

GCOOS: INVESTING IN LIVES, JOBS AND ECONOMIES IN THE GULF STATES

Online at GCOOS.org



The Gulf of Mexico Coastal Ocean Observing System (GCOOS) is the Gulf of Mexico regional component of the U.S. Integrated Ocean Observing System (IOOS). We are the only comprehensive data collection and dissemination center for coastal and ocean data in the Gulf.

GCOOS leverages a small budget – just \$2 million – into big results by coordinating information gathered by federal, state and private partners running nearly 2,000 sensors in coastal waters to the deep ocean. We ensure that all data is timely, reliable, accurate and available to everyone – from weather forecasters to Coast Guard first responders – to ensure a healthy, productive ocean and resilient coastal communities for the Gulf’s 14 million residents and the \$234 billion annual economic benefit it provides to the U.S. economy.

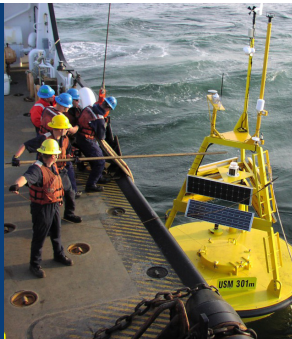
Instead of operating our own in-water assets such as buoys, autonomous vehicles, radar systems and water-quality monitoring tools, we collaborate with and provide grant support to on-the-ground investigators who develop and implement data collection using their own systems. This allows us to leverage our limited dollars to increase partnerships with local and state organizations

IMPROVING OUR CAPABILITIES

While progress has been made toward a fully developed Gulf observing system, the 2010 Deepwater Horizon Oil Spill, hypoxia and continued toxic algae blooms impacting fisheries and tourism provide vivid examples of the ocean observing needs that still exist in the Gulf of Mexico. And despite billions of dollars available from many funding sources in the post-DWH era, no money has been allocated for sustained real- and near-real time observations.

Return on investment in GCOOS:

- Safer & more efficient marine operations
- Reduction in coastal hazards
- Healthier ecosystems & living resources for a more robust economy
- Healthier & safer communities



Gulf-wide that are using professional and citizen scientists to develop a comprehensive data system that benefits users and supports jobs and local economies.


In addition to data collection and distribution, we conduct education and outreach activities to equip the public to use and make decisions about the economic and environmental health of our Gulf of Mexico.

By sharing the responsibilities for fully implementing a Gulf-wide observing system, each Gulf state is making an investment that protects lives, jobs and economies.


14 MILLION people call the U.S. Gulf coast home.

TX LA MS AL FL
would be ranked as the world's **7th** largest economy for Gross Domestic Product if they were their own country.

The economic impact of the Gulf of Mexico on the nation's economy is **\$234 BILLION ANNUALLY**

 We're vulnerable to strong currents, hurricanes and flooding of nationally significant infrastructure – ports, refineries, petroleum reserve facilities.

11 of the nation's top **20** U.S. ports (by tonnage) are in the Gulf of Mexico.

 The Gulf's oil and gas industry produces **44%** of the nation's crude, **43%** of the dry natural gas and more than **50%** of the liquid natural gas.

The Gulf's commercial fishery sales: **\$24 BILLION** 



PROTECTING PUBLIC HEALTH, JOBS AND THE ECONOMY IN ALABAMA



JOBS

Nearly a quarter million jobs are linked to Alabama's coast. The port system accounts for an estimated 127,500 jobs; Gulf Coast tourism supports approximately 70,000 jobs annually and commercial fisheries supports about 15,000 jobs.



PUBLIC HEALTH

Nearly 75 percent of the state's bays and estuaries are classified as "impaired" in Alabama and beach closures and health advisories are prominent public concerns. State officials have identified improving water quality as a key priority for Deepwater Horizon funding.



ECONOMY

Alabama's marine resources are among its greatest economic assets. More than 25 million tons of cargo, at an annual value of \$18.7 billion, pass through its ports annually. In 2015, more than 9 million tourists, spending \$4.9 billion, generated \$24.8 million in tax revenues. Also vital to the state's "blue economy": commercial fisheries, which generated \$660 million in sales, and recreational fisheries, which generated more than \$1 billion in sales.

GCOOS is the heart of data collection for the ocean and coastal waters of the Gulf of Mexico — collecting thousands of data points from sensors and ensuring data are reliable, timely and accurate before disseminating to all who need it (gcoos.org/products). These data support the tools and technology that help protect public health, ensure safe and efficient navigation and jobs tied to the blue economy. While GCOOS has a well-established infrastructure, additional tools are needed to improve public health and safety and decrease economic losses.

A \$1 million investment would:

- More accurately measure and forecast ocean currents using coastal radar. In Coast Guard rescue operations, data from these systems have been shown to reduce search areas by 66%. They also help emergency response following contaminant spills, improve weather forecasts and aid navigation for maritime operations at Alabama's ports. (Investment: \$345,000)
- Bring the Beach Conditions Reporting System to Alabama, which saves lives and reduces ER visits by providing real-time information on water conditions — rip currents, hazardous marine life, toxic algae. (Investment: \$30,000)
- Improve water quality data collection that supports early warning for toxic algae blooms. There is great need by seafood producers and harvesters to track the spread of potentially toxic waters to shellfish beds. Early detection and warning can save millions of dollars and protect public health — and safeguard Alabama's \$64 million shellfish industry. (Investment: \$425,000)
- Improved coverage and accuracy of water level predictions — particularly in areas at or below sea level, which could save lives and money. For instance, Alabamans were paid \$8.5 million in flood claims in FY 2015-2016. (Investment: \$200,000)

The additional funding would allow us to further leverage and expand our partnerships with Alabama institutions and organizations, including: Dauphin Island Sea Lab, Mobile Bay National Estuary Program, MS-AL Sea Grant Consortium, Information Technology & Systems Center of University of Alabama in Huntsville, Radiance Technologies, Inc.