plan Working Group Lead – Dr. Becky Allee (becky.allee@noaa.gov)

Engagement Working Group Lead – Dr. Julien Lartigue (julien.lartigue@noaa.gov)
Focus Areas

“Ecosystem processes, functioning and connectivity” through integrative field and laboratory studies

“Holistic approaches to observing & monitoring” with advanced technologies to monitor fisheries & other natural resources, & data integration tools focused on the observing needs in the Gulf of Mexico

“Integrated analysis and synthesis of existing and new data” to advance the state of ecological knowledge through the search for patterns and principles

“State of Health” of the Gulf, incorporating environmental, socio-economic, & human well-being benefits & elements