

**Gulf of Mexico University Research
Collaborative:
Strategies to promote DWHOS
restoration coordination and
ecosystem-wide monitoring**

*Dr. L. McKinney, GOMURC Board Chair,
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GCOOS Board Meeting, 9/25/13

Gulf of Mexico University Research Collaborative (www.gomurc.org)

Mission:

Advocate: promote science and education needed for sustained, informed, environmental stewardship of GOM

Coordinate: collaborate with other Gulf, national and international partners on multi-institutional initiatives.

Gulf of Mexico University Research Collaborative (www.gomurc.org)

GOMURC's Principal Member's Board includes consortia representatives from each state including:

The Alabama Marine Environmental Sciences Consortium

The Florida Institute of Oceanography

The Louisiana Universities Gulf Research Collaborative

The Mississippi Research Consortium

The Texas Research Consortium

<http://gomurc.usf.edu/>

Working together...

RESTORE Act support

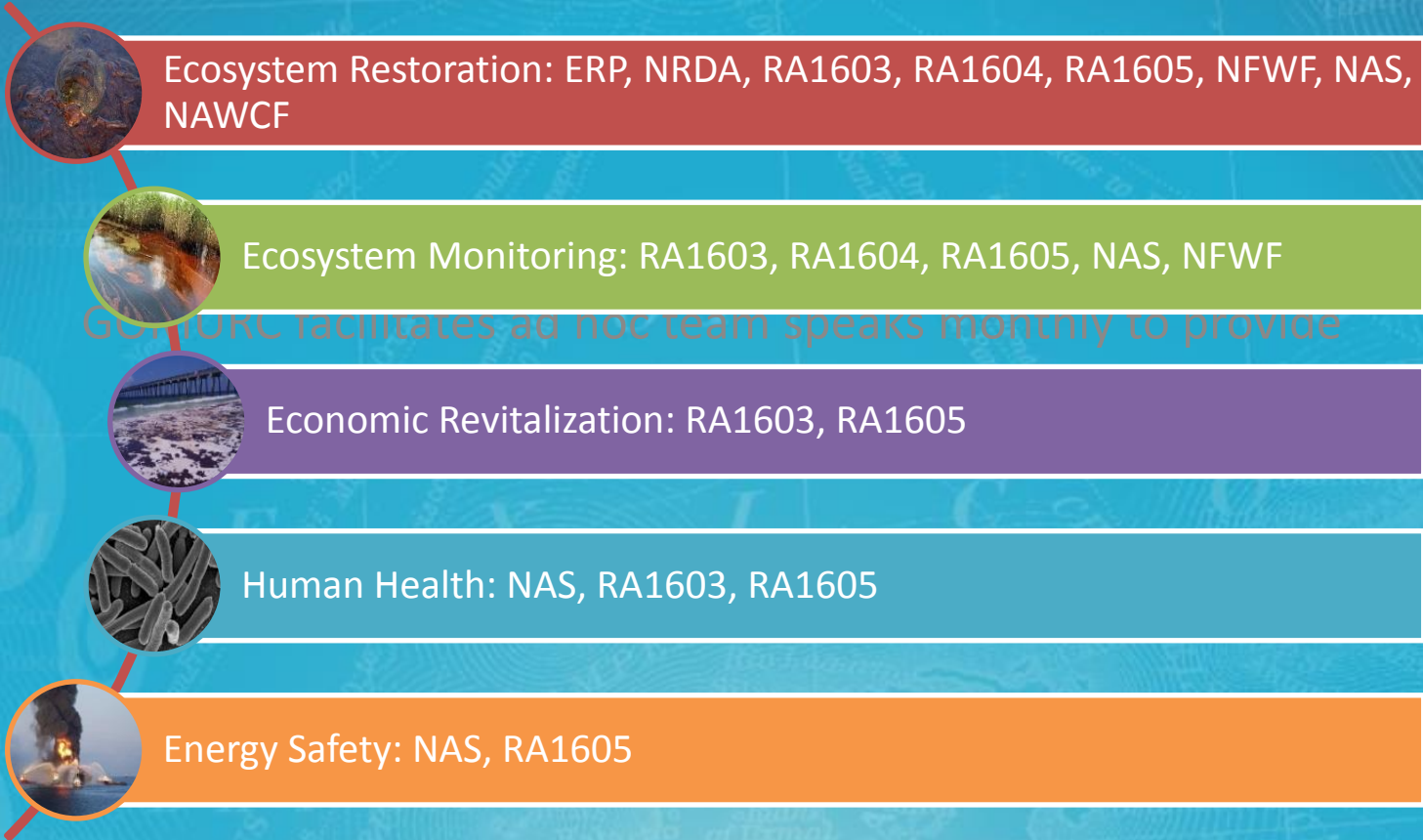
2012 Marine Restoration Workshop– identify options for blue-water restoration

2013 Restoration Science Workshop: Implementing Ecosystem Restoration based on “best available science”

Position Papers, e.g.:

- Total economic value of Gulf ecosystem goods and services (in prep., Gulf Science)
- Restoring coral ecosystems (in prep, CRC Press)
- Gulf Observing System. . .

GULF RESTORATION SCIENCE PROGRAMS COORDINATION TEAM



Gulf Observing System: Gulf-wide Observation and Monitoring Program

*Implementation via Gulf Restoration
Programs*

Gulf Observing System- What?

Gulf-wide science-based observation and monitoring program

- ❑ Integrated, interdisciplinary measurements, data management, modeling and research
- ❑ Expanding on existing capabilities

Managed by one organization

- ❑ Regional level GOM presence
- ❑ Independent of state or federal agencies
- ❑ Entity agreed on by multiple stakeholders (e.g. GCOOS, GOMA, academia, state and federal agencies, industry)

Gulf Observing System- What?

Administrative entity TBD

Possibilities:

- Non-profit/independent of IOOS - GCOOS
- GOMA
- SURA
- Administrative partnership

Use revised and comprehensive GCOOS build out plan

- GOMA Water Quality Monitoring Plan a subset
- Other published plans integrated into GCOOS plan

Gulf Observing System- Where?

Entire Gulf of Mexico

State-by-state and project-by-project piecemeal observing and monitoring system unable to provide data necessary to understand how restoration activities affect the entire Gulf ecosystem

Gulf Observing System- Why?

Widely acknowledged as a high priority need for GOM...

Applications:

Restoration Monitoring

Oil and gas industry for safe/efficient operations

Maritime Commerce

Emergency Responders

Weather Forecasters

Ecosystem Management

General Public

International Partners

Gulf Observing System- Why?

Critical physical, chemical, biological, geological and marine atmospheric information needed to advance scientific and societal goals

Restoration needs

- Observations to assess progress and link project level and ecosystem level observing and monitoring systems
- Baseline information as to what to restore and evaluate success

Cannot predict consequences of natural or anthropogenic perturbations if we don't understand the GoM system

Preparation for the future: e.g. do not want an oil spill in future with limited improvement in tracking capability

Gulf Observing System- Why?

State and federal funds for development of comprehensive, integrated and interdisciplinary ocean observing system have been limited

Unique and perhaps only opportunity to create a lasting legacy

Learning from Alaska: entire system needs to be addressed simultaneously and without great delay

Gulf Observing System- How?

Penalty funds from DHOS may be only source of funding available for decades that will provide a Gulf-wide observing system integrated across state, federal and international waters

Everyone recognizes the need but as yet no one with funding or potential funding is willing to step up to a leadership role – a lot of finger pointing at one another

Gulf Observing System - How?

Endowment from a combination of sources coming out of Gulf restoration funding

Based on Alaska experience, at least ~20% devoted to ocean observing and monitoring system (in this case, GOS)

IOOS contribution...

to date, unable to provide funds to cover any but a fraction of the requirements, one of many contributors towards this system – continue to provide funds to GCOOS and SECOORA

Gulf Observing System - TBR?

- State-led GOMA focuses on state priorities and should be linked to GOS
Political interest of Governors, subject to change with new administration but GOMA can be a portal
- Non-profit GCOOS provides independence from IOOS that is very attractive
- New more defined collaborations with industry
- International linkage to Mexico (GOM-LME) and Cuba

Gulf Observing System- Why GOMURC involvement?

- ❑ GOMURC is a university-led organization, not restricted by state or federal mandates. No management interest
- ❑ *Advocate* for interdisciplinary, science-based GOS
- ❑ *Promote* integration of research, education and management communities

Gulf Observing System- Why GOMURC involvement?

- Advocate* and work across political boundaries
- Work towards* broad multi-organizational support for GOS
- Advocate* for endowment

