GULF RESEARCH PROGRAM

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

Research to Advance Oil System Safety, Human Health, and the Environment in the Gulf of Mexico

In 2010, the *Deepwater Horizon* explosion and fire caused the largest offshore oil spill in U.S. history, which had significant impacts on the Gulf environment and people. As part of legal settlements with the companies involved, the federal government asked the **National** Academy of Sciences (NAS) to establish a new program to fund and conduct activities to enhance oil system safety, human health, and environmental resources in the Gulf of Mexico and other U.S. outer continental shelf regions that support oil and gas production.

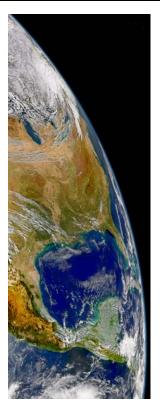


Photo: SeaWiFS Project, NASA/GSFC, ORBIMAGE

What is the Program's 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.

What are the Program's goals? The Program's most valuable contributions are likely to come at the intersections of its areas of responsibility—oil system safety, human health, and environmental resources. Given this context, the Program will address three interconnected goals:



- **Goal 1:** Foster innovative improvements to safety technologies, safety culture, and environmental protection systems associated with offshore oil and gas development.
- **Goal 2:** Improve understanding of the connections between human health and the environment to support the development of healthy and resilient Gulf communities.
- **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.

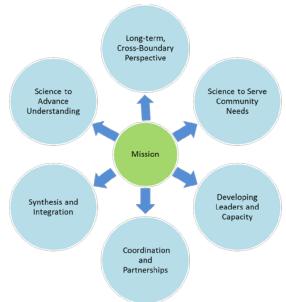
What will the Program do? The Program will fund studies, projects, and other activities using three broad approaches specified in the legal settlements: research and development, education and training, and environmental monitoring.

How is the Program operating? In 2013, the NAS appointed a group of 25 volunteers to develop a strategic vision for the program. Elements of this strategic vision are outlined here, and the entire document is available

at <u>www.nas.edu/gulf</u>. In fall 2014, Program oversight transitions from the original Advisory Group to a newly appointed Advisory Board charged with implementing the Program's vision.

How much money will the Program manage and over what time span? The Program will have a total of \$500 million (\$350M from BP and \$150M from Transocean) in a fixed term endowment. The funds accumulate over five years (2013-2018), and must be disbursed within 30 years. This time horizon presents an extraordinary opportunity to use science and technology to tackle large, complex issues at a regional scale and over the long term.

How will the Program have long-term impact? The planning process identified six overarching strategies that can steer the Program toward producing lasting benefits. These are key opportunities where the Program's mission aligns with the strengths of the National Academies—the NAS, National Academy of Engineering, Institute of Medicine, and National



Research Council—and where the Program's 30-year duration and long-term perspective hold special potential for cumulative impacts. These strategies are shown in the graphic to the right.



What is the Program's geographic focus? Program activities focus on the Gulf of Mexico and other U.S. coastal and outer continental shelf regions where human communities, ecosystems, and energy production co-exist. Work that transfers knowledge to or from other places in the United States or other nations is included in the mandate.

Who is involved? Program planning and oversight is led by a volunteer group of experts called the Advisory Board. Oversight is provided by the National

Academy of Sciences, National Academy of Engineering, Institute of Medicine, and National Research Council, known collectively as "The National Academies." We are a private, non-profit organization chartered by Congress in 1863 to provide independent, expert advice to the nation. Activities will involve scientists, engineers, health experts, educators, and others from throughout the United States, the Gulf region, and relevant other countries in a variety of ways.

What are the Program's first activities? In fall 2014, the Program will begin accepting applications for three-initial, short-term funding opportunities: exploratory grants, research fellowships, and science policy fellowships. In 2015, the Program will offer an opportunity related to the synthesis of environmental monitoring data. The incoming Advisory Board will work to identify future activities that align with the

Program's mission and objectives, including some larger-scale initiatives.

To register to receive e-updates about Program activities and upcoming funding opportunities, please visit www.nas.edu/gulf.

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