The HRI model is unique among Gulf of Mexico marine science endeavors by integrating six science disciplines, economics, law, and big data analytics. This integrated, interdisciplinary institute that cohesively addresses critical environmental and economic problems limits the authority of single-organization-centric space. HRI has applied the specialized, integrated capacity of its expert community to produce high-impact science for decision-makers, industry leaders, and stakeholders in the U.S., Mexico, and Cuba to strengthen resilience of Gulf communities, economies, and environments. However, while this has resulted in significant growth at HRI, there are challenges in entering the next phase, particularly in more effectively linking science to decision making.

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In support of the SSC, HRI will:
- Leverage Texas OneGulf, a RESTORE Center of Excellence concerned of and led by HRI that includes nine state institutions with wide-ranging expertise across more than 140 of the state’s leading Gulf experts,
- Enhance institutional operations through innovative shared laboratory functions, data and information management, and cooperative research mechanisms with the university and other entities, and
- Pursue partnerships to expand and integrate expertise in interdisciplinary research areas such as coastal and marine engineering, big data informatics, and risk modeling.

In 2000 to establish HRI

PRIORITY PROJECTS
Addressing Gulf Problems

To help realize outcomes in each research area, HRI has identified six High-Priority Projects identified by distinct and achievable objectives, time frames from two to five years, and well-defined metrics. These Projects may be sub-regional in scope but always are expandable to the entire Gulf and transferable both nationally and internationally.

- Resilience and Objective Science Engagement – Ensuring policy and resource management decisions affecting the Gulf are science based.
- Environmental Water Incorporation into Water Planning, Development, and Management – Pursuing innovative strategies to fully incorporate environmental water into planning, development, and management.
- Gulf Health Index – Providing all users a credible, transparent process built on easily obtainable data that offers an objective and sustained assessment of the ecological and socio-economic health of the Gulf of Mexico.
- Consistent International Environmental Policy for the Gulf of Mexico – Ensuring that environmental policies and regulations affecting shared resources are harmonized across international borders.
- Smart Growth for Coastal Communities – Developing and supporting implementation of a Sea Level Rise Plan for Texas to protect economic investments and environmental stability of Texas coastal margins.
- Sustainable Recreational Fisheries Model – Developing and implementing a national policy and management structure for ensuring a sustainable recreational fishery.
- Gulf Knowledge Base – Ensuring a data and information legacy that promotes continued discovery and public awareness of the Gulf of Mexico large marine ecosystem.

HRI SHAPING THE FUTURE
Gulf Collaborations

In support of the SSC, HRI’s Gulf Network will maximize impact by bringing together increasingly diverse experts, data, and information to address big picture questions at a deeper level. The Institute’s highly respected team of researchers, students, leaders, entrepreneurs, and staff will move the Institute toward transdisciplinary collaboration by:

- Identifying collaborations across disciplines and nations to generate new ideas and approaches,
- Informing science-based policies and actions to transform the management of natural resources, secure the resilience of Gulf communities, and strengthen regional and national economies, and
- Training and enriching the next generation of Gulf leaders and scientists to perpetuate deep-rooted, indelible change.

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HRI CREATING CHANGE
Structure for Success

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HRI RESEARCH INSTITUTE

VISION
The Gulf of Mexico is ecologically and economically sustainable.

MISSION
Science-driven solutions for Gulf of Mexico problems.

STRATEGIC EMPHASIS
High-impact science and policy to inform, inspire, and enrich all generations of leaders and scientists.

HRI’S GULF NETWORK
Texas OneGulf 
Centers of Excellence 
International 
Gulf of Mexico University Research Collaborations

HARTE RESEARCH INSTITUTE

ED HARTE donated $46 million in 2000 to establish HRI

HARTE RESEARCH INSTITUTE

2018 $20 million

HARTE RESEARCH INSTITUTE

AT A GLANCE
2018

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HRI THINKING DEEPER

Working for a Healthy Gulf

In the Gulf of Mexico, habitat has given way to asphalt in the nation. The apex predator missing is the salmon, and overfishing remains problematic. Factoring in climate change and a burgeoning coastal population, Gulf sustainability becomes even more complex and crucial to success. Founded in 2002, the Texas Research Institute (HRI) for Gulf of Mexico Studies at Texas A&M University-Corpus Christi (TAMUCC) is the only research institute dedicated to understanding these complex dynamics and advancing the long-term viability of the world’s largest body of water.

In the early years of HRI, at a meeting of the advisory board in Houston, Ed Harte exhorted HRI leadership to “Make a difference! It’s a message that guides the institute everyday as we research and teach how to make the Gulf more sustainable, both environmentally and economically. To direct future effort, HRI engaged in a multi-year, multi-stakeholder assessment and comprehensive strategic planning initiative.

HRI’s Thinking Deeper 2018–2028 details the strategy the institute will execute, in lockstep with its partners, to craft and implement actionable and long-lasting solutions for the Gulf of Mexico. This Strategic Plan Overview describes HRI’s core and comprehensive strategic planning initiative.

HRI THINKING DEEPER

Elements—structural and functional—and its priority tasks for the next decade. In its addendums, Thinking Deeper details the strategy the institute will execute, in lockstep with its partners, to craft and implement actionable and long-lasting solutions for the Gulf of Mexico. This Strategic Plan Overview describes HRI’s core and comprehensive strategic planning initiative.

HRI’s strategic planning framework reflects the institute’s overall vision, mission, and strategic emphasis.

HRI TAKING ACTION

Strategic Framework

Without interruption, the health and productivity of the Gulf of Mexico will continue to falter because of our use of it. Transformative changes are needed. HRI has a demonstrated history of successfully initiating and sustaining change. The institute’s theory of change, derived from its core principles, embraces holistic, scientific, social, and policy-based considerations to sensibly solve problems that drive sustainability. Growing institutional strengths and abilities to provide actionable science will help address the bigger challenges to Gulf of Mexico health and prosperity.

Thinking Deeper provides the focus and structure needed to direct HRI’s resources and initiatives to affect positive change during its next phase. Working collaboratively, the HRI team assessed current and planned capacity and established four Research Areas that, with the SSC, will advance the institute’s Vision, Mission, and Strategic Emphasis.

HRI ACHIEVING RESULTS

Research Areas, Outcomes, and Actions to 2028

This Research Areas frame HRI’s vision for positively impacting the Gulf of Mexico’s greatest challenges. The outcomes within each Research Area set the standards and guide the work and priority tasks that will create the change needed to ensure the Gulf’s sustainability. Each Research Area will evolve to reflect successes and emerging issues.

For the most up-to-date information, visit坏人isaresearchinstitute.org

Sustainable Coastal & Marine Ecosystems

Outcomes

Healthy Coastal Communities & Economies

Outcomes

Coastal & Marine Resource Management

Outcomes

Institutional Excellence

Outcomes

Sustainable Coastal & Marine Ecosystems

Outcome 1.1

Healthy Coastal Communities & Economies

Outcome 2.1

Coastal & Marine Resource Management

Outcome 2.2

Institutional Excellence

Outcome 4.1

SUSTAINABLE COASTAL & MARINE ECOSYSTEMS

Healthy Coastal Communities & Economies

Healthy Coastal Communities & Economies

Coastal & Marine Resource Management

Institutional Excellence

HRI THINKING DEEPER

Principle-Driven Science

Wishing wider is shared conceptual framing emphasizing science-based action, HRI conducts world-class science and fosters deep engagement on complex issues, both internationally and across disciplines, by engaging educators, policymakers, coastal planners, private sector leaders, entrepreneurs, and innovators advancing holistic, creative, and feasible solutions for a sustainable Gulf of Mexico.

From its inception, HRI has been guided by three core principles:

1. Research is interdisciplinary, balancing biophysical science with social, behavioral, and economic science and policy.
2. Research upholds the highest standards for scientific integrity and is integrated to provide holistic and grounded solutions.
3. Engagement is encouraged and facilitated by providing a collaborative platform to all Gulf of Mexico stakeholders in the U.S., Mexico, and Cuba.

HRI SHARING SOLUTIONS

Principle-Driven Science

VISION

The Gulf of Mexico is ecologically and economically sustainable.

MISSION

Science-driven solutions for Gulf of Mexico problems.

INSTITUTIONAL SUPPORT

SUSTAINABLE COASTAL & MARINE ECOSYSTEMS

Healthy Coastal Communities & Economies

Coastal & Marine Resource Management

INSTITUTIONAL EXCELLENCE

INSTITUTIONAL EXCELLENCE

STRATEGIC EMPHASIS

High-impact science and policy to educate, inspire, and inform all generations of leaders and stewards.

SUSTAINABLE COASTAL & MARINE ECOSYSTEMS

A systems approach to strengthening robust communities and ecosystems.

HEALTHY COASTAL COMMUNITIES & ECONOMIES

Institutional Excellence

Outreach approaches to engaging and empowering all employees across our partnerships.

COASTAL & MARINE RESOURCE MANAGEMENT

Science-based strategies to strengthen coastal and ocean resources.

INSTITUTIONAL EXCELLENCE

Outreach approaches to engaging and empowering all employees across our partnerships.

OUTCOME 1.1

Habitat conservation and protection to safeguard the health of Gulf of Mexico habitats and species.

OUTCOME 1.2

Biodiversity is maintained through strategies that sustain ecosystem health.

OUTCOME 1.3

Fisheries are a renewable resource and innovation follows as a major economic driver.

OUTCOME 2.1

Coastal resilience practices are holistic and pursue a systems approach.

OUTCOME 2.2

One Coast is incorporated into decision-making.

OUTCOME 3.3

Coastal planning and decision-making is environmentally sensitive.

OUTCOME 4.1

HRI’s culture and processes address problem-solving and employee satisfaction.

OUTCOME 4.2

Data management needs are met.

OUTCOME 4.3

Strategic engagement is advanced.

HRI is committed to the concept that holistic, long-term Gulf solutions must evolve in concert with our international partners. To that end, our collaborative efforts will drive our work, and continue to grow these partnerships today.

For example, HRI has Memoranda of Understanding with government and research institutions in Cuba and Mexico, allowing us to engage in research projects in those countries. These agreements also enable us to deliver unique information to both partners and students. This is a key to facilitating collaboration across the Gulf.