

# RESPONDING TO CHANGING LANDSCAPES

The Water Institute of the Gulf is a not-for-profit, research and technical services resource designed to provide the science-based answers decision-makers need to develop resilient coasts, sustainable water systems, and reduce risk for communities worldwide. We provide applied research services for government agencies, businesses, foundations, non-profits, and philanthropic organizations to make planning for projects more efficient and inclusive.

The Institute's strength comes from the integrated approach we use to connect across scientific disciplines, both within the Institute's technical team and with partners around the world.

Very few environmental challenges occur in the vacuum of pure science, which is why it is essential that solutions find the balance between people and the environment.

## **OUR GOALS ARE TO:**

- Increase understanding of natural and human aspects of coastal, estuarine, and fresh water ecosystems
- Develop tools that address real challenges to benefit people and the environment
- Reduce risk for communities and infrastructure

## WHAT WE DO

- · DATA COLLECTION
- · REAL-TIME MONITORING
- · ECOLOGICAL AND COMMUNITY MAPPING
- HAZARD MITIGATION SUPPORT

- · INTEGRATED NATURAL SYSTEMS MODELING
- · INDEPENDENT TECHNICAL REVIEW
- · HABITAT RESTORATION DESIGN
- BEACH SAND MANAGEMENT

For more information about the Institute's research capabilities and how they can benefit your organization, visit www.thewaterinstitute.org or contact info@thewaterinstitute.org.

#### APPLIED RESEARCH

### Managing Water Resources



The Institute's broad experience in developing water budgets can help communities establish minimum flows and levels for better water resource management, providing a more holistic view of potential impacts of water usage to communities and ecosystems downstream.

#### **Beach Restoration Strategies**



Institute researchers bring world-class experience to address the challenge of maximizing beach improvements through identifying the best ways to add new sand to the system.

## Mapping Socioeconomic and Ecosystem Change



Mapping changing landscapes and populations provides a clearer vision of current and future conditions in order to better inform decisions about where limited resources should be spent in order to do the most good.

#### Independent Technical Expert Review



The Institute offers a wide array of expertise in areas of beach erosion, flood protection, coastal and freshwater habitat restoration, hazard mitigation, community sustainability, and numerical modeling. Science-based reviews of proposed projects ensure a more successful and cost-effective result.

#### Flood Mitigation Planning



Sea level rise continues to impact communities living along the coast and bays. The Institute specializes in working directly with communities to better understand, and plan for, flood mitigation.

## **Aquatic Habitat Protection And Restoration**



The Institute's field investigation capabilities provide the foundational science to address challenges such as hypoxia, harmful algal blooms, and flood protection.

#### LET'S WORK TOGETHER

The Institute stands ready to partner with governments, businesses, and stakeholders across the Gulf of Mexico by providing the necessary research designed to protect and improve the health of the Gulf, now and into the future.

Contact Justin Ehrenwerth, President and CEO, jehrenwerth@thewaterinstitute.org.

