Texas General Land Office

Coastal Protection-Oil Spill Prevention and Response

Request for Applications:

Research, Testing, and Development of Oil Discharge Prevention and Response Technology, Training, and Community Outreach

Table of Contents

January 15, 2025

Opportunity Snapshot

Below is a high-level overview of many of the elements of this opportunity. Full information is provided in the funding announcement that follows.

Purpose

The Oil Spill Prevention and Response Act of 1991 (OSPRA), codified as Texas Natural Resources Code Chapter 40, directs the General Land Office (GLO) to enter into interagency contracts with Texas state institutions of higher education for research, testing, and development related to oil spill prevention and response.

The purpose of this Request for Applications (RFA) announcement is to solicit applications for funding of research, testing, and development of oil discharge prevention and response technology, oil discharge response training, wildlife and natural resources rescue and rehabilitation, development of computer models to predict the movements and impacts of unauthorized discharges of oil, and other purposes consistent with and in furtherance of the purposes of OSPRA.

Funds Available

The GLO anticipates multiple projects will be funded under this RFA, for a collective $2.5 million over a biennium cycle, with a maximum of $1.25 million per year. It is anticipated that most successful applications will be for two-year projects.

Process

Applicants must respond to this RFA by completing an application located on Survey Monkey Apply and budget by no later than Feb 28, 2025. The application submission period for this cycle is Jan 15, 2025 – Feb 28, 2025. The required documents can be found at the following web address: https://www.glo.texas.gov/coastal/research-development-funding-opportunity .

Matching Funds

There is no matching funds requirement under this program; however, preferential consideration will be given to applicants offering matching funds, including in-kind match.

Project Periods

A project selected for contract award under this RFA (a "Project") will be funded for up to 24 months – September 1, 2025 through August 31, 2027. The GLO has the discretion to extend any Project for up to two additional years (through August 31, 2029), if agreed upon by both parties.

Organizational Eligibility

Only Texas state institutions of higher education ("Institutions") are eligible to receive a contract award under this RFA. Institutions desiring to submit consortium applications should submit both a consolidated application that provides an overview of the entire project and a specific application from each Institution.

Contact Information

All requests, questions, or other communications about this RFA should be submitted in writing to the GLO by emailing: brent.koza@glo.texas.gov .

Oil Discharge Prevention and Response Technology

The Oil Spill Prevention and Response Program of the GLO is requesting applications for funding for research and development activities. This RFA is open to Texas state institutions of higher education only. OSPRA designates the GLO to serve as the lead state agency in preventing and responding to coastal and marine oil spills. OSPRA places numerous and varied responsibilities on the GLO, including the establishment of a research and development initiative (the "R&D Program") in the GLO Oil Spill Prevention and Response Program. The GLO is accepting applications for projects that provide research, testing, and development of oil discharge prevention and response technology, oil discharge response training, wildlife and natural resources rescue and rehabilitation, development of computer models to predict the movements and impacts of unauthorized discharges of oil, and other purposes consistent with and in furtherance of the OSPRA.

The R&D Program funds higher education research in the following categories of understanding:

- **Applied basic research into oil spill science without specific applications, processes or products necessarily as an outcome. The outcome is determined by the gaining of knowledge and understanding through the scientific method of a defined research initiative.**
- **Research and development or applications that are directed toward the production of new methodologies, data collection/acquisition/development, materials, equipment, procedures, training, models, software, and systems that are designed to advance oil spill prevention, response, preparedness, mitigation or restoration on established or new issues related to oil spills, wildlife, and natural resources.**
- **Development of improved or enhanced technological advancements in existing oil spill related tools, machines, data collection/acquisition/development, systems, training, models, software, and equipment that are designed to address a defined and noted deficiency, problem, or need, or those related to wildlife and natural resources issues.**

To apply for a contract award under this program, follow the process outlined below:

- **Step One - Review the Process:** Review the funding announcement and the process used for this particular program.
- **Step Two - Consider the Requirements:** Consider the eligibility requirements and what will be required of a successful applicant.
- **Step Three – Apply for a Contract Award**. Complete and submit the application on Survey Monkey Apply for consideration on or before the submission deadline. Late applications will not be accepted.
- **Step Four – Funding Decisions and Contract Award Acceptance.** Await the funding decision, which is provided through an interagency contract award or other notice from the GLO.
- **Step Five – Contract Establishment (if selected).** Review the contract and sign in DocuSign. Per OSPRA, contracts awarded pursuant to this RFA are interagency contracts.

Step 1: Review the Process

Timeline

	Date
Funding Announcement Release	Jan 15, 2025
Application Submission Period	Jan 15, 2025 – Feb 28, 2025
Funding Notices	By May 31, 2025
Earliest Start Date	September 1, 2025

Submission Method: The application process and associated documents can be found at the following location: https://www.glo.texas.gov/coastal/research-development-funding-opportunity. Applications will be submitted through Survey Monkey Apply.

Step 2: Consider the Requirements

Organizational Eligibility

Only Texas state institutions of higher education are eligible to receive a contract award under this RFA. Institutions desiring to submit consortium applications should submit both a consolidated application that provides an overview of the entire project and a specific application from each Institution.

Responsibility

Applicants must identify a lead principal investigator or project director, as well as a co-lead investigator or co-project director, who will assume management responsibility for the project. If the principal investigator or project director leaves the Institution or otherwise relinquishes active direction of the Project, the Institution must notify the GLO Oil Spill Prevention and Response Division as soon as possible. The Institution must name a proposed new principal investigator or project director in writing to the GLO. Upon the GLO's approval, the proposed new principal investigator or project director will become the principal investigator or project director for the Project. Contracts may not be transferred or assigned to another state institution of higher education.

Each Institution awarded a contract through this RFA (an "Awarded Institution") must establish a system in writing to ensure that appropriate officials provide the necessary organizational reviews and approvals for the expenditure of funds and for monitoring Project performance and adherence to contract terms and conditions.

Available Funding

The GLO anticipates multiple Projects will be funded under this solicitation, up to a total of $2.5 million for the biennium cycle, with a maximum of $1.25 million per year. Most successful applications will be funded as two-year projects.

Source of Funding

Projects funded out of this announcement will be funded with state funds paid under an interagency contract between the GLO and the Awarded Institution.

Match Requirement

There is no match requirement under this program; however, preferential consideration will be given to Institutions offering matching funds, including in-kind match.

Budget

Applicant(s) must complete the budget (Section 6 of the application) to be considered under this RFA. Applicants are encouraged to collaborate with other research institutions, industry, and other governmental agencies. Collaborative applications that provide external matching funds or other sources of revenue are also encouraged. Institutions desiring to submit consortium applications must include a summary budget of the project by Institution and a separate budget page for each Institution. Awarded Institutions must request the GLO's prior written approval for all budget categorical changes and MUST submit all such requests using the Budget Adjustment Request form available at https://www.glo.texas.gov/coastal/research-development-funding-opportunity. The GLO will not make awards for equipment alone but may consider equipment requests included as part of a total application. Individual equipment purchases authorized under a contract awarded hereunder, valued $5,000.00 or more, shall remain the property of the GLO unless expressly conveyed to the Awarded Institution by an authorized GLO representative.

Eligible Costs

Except for ineligible costs listed below, unallowable costs under the Texas Grant Management Standards, and indirect rates exceeding 15%, all other costs will be considered through the GLO's approval process.

Ineligible Costs and Activities

Contract funds may not be expended for any cost disallowed by any applicable law or regulation and may not be used to support the following services, activities, and costs:

1. Supplanting or use of contract funds to replace any other existing federal, state, or local funds;
2. Inherently religious activities such as prayer, worship, religious instruction, or proselytization;
3. Lobbying;
4. Fundraising;
5. Membership dues for individuals;
6. Promotional gifts;
7. Construction, renovation, or remodeling;
8. Medical services;
9. Entertainment, including amusement, diversion, social activities, and any associated costs (e.g., tickets to shows or sports events, meals, lodging, rentals, transportation, and gratuities) unless there is a clear programmatic purpose and the costs are approved in advance by the GLO;
10. Any portion of the salary of, or any other compensation for, an elected or appointed government official;
11. Foreign travel, except where such travel is clearly part of the research and the costs are approved in advance by the GLO; or

12. Any other prohibition imposed by federal, state, or local law or regulation.

Reporting Requirements

Awarded Institutions must submit quarterly reports and a more extensive comprehensive final report. Quarterly reports should summarize the Project's progress and outline plans for the remainder of the Project. The format for these reports will be specified at the time the contract is initiated. Within sixty (60) days after the expiration of the contract, the Awarded Institution must submit its final project report to the GLO Oil Spill Prevention and Response Division. The report must contain a summary of progress, including a list of objectives met, publications of findings, presentations, and patents (if applicable). The final report must also contain complete accounting information on the final disbursement of funds. At the end of the contract period, unexpended funds will revert to the GLO. **All reports and invoicing must include in their heading the associated GLO contract number.**

Program Income

Awarded Institutions must comply with all state rules and regulations for program income and report all program income that is generated as a result of the project's activities. Awarded Institutions must also report program income to the GLO through a formal contract adjustment, to secure approval prior to use of the program income, to use program income only for allowable costs, and to expend program income immediately after GLO's approval of a contract adjustment and prior to requesting reimbursement of GLO funds. For the purposes of this program, the deduction method applies. Program income includes any intellectual property developed as a result of a funded project.

Each Awarded Institution must publish or otherwise make publicly available the results of work conducted under the contract. Publication in popular media as well as scholarly journals is expected. Each Awarded Institution must provide electronic copies of all manuscripts intended to be published in journals and all abstracts or summaries prepared for oral presentations to the GLO Oil Spill Prevention and Response Division for review at the time of submittal to the journal or conference authority. **The GLO Oil Spill Prevention and Response Division may publish these materials on its website.**

Any publication produced by an Awarded Institution funded through this RFA must have the following acknowledgement on the publication:

> ***"This material is based totally or in part upon work supported by the Research and Development program of the Texas General Land Office Oil Spill Prevention and Response Division."***

Description of current GLO Research and Development Areas of Interest

The following are general areas of focus for research and development that the GLO is currently interested in funding. This list is not exhaustive, and applications may be submitted for other similar projects, as the GLO recognizes that scientific and technological discoveries may occur in pursuit of other subjects that would be of great benefit to oil spill response performance. The GLO strongly encourages applications regarding any concept or idea that would enhance oil spill prevention and response capabilities, though emphasis will be placed on current areas of focus and proposed projects must meet one of the purposes listed in Texas Natural Resources Code sec. 40.302. Those purposes are: for research, testing, and

development of oil discharge prevention and response technology, oil discharge response training, wildlife and natural resources rescue and rehabilitation, development of computer models to predict the movements and impacts of unauthorized discharges of oil, and other purposes consistent with and in furtherance of the purposes of Chapter 40 of the Texas Natural Resources Code.

In and On-water Containment and Recovery:

Development of new approaches, equipment, and systems specific to the containment and recovery of surface and subsurface oils. Specific areas of interest include:

- Development of oil collection and containment systems that can increase encounter and capture rate of surface oil slicks, preferably compatible with existing Oil Spill Response Organization (OSRO) equipment;
- Improved efficiency and development of recovery tools and systems for submerged and sunken oils; and
- Analysis of existing information on chemical and physical characteristics of unconventional oils such as shale oils. Evaluation of the physical interaction of unconventional oils with Gulf of Mexico shoreline types (sand beaches, salt marshes, mangroves, tidal flats, riprap, etc) to provide guidance on response tactics.

Oil Spill Detection and Environmental Data Collection:

Research and development of more accurate and effective methods of obtaining real time or near real time remotely sensed data. Specific areas of interest include:

- Development of new technologies for use with UAV/ drone systems in field data collection, and dissemination of this data for aspects of spill response and preparedness;
- Development of near real time data processing tools and protocols that integrate data across sensors and platforms to facilitate integration into common operational pictures; and
- The use of Artificial Intelligence (AI) and machine learning to enhance oil spill detection and monitoring.

Testing of Chemical Countermeasures and Alternative Countermeasures (In-situ Burning):

Research into the testing of National Contingency Plan (NCP) authorized chemical countermeasures inclusive of efficacy, toxicity, and fate. Current areas of focus are on dispersants and use of oils and species required under Subpart J of the NCP. Specific areas of interest include:

- Effectiveness testing at laboratory, meso, and field scales;
- Efficacy of stockpiled chemical dispersants as a function of shelf life; and
- Associated acute toxicity and chronic effect impact studies on species identified in Subpart J of the NCP.

Research and evaluation of in-situ burning as a technology. Specific areas of interest include:

- The potential use of NCP authorized chemical herding agents to enhance response capabilities of in-situ burning.

Data Development, Collection and Decision Support:

Development or improvement of current and new GIS datasets and information that supports oil spill contingency planning and time critical decision-making. Specific areas of interest include:

- Improved GIS data sets characterizing the environmental sensitivity of shorelines and habitats;
- Improved GIS data sets of biological resources at risk and infrastructure useful to oil spill response;
- Refresh Environmental Sensitivity Index Maps (ESI) to improve GIS data sets of marine mammals and herpetofauna; and
- Improved and expedited methods for assessing shorelines, evaluating practical cleanup methods and tradeoffs, and making cleanup endpoint recommendations for oil spill response purposes.

Offshore Facilities and Surface Systems:

Research is needed to address spill related issues due to aging oil & gas wells and infrastructure in Texas coastal waters. Improved inspection technologies have the potential to detect problems before failures occur. Improved leak detection and well control systems can identify leaks early and minimize spill impacts.

- Develop mitigation methodologies and detection technologies that do not require significant reinvestment, to minimize failures and extend the life of aging oil & gas infrastructure;
- Conduct meteorological/oceanographic studies to determine the effects and impacts of severe weather conditions upon and extend the life of aging oil & gas infrastructure in Texas coastal waters; and
- Improve the use of unmanned systems, remotely operated vehicle systems, or other emerging technologies for assessing nearshore oil & gas infrastructure in low visibility and challenging sea conditions.

Response Management Systems:

Development of systems to manage how data and information are collected, documented, and shared among the planning and response communities.

- The use of Artificial Intelligence (AI) in response management. Using AI to improve oil spill response by incorporating previous response strategies, authorizations, plans, etc. to reduce command post staff needed to manage Incident Command Structure (ICS) processes.

Sociological and Economic Effects:

Develop methods for understanding and tracking mental health impacts to responders and real-time public perception during and after an oil spill.

- Improve methods for oil spill crisis and risk communication with the general public; and
- Develop protocols and approaches to mitigate mental health impacts to responders from oil spill response, which can be incorporated into preparedness and response plans.

Step 3: Apply for a Contract Award

How to Apply

All applicants must complete the required application on Survey Monkey Apply (SMA), which can be found here: https://txglo.smapply.us/prog/oil_spill_rd/.

Elements of the Application

The application must contain all elements detailing the benefits of the proposed project to the oil spill response program and community and describe the activity and deliverables that would result if the project were to be funded. The application must state the objectives and methods to be used and address the practical merit. The GLO will only accept applications using the GLO Oil Spill Application form at https://txglo.smapply.us/prog/oil_spill_rd/.

The application must include the following sections:

Section 1: Project Summary.

A **concise** one or two paragraph project summary that **describes the activity** that would result if the project were to be funded and how the proposed project will benefit the oil spill response program, response community, or oil spill-related science.

Section 2: Description: Research, Testing, and Development of Oil Discharge Prevention and Response Technology and Training. State the research objectives of the proposed project and explain their importance and how it pertains to the Project Summary. Explain how the proposed work will fulfill an objective described in the RFA. Address the practical merits of the proposed activity and the potential impacts of a successful conclusion of the activity. Explain how the research will enhance, assist, or move forward the GLO's mission to promote Oil Spill Prevention and Response research.

Section 3: Methodology. Provide details of experimental methods and procedures to be used to meet the stated objectives. Include enough information about methods and techniques to allow for evaluation of the merits of the application. Outline specific milestones and an itemized schedule (timeline) for the project through completion. Describe the means (e.g., evaluation criteria) by which the GLO can confirm the project has accomplished the objectives.

Section 4: Deliverables/Tasks and Timelines. State explicit deliverables to be outcomes of the proposed work and a timeline for the completion of the associated tasks. This may include manuscripts, reports, training materials, educational curricula, workshop planning and conduct, or other similar deliverables. Provide a concise statement of the proposed content and purpose of each deliverable. Include a project timeline that specifies when major activities will begin, and objectives will be completed. Awarded Institutions must notify the GLO in writing immediately upon determining a timeline cannot be met and provide an updated timeline.

Section 5: Research personnel, roles, and responsibilities. List Principal and Co-investigators and those who will work on the proposed project and how they will be organized. Other personnel working on the project should be listed by position.

Section 6: Institutional commitment and sources of additional support. Describe facilities, services, and other institutional resources that will support the proposed work. Describe plan to maximize the value of

the GLO funds by obtaining additional support from other public and private sources. If support by an industry collaborator is contemplated, describe the nature and amount of that support. Describe the institutional commitment to the project.

Section 7: Value Added. If the project has "value added" possibilities outside oil spill prevention and response, provide a brief explanation of such benefits.

Section 8: Budget. Provide a budget for the proposed project in the table provided, broken out by the specified categories. Awarded Institutions must reference these budget categories when invoicing the GLO. If the applicant intends to utilize any major subcontractors in performing fifteen percent (15%) or more of the project, applicant must provide an attachment identifying the subcontractor(s) and indicate whether or not the applicant holds any financial interest in the subcontracting entity.

Section 9: Budget Justification. Provide a brief justification of all major budget elements.

Section 10: Support. Cite relevant work that has been conducted in the research area of the proposed project.

Section 11: Investigators. Provide résumé(s) for the principal investigator or project director and each co-principal investigator or co-project director as attachments with the application. These documents should be no more than two pages per individual. Include selected publications from the last five years. When listing publications, use the standard bibliographic style of listing the senior author first.

Formatting

In addition to the GLO application, applicants may include a reasonable number of appendices or attachments. The application must specifically reference any supporting documentation provided.

Step 4: Funding Decisions and Contract Award Acceptance

Selection Criteria

Applications will be evaluated through an internal and, if applicable, external peer review process. A number of criteria will be used in the review. For example, applications will be evaluated on scientific merit and soundness as well as clear and useful milestones or deliverables. The GLO will also consider the likelihood that the application will increase the capability, or improve the knowledge and technology, necessary to prevent, respond to, and clean-up spills of crude oil and petroleum products in coast, offshore environments, marine shorelines, estuarine waters, and marshes. The clarity of budget and capability or qualifications of the investigator(s) or project director(s) listed will also be considered. This section represents a sample of criteria and not an exhaustive list.

Announcements

After the GLO makes final funding decisions, each applicant will receive either a notification of rejection of proposal, a preliminary decision notification, or a final contract award notice by email. All funding recipients will be required to attend a mandatory meeting/training session on reimbursement requests. This meeting will provide essential information about how to submit requests and comply with funding guidelines.

Step 5: Contract Establishment

After the GLO sends the contract award notice, the Awarded Institution's authorized signatory will receive a contract and Work Plan and Budget attachment which must be signed electronically in DocuSign. The Awarded Institution must reference the contract number in all forms, reports, and other communications.