



ONEGULF PRIORITY NEEDS

Establishing Baselines: Community Resilience, Estuarine & Coastal Environments *FY22 Notice of Funding Availability*

I. Introduction and Background

Texas OneGulf is a consortium of nine research institutions funded, in part, with federal funding from the Department of the Treasury through the State of Texas (Texas Commission on Environmental Quality) under the RESTORE Act. Our mission is to improve understanding of the Gulf of Mexico large marine ecosystem and its effects on human health and well-being to support a healthy environment and communities in Texas, the Gulf and beyond. The vision of Texas OneGulf is to become a trusted source of scientific information about the Gulf of Mexico, especially to Texas decision-makers. OneGulf has established the Texas OneGulf Network of Experts (TONE), which consists of more than 150 scientists, policy experts and researchers to provide a trusted resource for information and science-driven solutions relevant to Gulf of Mexico issues that affect Texas and the region.

II. Needs Description

In support of the OneGulf vision, the consortium has created the Texas OneGulf Agency Council to better inform OneGulf on priority decision-making needs and the development of projects. The Council is composed of agency leadership from Texas Commission on Environmental Quality, Texas Division on Emergency Management, Texas General Land Office, Texas Parks and Wildlife Department and Texas Water Development Board. Drawing from the Texas OneGulf Strategic Research and Action Plan, the Council has identified the following research focus areas and research questions as priorities. **This Notice of Funding Availability (NoFA) will support projects to establish knowledge baselines¹ for research questions in the Community Resilience and Estuarine & Coastal Environments focus areas, as well as key gaps and recommended next steps around which future funding may be targeted.** Importantly, this announcement also supports the deepening of collaboration among scientists and end-users to better understand the decision-making need and context, key methodologies and inferences, meaning of uncertainty, and potential implications of research results, such that trusted, actionable science² can be best supported and produced.

In support of this goal, Texas OneGulf seeks assistance from teams with diverse expertise, including biogeophysical and social sciences, policy, communication, engagement, and issues related to the Gulf of Mexico to develop an inter/transdisciplinary, intersectoral perspective on establishing knowledge baselines and producing actionable decision support related to OneGulf focus areas, as well as key gaps and recommended next steps.

¹ Knowledge baseline refers to information, data and inferences that we know, lessons learned, as well as top performing methods and/or processes, newest ideas, and latest developments in robust technologies and features.

² Actionable science is research produced with an end-user in mind; it meets the needs of decision-makers by understanding and considering those needs – spatial, temporal, political, otherwise – throughout scientific processes.



Community Resilience Focus Area:

- *Risk Communication:* What are the top performing methods in disaster risk communications, focusing on misinformation, public distrust and social media, to minimize the impacts of disasters on human communities?
- *Prioritizing Mitigation Projects:* What analytical tool(s) or scoring mechanism(s)/criteria can best prioritize disaster risk mitigation projects from a state and local perspective, including through identifying data needs and best practices?

Estuarine & Coastal Environments Focus Area:

- *Coastal Stressors:* What methods exist to better understand and address linkages between coastal environmental stressors and human communities, including public health and the economy?
- *Integrated Water Resource Management:* What strategies of Integrated Water Resource Management (IWRM), from a flood and water supply perspective, can be applied in Texas to enhance the health of Texas estuaries and the Gulf?

Applicants should select to address one of the above priority research questions in their response.

III. Eligibility and Award Information

It is anticipated that one award will be made in each research focus area, with a projected funding amount for each award set at a maximum of \$150,000. The anticipated start date is in April 2022 and completion date in March 2023. All proposed work must be completed during this period. No extensions will be available, unless approved by OneGulf.

To be eligible, the project lead must be a member of TONE; however, collaboration outside of TONE is acceptable and encouraged. An individual may serve as project lead on only one proposal; however, an individual may participate in more than one proposal as a team member.

IV. Key Dates

All applicants must submit a letter of intent by 5 pm Central Daylight Time on Monday, November 5, 2021 in order to submit a full proposal. Full proposals will only be encouraged for projects demonstrating significant relevance to priority research areas. Notification and encouragement to submit a full proposal will be distributed by email by November 15, 2021.

Applicants of encouraged proposals will be invited to participate in a knowledge co-production process (among others, see, e.g., Beier et al., 2016; DeLorme et al., 2016; Wall et al., 2017) for project development among TONE member teams and research end-users, which may be Texas OneGulf Agency Council members and/or additional stakeholders. Applicants whose proposals were not encouraged may submit a full proposal at their discretion, though they must show evidence of collaboration with end-users.



Full proposals are due by 5 pm Central Daylight Time on January 24, 2022. Proposal should be submitted, in PDF format, via email to: texasonegulf@tamucc.edu

V. Preparation Instructions

A letter of intent should consist of the following sections:

- 1) Project title
- 2) Project personnel (name, title and institution of project lead and team members)
- 3) Project key words (up to 5 key words)
- 4) Project summary (up to 1,000 words) including:
 - a. Question(s) addressed, including specific identification of the priority research question addressed
 - b. Goals and objectives
 - c. Project partners (external to project team, if any)
 - d. Project plan
 - e. Expected outputs and outcomes
- 5) Approximate cost

The knowledge co-production process for invited proposals will consist of the following:

Texas OneGulf will facilitate at least one virtual meeting with key decision-makers related to the research question(s) being addressed. All project leads from each encouraged letter of intent will be granted access to related meetings. Meetings will provide an initial opportunity for researchers and end-users to ask questions, build or strengthen relationships, and identify key aspects necessary for a co-production process (Beier et al. 2016), such as:

- Management need, goal or problem, and timeframes
- Key assumptions and/or constraints of the decision-making context
- Potentially relevant scientific information
- Applicable methodologies, models, approaches, data sources, criteria, etc.
- Understanding risk and uncertainty

For those proposals that are not invited, applicants will need to gather this information on their own to be competitive at the full proposal stage.

A full proposal should consist of the following sections:

- 1) Cover sheet (1 page)
- 2) Project abstract (250 words)
- 3) Project description (maximum 5 pages)



4) Budget

5) Budget narrative (maximum 2 pages)

6) Biosketches of team members (maximum 2 pages per team member)

All sections must use Times New Roman 12 pt or larger, or Arial or Helvetica 11 pt or larger. The proposal packet must be sent in PDF format.

Instructions for each section are provided below.

1. Cover Sheet (max. 1 page)

The cover sheet must include the following information:

- Project title
- Name, institution, email address and phone number of the Principal Investigator
- Names and institutions of all other team members
- Name, institution, email address and phone number of administrative contact
- Requested award amount

2. Abstract (max. 250 words)

The abstract should provide a statement on the general qualifications and experience of the team, the research question being addressed, proposed approach, and the expected project outcomes and deliverables.

3. Project Description (max. 5 pages)

The project description should include:

- A. List of Team Members:** List all team members, their institutions, their roles in the proposed project, and their relevant expertise.
- B. Current Knowledge, Gaps, and Next Steps:** Identify the plan for developing knowledge baselines related to the chosen research question(s), including current knowledge, key gaps and recommended next steps. Related to each specific research question, responses should include knowledge, gaps and next steps on:
 - *Community Resilience/Risk Communication:* helping communities understand which disaster measures they should prioritize; best language and platforms needed to clearly convey messages; messaging to convey the relationships between disasters over time, as well as longer-term trends; and challenges in operationalizing research outputs/outcomes.
 - *Community Resilience/Prioritizing Mitigation Projects:* comparing disparate risk mitigation projects (e.g., structural/non-structural, geographic differences) in a common framework, with a focus on cost-benefit analysis (CBA); quantification or measurement of societal benefits in CBA to assess disaster risk mitigation projects; and ranking criteria for agencies/officials with limited resources and multiple priorities.
 - *Estuarine & Coastal/Coastal Stressors:* determining coastal stressors in Texas, especially by exploring new and emerging stressors; and developing a

better socioeconomic understanding of the community/individual impacts of harmful algal blooms sediment loss and other coastal challenges and stressors.

- *Estuarine & Coastal/Integrated Water Resources Management (IWRM)*: stakeholder interests in using IWRM as well as the limitations and/or benefits of this approach; using IWRM to prioritize risk mitigation projects across flood and water supply; compound flooding in the coastal zone; and how OneGulf can best support larger, ongoing projects to address flood and water supply.

C. Responsiveness to End-User Needs: Describe critical insights gained from initial meetings with science end-users, and the methods and measures the project will take to address key aspects and support a co-production process over the life of the project. This includes (but is not limited to) how the team will identify the levels of risk/vulnerability, awareness, concern and policy preferences as perceived by major stakeholders (including Council members and any other key stakeholders identified) as they deal with management actions aimed at addressing the short-term and long-term issues/threats to both environmental and economic health of the Gulf of Mexico and the impact on coastal resources and communities. This also includes expected sources of information, which may include the team members' expertise, information from previous work, as well as proposed new assessments (syntheses/analyses/modeling) that may be conducted.

D. Deliverable(s): Describe the timing and formats the project team will use to submit requested information, including final deliverables and any potential interim deliverables to ensure the project is meeting end-user needs.

E. Work Plan: Provide a list of major tasks, identify who will lead each task, and provide a project schedule with specific milestones, showing how the project will be completed within the funding period.

4. Budget

The budget should be provided in the following categories:

- Personnel Support (name personnel, their time commitment, and allocated support)
- Fringe Benefits
- Travel
- Data Management
- Other (consultants, materials and supplies, etc.)
- Indirect Costs
- Total

5. Budget Narrative (max. 2 pages)

Provide narrative details for how the funds requested in each budget category will be used.



6. Biosketches (max. 2 pages per team member)

A biosketch should be provided for each team member that includes: name, education, professional positions in reverse chronological order, relevant expertise, and relevant experience and publications.

VI. Proposal Review Process and Criteria

Proposal review will be administered by the Texas OneGulf Management Team, who will initially review each proposal to ensure that each is administratively complete and conforms to the Notice of Funding Availability requirements. All proposals will then be reviewed by an independent panel of qualified, unbiased reviewers who will review and rank each proposal on its' intellectual merits. Reviews and recommendations will be passed to the Texas OneGulf Consortium leadership for final approval.

Review criteria will include:

- Project Management (10%)
- Project Responsiveness to Research Priorities (50%)
- End-User Collaboration (30%)
- Broader Impacts (10%)

The selected project will then be required to go through a Texas Commission on Environmental Quality application process for approval.

VII. Award Terms and Conditions:

1. By applying in response to this Notice of Funding Availability, each Project Team, including the Principal Investigator (PI), agrees to be bound by all terms and conditions of the Texas OneGulf Center of Excellence Rules and Policies, as well as, applicable RESTORE Terms and Conditions.
2. All proposals will be treated as new efforts; each proposal must be a stand-alone document without need to review or consider linked material.
3. As required by the RESTORE Act [Sec. 1603 (33-34)], all efforts must be located in and applicable to Texas.
4. Grants must be led by a PI or Co-PI that is currently a member of the TONE. Collaboration outside of TONE is acceptable and encouraged.
5. Other partnering entities (including non-profits, governmental agencies, and public or private companies) from within or outside of Texas are encouraged. Personnel from any number of partnering institutions should be reimbursed appropriately for their time commitment to the research program based on the salary structures at their home institutions. The tasks they lead will be open in nature and may include work by undergraduate or graduate students, and postdoctoral research associates as appropriate.



6. An individual may only be the lead Principal Investigator (PI) on one Texas OneGulf grant proposal but may participate in others in any other capacity. It is the responsibility of the submitters to confirm that each member of the entire team is eligible.
7. All personnel conducting activities financed, directly or indirectly, wholly or in part, by Texas OneGulf are subject to and must comply with the terms of the Texas OneGulf Center of Excellence Rules and Policies and applicable RESTORE Terms and Conditions. All activities must be carried out under professional standards of responsible conduct in research [e.g., as defined by the best practices outlined and described in the United States National Academies of Science “On Being a Scientist: A Guide to Responsible Conduct in Research, Third Edition” (2009), National Academies Press.
8. Each PI, Co-PI and anyone being paid salary from a Texas OneGulf grant will be required to submit a [Conflict of Interest Disclosure Statement form](#).
9. Cost sharing or matching is not required for Texas OneGulf grants.
10. Consistency and uniformity standards for allowable costs, and audit standards requirements for non-profit organizations expending federal awards, including their grant recipients, are defined in the federal Uniform Grant Guidance (2 CFR 200); Subpart F applies to audits of the recipient’s fiscal years beginning on or after December 26, 2014.
11. PI’s are responsible for compliance with local, state or federal requirements related to their research program, including ensuring they have any permits required to conduct their research; if applicable, copies must be provided to Texas OneGulf.
12. Intellectual property funded by a Texas OneGulf grant will reside with the responsible investigator’s home entity. Texas OneGulf, in consultation with PIs, may at any time use photos, data, results, and appropriate documentation to highlight and publicly share Texas OneGulf accomplishments and outcomes. Whenever possible, work conducted under Texas OneGulf grants is expected to result in publications in peer-reviewed (refereed) journals, or equivalent media. Publications and datasets that contribute to the published work must be assigned a Digital Object Identifier (DOI) to facilitate public access.
13. Texas OneGulf uses the Gulf of Mexico Research Initiative Information and Data Collaborative (GRIIDC) to archive metadata records. All projects should include data management and curation by GRIIDC supported by 3.75% of direct costs. All data and derived data products and metadata must be made publicly available within one year of data acquisition, before publication that relies on the data, or before the end of the grant, whichever is soonest. Metadata records submitted to GRIIDC must be accompanied by the related datasets, regardless of where they are permanently archived; they are needed to confirm metadata records. These requirements are intended to promote reproducibility, integration with other research programs, and advancement of knowledge and utility to engineers, researchers, and managers.



14. Texas OneGulf grant recipients will be required: to submit quarterly progress reports with financial statements (in order to justify cost-reimbursable quarterly payments), in specified format as defined in grant sub-agreement terms and conditions. The Texas OneGulf program office will coordinate with grantees to fulfill reporting requirements, and will maintain records for all grants, publications, presentations, reports, and activities of each grant. These will inform semi-annual reports to the Treasury Office of Gulf Restoration, and an annual report for the Gulf Coast Ecosystem Restoration Council, as required for continuation of program funding; these reports will be made publicly available via the Texas OneGulf website.

VIII. Contact Information

Questions may be directed to the Texas OneGulf Executive Management Team at Texas OneGulf Center of Excellence: texasonegulf@tamucc.edu

IX. Evaluation Criteria

Category (Weight)	Criteria
Project Management (10%)	<ul style="list-style-type: none"> • Expertise and track record of PI(s) in the proposed research (5 pts) • Realistic research timeline and availability of appropriate and resources for duration of the grant (<i>Note: Inability to meet this requirement is grounds for disqualification of proposal.</i>) (5 pts)
Project Responsiveness to Research Priorities (50%)	<ul style="list-style-type: none"> • Collaboration among Texas OneGulf institutions and/or partnership with other entities (university, nongovernmental, governmental, industry, and/or public) (10 pts) • Measurable outputs/outcomes relevant to one or more of the Texas OneGulf priority research questions (15 pts) • Quality and soundness of the proposed research (15 pts) • Demonstrated use of the “best available science” as defined by the U.S. Code of Federal Regulations [Title31, Chapter 1, Subpart A: (34.2)], as well as the integration of interdisciplinary methods, data and information as appropriate, including from the socioeconomic sciences (10 pts)
End-User Collaboration (30%)	<ul style="list-style-type: none"> • Relevance of proposed outputs/outcomes to key decision-makers (10 pts) • Description of critical insights gained from meeting(s) with key science end-users (decision-makers/stakeholders) (10 pts) • Assessment of expected sources of information (10 pts)
Broader Impacts (10%)	<ul style="list-style-type: none"> • Demonstrated connection of the proposed research to positively impact Texas OneGulf research focus areas (5 pts) • Availability and dissemination of results to a broad audience including publication and other outreach activities (5pts)

References

Beier, P., L.J. Hansen, L. Helbrecht and D. Behar. 2016. A how-to guide for coproduction of actionable science. *Conservation Letters*, 10:288-296. <https://doi.org/10.1111/conl.12300>.



- DeLorme, D.E., D. Kidwell, S.C. Hagen, and S.H. Stephens. 2016. Developing and managing transdisciplinary and transformative research on the coastal dynamics of sea level rise: Experiences and lessons learned, *Earth's Future*, 4, 194–209, doi:10.1002/2015EF000346.
- Wall, T.U., E. McNie, G.M. Garfin. 2017. Use-inspired science: making science usable by and useful to decision makers. *Frontiers in Ecology*, 15(10): 551–559, doi: 10.1002/fee.1735.