GULF OF MEXICO COASTAL OCEAN OBSERVING SYSTEM
GCOOS

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

Online at GCOOS.org

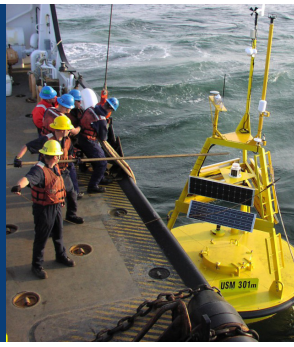
The Gulf of Mexico Coastal Ocean Observing System (GCOOS) is the Gulf of Mexico regional component of the U.S. Integrated Ocean Observing System (IOOS). We are the only comprehensive data collection and dissemination center for coastal and ocean data in the Gulf.

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

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



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.

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.

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**

CONTACT: Dr. Barbara Kirkpatrick, GCOOS Executive Director
Barb.Kirkpatrick@GCOOS.org • 941.724.4320

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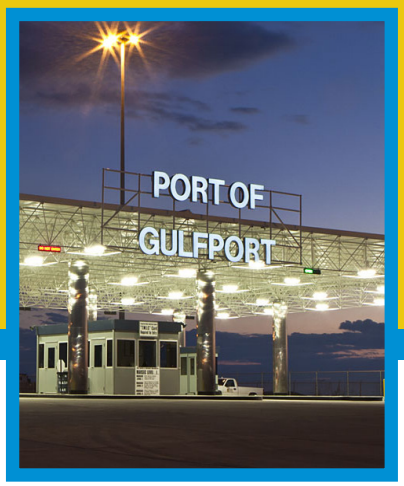
PROTECTING PUBLIC HEALTH, JOBS AND THE ECONOMY IN MISSISSIPPI

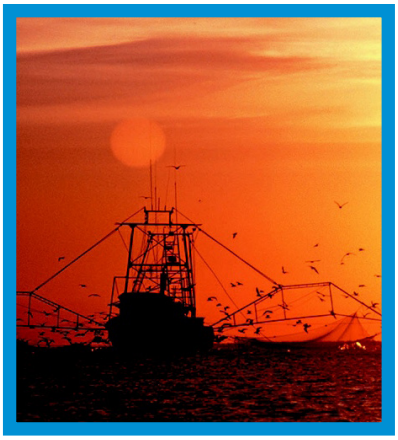


JOBS

Mississippi's ocean-related jobs are critical to the coastal workforce, supporting more than 35 percent of employees and offering some of the highest paying jobs in the state. Coastal tourism is especially important, supporting nearly one in five jobs and generating more than $43 million for the local economy. Gulf Islands National Seashore alone draws more than 1 million visitors annually.

ECONOMY

With 15 ports — including two that accommodate deep-draft vessels — coastal tourism and substantial fisheries, Mississippi's "blue economy" contributes billions of dollars to the state's annual revenues. In fact, it has been identified as a key — yet often overlooked — sector that could bolster Mississippi's overall economy.



PUBLIC HEALTH

Good water quality is important for public health and to protect Mississippi's fisheries and tourism-related economy. Beach closures and health advisories have been prominent public concerns. For example, 10 of the state's 21 monitored beaches along its 44 mile coastline were under water contact advisories for bacterial contamination as recently as October 2016.

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 to more efficiently direct state and federal emergency response resources following contaminant spills, improve weather forecasts and aid navigation for maritime operations. (Investment: $400,000)
- Expand a Beach Conditions Reporting System to Mississippi that would provide real-time information on water conditions to beach visitors, residents and businesses. For a minimal cost, the system provides rip current warnings, hazardous marine life notices and reduces health impacts from toxic algae, benefitting both the tourism industry and public health. (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 Mississippi's $17 million shellfish industry. (Investment: $370,000)
- Improved coverage and accuracy of water level predictions — particularly in areas at or below sea level. Better predictions could also save lives and money. For example, Mississippians were paid $20 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 Mississippi institutions and organizations, such as: USM, MSU, Mississippi Marine Resources, Mississippi Enterprise for Technology and key maritime partners based at Stennis Space Center.