

A satellite photograph of the Gulf of Mexico region, showing the Gulf of Mexico, the Yucatan Peninsula, and parts of North and Central America. The image is oriented vertically, with the Gulf of Mexico in the center. The surrounding landmasses are shown in various shades of brown, green, and blue, indicating different terrain and vegetation. The Gulf of Mexico is a large body of water, and the surrounding landmasses are the Yucatan Peninsula, Central America, and parts of North America.

Gulf Research Program Overview

Kim Waddell
September 2014

GULF RESEARCH PROGRAM

National Academy of Sciences
National Academy of Engineering
Institute of Medicine
National Research Council

The National Academy of Sciences

The National Academy of Sciences (NAS) is:

- an independent, nonprofit organization
- established in 1863 by the Lincoln Administration
- to provide independent advice to the Nation on science, engineering, and medicine
- not a government agency





The National Academies

“The National Academies” is used to include NAS plus:

- National Academy of Engineering (NAE - est. 1964)
- Institute of Medicine (IOM - est. 1970)
- National Research Council (NRC - est. 1916)
(operating arm)
- Intellectual leadership from volunteer experts, chosen for expertise, balance, and objectivity.
- 200+ independent reports/year
- Also research grants, fellowships, workshops, etc.
- More than 6000 volunteers every year.



Gulf Research Program Overview

- A 30-year, \$500 million program funded by the *Deepwater Horizon* criminal settlements
- Directed to operate in three realms:
 - Human health
 - Environmental protection
 - Oil system safety
- Conducting activities in three areas:
 - Research and development
 - Education and training
 - Environmental monitoring





Program Leadership

Barbara A. Schaal, NAS

Washington University, St. Louis
(CHAIR)

Donald F. Boesch

University of Maryland, Cambridge

Robert S. Carney

Louisiana State University

Stephen R. Carpenter, NAS

University of Wisconsin, Madison

Cortis K. Cooper

Chevron Corporation

Courtney Cowart

Sewanee: The University of the
South

Robert A. Duce

Texas A&M University, College
Station

Deborah Estrin, NAE

Cornell New York City Tech

Christopher B. Field, NAS

Carnegie Institution for Science

Gerardo Gold-Bouchot

Center for Research and Advanced
Studies at Merida

Lynn R. Goldman, IOM

George Washington University

Bernard D. Goldstein, IOM

University of Pittsburgh Graduate
School of Public Health

Thomas O. Hunter

Sandia National Laboratories
(retired)

Shirley Ann Jackson, NAE

Rensselaer Polytechnic Institute

Ashanti Johnson

University of Texas, Arlington

David M. Karl, NAS

University of Hawaii

Molly McCammon

Alaska Ocean Observing System

Linda A. McCauley, IOM

Emory University

J. Steven Picou

University of South Alabama

Eduardo Salas

University of Central Florida

Kerry Michael St. Pé

Barataria-Terrebonne National
Estuary Program

Arnold F. Stancell, NAE

Mobil Oil; Georgia Tech (retired)

LaDon Swann

Mississippi-Alabama Sea Grant
Consortium; Auburn University

James W. Ziglar

Van Ness Feldman

Mark D. Zoback, NAE

Stanford University

**** Advisory Group terms end 9/30/14 and
new Advisory Board takes over 10/1/14**

2013-2014 Program Planning Process

- 25-member Advisory Group & small staff led planning process:
- Advisory Group activities:
 - New Orleans, LA (July 2013)
 - Washington, DC (August 2013)
 - Mobile, AL (September 2013)
 - Thibodaux, LA (September 2013)
 - Tallahassee, FL (October 2013)
 - Long Beach, MS (November 2013)
 - Austin, TX (November 2013)
 - Houston, TX (February 2014)
 - Tampa, FL (June 2014)
 - Two virtual meetings (Oct. & Dec. 2013) w/ 100+ participants
 - Monthly calls, working groups, numerous outreach presentations.



Photo: National Oceanic and Atmospheric Administration

Learn landscape, establish relationships, define purposes, produce a strategic plan (released later this month), and design initial activities.

Program Mission

Over its 30-year duration, the Gulf Research Program will work to enhance oil system safety and the protection of human health and the environment in the Gulf of Mexico and other U.S. outer continental shelf areas by seeking to improve understanding of the region's interconnecting human, environmental, and energy systems and fostering application of these insights to benefit Gulf communities, ecosystems, and the Nation.

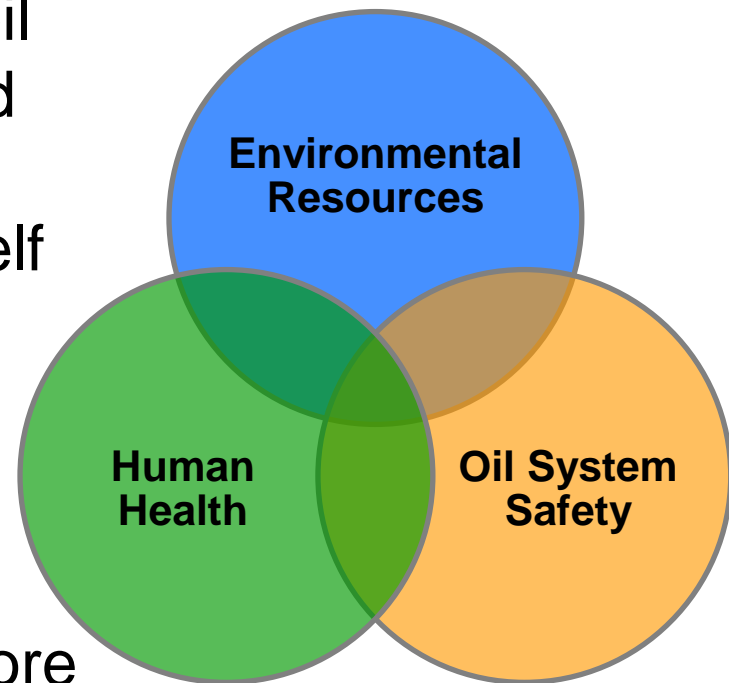




Program Mission

... foster innovative, collaborative, and cross-cutting activities to enhance oil system safety, the environment, and human health in the Gulf of Mexico and other U.S. outer continental shelf oil producing areas

... improve understanding of the interconnecting human and environmental components of offshore energy producing regions and to support application of these insights to increase the resilience of Gulf communities and ecosystems



Strategies to achieve lasting benefits

- Long-term, Cross-boundary Focus
- Science to Advance Understanding
- Science to Serve Community Needs
- Synthesis and Integration
- Coordination and Partnerships
- Leadership and Capacity-Building



Photo: National Oceanic and Atmospheric Administration



Program Goals

Goal 1:

Foster innovative improvements to prevention, safety technologies, safety culture, and environmental protection systems associated with offshore oil and gas development.

Goal 2:

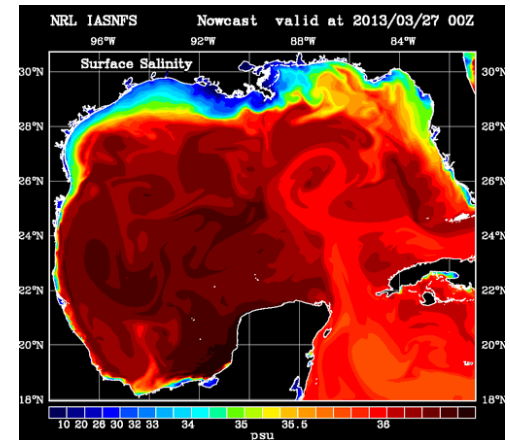
Improve understanding of the connections between the environment and human health to support the development of healthy and resilient Gulf communities and ecosystems.

Goal 3:

Advance understanding of the Gulf of Mexico region as a dynamic system with complex, interconnecting human and environmental systems, functions, and processes to inform the protection and restoration of ecosystem services in the Gulf of Mexico.

Guiding Principles

- Emphasize a future-oriented perspective
- Encourage excellence in science
- Engage stakeholders in the Gulf region and beyond
- Operate strategically, with a focus on achieving a lasting impact
- Catalyze the development of potentially transformative science and technologies
- Invest in building capacity to improve resilience in Gulf coast communities and ecosystems



*Photo: NOAA Okeanos Explorer Program,
Gulf of Mexico 2014 Expedition*



2014-2015 Plans

2014-2015: begin implementation of “The Gulf Research Program: A Strategic Vision,” including

- Transition from Advisory Group to Advisory Board
- Three “opportunity analysis” workshops –middle skill training, environment-health connections, environmental monitoring
- Announce first funding opportunities (fall)
- Continue community interactions
- Continue planning major activities

For more information and to register to receive e-updates,

Go to: www.nas.edu/gulf



2014-2015 Plans

2014-2015: begin implementation of “The Gulf Research Program: A Strategic Vision,” including announcing RFA/RFPs

- Exploratory Grants (est. 10-15 grants w/average \$100K per)
- Fellowships
 - Early career /pre-tenure (2-year awards)
 - Science Policy (1-year awards)
 - Christine Mirzayan Graduate Fellowships (3 months)

For more information and to register to receive e-updates,

Go to: www.nas.edu/gulf