

**Texas General Land Office**

Coastal Resources-Oil Spill Prevention and Response

Request for Applications:

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

February 5, 2021

# 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 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 the Oil Spill Prevention and Response Act of 1991 (Texas Natural Resources Code Chapter 40).

### Funds Available

The GLO anticipates multiple grants 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 and budget by no later than March 4, 2021. The required documents can be found at the following web address: <http://www.glo.texas.gov/coast/grant-projects/funding/index.html>

### Match

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

### Project Periods

A project selected under this request for applications will be funded for up to 24 months – September 1, 2021 through August 31, 2023. The GLO has the discretion to extend any project for up to two additional fiscal years, if agreed upon by both parties.

### Organizational Eligibility

Applications may only be submitted by Texas state institutions of higher education. Institutions desiring to submit consortium applications should submit both a consolidated application that provides an overview of the entire project and specific application from each institution.

### Contact Information

All requests, questions, or other communications about this request for applications should be submitted in writing to the GLO by emailing: steve.buschang@glo.texas.gov

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Oil Discharge Prevention and Response Technology

The Oil Spill Prevention and Response Program of the Texas General Land Office (GLO) is requesting applications for funding for research and development activities. This request for applications is open to Texas state institutions of higher education only. The Oil Spill Prevention and Response Act (OSPRA), Chapter 40 of the Texas Natural Resources Code, designated 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 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 of the GLO 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 grant under this program, follow the process outlined below:

* **Step One - Review the Process:** Get familiar withthe 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 application.
* **Step Three - Apply.** Complete the application. Email the application to the GLO for consideration on or before the closure of the announcement. Late applications will not be accepted.
* **Step Four –** **Funding Decisions and Grant Acceptance.** Await the funding decision, which is provided through a grant award or other notice from the GLO.
* **Step Five – Grant Contract (if selected).** Review the grant contract and sign in DocuSign.

# Step 1: Review the Process

## Timeline

| Below is the anticipated timeline for this application. Action | Date |
| --- | --- |
| Funding Announcement Release | February 5, 2021 |
| Final Date to Submit an Application | March 4, 2021 |
| Funding Notices | By June 30, 2021 |
| Earliest Start Date | September 1, 2021 |

**Submission Method**: The required application and associated documents can be found at the following location: <http://www.glo.texas.gov/coast/grant-projects/funding/index.html>. Email the completed application and any supporting documents to steve.buschang@glo.texas.gov. An acknowledgement email will be sent upon receipt of the email.

# Step 2: Consider the Requirements

## Organizational Eligibility

Applications may only be submitted by Texas state institutions of higher education. Institutions desiring to submit consortium applications should submit both a consolidated application that provides an overview of the entire project and specific application from each institution.

## Responsibility

Applicants must identify a lead principal investigator or project director, as well as a co-lead investigator or project director. These individuals assume management responsibility for the project. If the principal investigator or project director leaves the Grantee institution or otherwise relinquishes active direction of the Project, the Grantee must notify the GLO Oil Spill Division as soon as possible. The Grantee institution must name a proposed new principal investigator in writing to the GLO. Upon approval the GLO’s approval, the named person will become the principal investigator for the project. Grants may not be transferred to another state institution of higher education.

Each Grantee 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 grant terms and conditions.

## Available Funding

The GLO anticipates multiple grants 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 a two-year project.

## Source of Funding.

Projects funded out of this announcement will be funded with state funds.

## 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 inclusive or a separate application with budget for each institution. Grantees 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 <http://www.glo.texas.gov/coast/grant-projects/funding/index.html>. 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 this grant, valued $5,000.00 or more, shall remain the property of the GLO, unless expressly conveyed to the Grantee by an authorized GLO representative.

## Eligible Costs

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

## Ineligible Costs and Activities

Grant funds may not be used to support the following services, activities, and costs:

1. Supplanting or use of grant 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. Any other prohibition imposed by federal, state, or local law or regulation;
10. 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;
11. Any portion of the salary of, or any other compensation for, an elected or appointed government official; or
12. Foreign travel, except where such travel is clearly part of the research and the costs are approved in advance by the GLO.

## Reporting Requirements

Grantees 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 of the expiration of the contract, the Grantee must submit its final project report to the GLO Oil Spill Division. The report must contain a summary of progress, including, as applicable, a list of objectives met, publications of findings, presentations, and patents. The final report must also contain complete accounting information on the final disbursement of funds. At the end of the grant period, unexpended funds will revert to the Coastal Protection Fund. **All reports and invoicing must include in its heading the associated GLO contract number.**

Grantee must publish or otherwise make publicly available the results of work conducted under the grant. Publication in popular media as well as scholarly journals is expected. Grantee must submit all manuscripts intended to be published in journals and all abstracts or summaries prepared for oral presentations based on the study to the GLO Oil Spill Division for review at the time of submittal to the journal or conference authority. Grantee shall provide **an electronic copy to the GLO Oil Spill Division for publication on its website.**

Any publication produced by a Grantee funded by this request must have the following acknowledgement on the material:

***“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 under GLO Contract Number “XX-XXX-XXX-XXX”***

## 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 important 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.

**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:

* Developing data collection technologies that are capable of operations twenty-four (24) hours a day in any weather;
* Development of new technologies, including hardware and software systems, for use with developing UAV/drone systems for use in field data collection, environmental data collection, and dissemination of this data for all aspects of spill response and preparedness;
* Development of technologies for detecting and mapping submerged oils over a range of turbidity conditions;
* Modeling the fate and degradation of residual oils and tarballs in the environment;
* Computer models that predict the movement and fate of surface and subsurface oil spills;
* Development of in-situ sensor technologies to determine the movement and fate of surface and subsurface oil spills as well as sea conditions for oil spill response operations;
* Development, improvement, or validation of fate and forecast models that assimilate near real time data from remote sensing (satellite, airborne, and ship-based) and in-situ (drifters, current meters, wave gauges, stream gauges, etc.) sensors; and
* Development of new technologies, including hardware and software systems, involving in-situ oil sample analysis for use in chemical field data collection, environmental data collection, and dissemination of this data for all aspects of spill response and spill identification.

**Testing of Chemical Countermeasures:**

Research into the testing of National Contingency Plan (NCP) currently authorized chemical countermeasures inclusive of efficacy, toxicity and fate. Current areas of focus are on surface washing agents and sorbent materials, and use of oils and species common to the open waters and bays of the northwestern Gulf of Mexico. Specific areas of interest include:

* Effectiveness testing at laboratory, meso, and field scales;
* Associated acute and chronic effect studies utilizing oils (transported or produced) and species common to the open waters and bays of the northwestern Gulf of Mexico;
* Delivery systems; and
* Modeling the fate and degradation of dispersed oil and the constituents of other chemical countermeasures.

**Data Development, Collection and Decision Support:**

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

* Integrate/merge existing GIS data, consisting of ESI, biological, into an electronic response reporting tool for use for expedited spill response use;
* Improved GIS data sets characterizing the environmental sensitivity of shorelines and habitats;
* Improved GIS data sets of biological resources at risk;
* Improved GIS data sets of infrastructure useful to spill response;
* Improved/faster methods for characterizing shorelines, habitats and the distribution of biological resources at risk;
* Improved tools for accessing decision support resources (GIS applications, environmental data website interfaces, etc.); and
* Development of a background level hydrocarbon data set for coastal waters, and sediments, including marsh, sand beaches, bay and nearshore benthos environments.

**Outreach and Education:**

Public opinion and perception play import roles in oil spill response. Information regarding spill response practices, research, capabilities, and limitations are often only gained through large newsworthy spill events and potentially biased sources. Additionally, as social media has often become the public’s first source of news, and one that is often delivered without filters or regard to accuracy, the spill response community has struggled to keep up. Specific areas of interest include:

* Improving effectiveness of response utilizing and in response to social media campaigns; and
* Production of informative/awareness video products highlighting aspects of spill response capabilities and challenges for education/outreach purposes targeting schools, coastal communities and decision makers.

**Program Income**

Grantee(s) 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. Grantee must also report program income to the GLO through a formal grant 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 grant 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.

# Step 3: Applying for a Grant

## How to Apply

All applicants must complete the required application, and email it and any supporting documents to steve.buschang@glo.texas.gov. Reference in the subject line: “Grant Application for OS 2022-23 RFA.”

## Elements of the Application

The application must contain all elements detailing the benefits of the proposed project to the spill response program and community and describe the activity and deliverables that would result if the project is funded. The application must state the objectives and methods to be used and address the practical merit. The GLO will only accept applications utilizing the GLO Oil Spill Application form at <http://www.glo.texas.gov/coast/grant-projects/funding/index.html>.

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 is funded and how the proposed project will benefit the 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. Grantee 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 Principle 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 grant 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. Grantees 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 area of the proposed project.

**Section 11: Investigators**. Provide résumé(s) for the principal investigator and each co-principal investigator 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 are permitted to include a reasonable number of appendices or attachments. The application must specifically reference any supporting documentation provided.

# Step 4: Funding Decisions and Grant Acceptance

## Selection Criteria

Applications will be evaluated through an internal, and if applicable, an 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) 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 notification of rejection of proposal, a preliminary decision notification, or a final grant award notice.

# Step 5: Contract Establishment

After the GLO sends the grant award notice, the Grantee’s authorized signatory will receive a grant contract and Work Plan and Budget attachment which Grantee will sign electronically in DocuSign. The Grantee must reference the contract number in all forms, reports, and other communications.