ANNOUNCEMENT OF FEDERAL FUNDING OPPORTUNITY

EXECUTIVE SUMMARY

Federal Agency Name(s): National Ocean Service (NOS), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce

Funding Opportunity Title: 2015 Northern Gulf of Mexico Ecosystems and Hypoxia Assessment Program (NGOMEX); Glider Application to Gulf of Mexico Hypoxic Zone Monitoring: Pilot Study and Transition to Operations

Announcement Type: Initial

Funding Opportunity Number: NOAA-NOS-NCCOS-2015-2004197

Catalog of Federal Domestic Assistance (CFDA) Number: 11.478, Center for Sponsored Coastal Ocean Research - Coastal Ocean Program

Dates: The deadline for receipt of full applications at the NCCOS/CSCOR office is 3 p.m., Eastern Time on November 18, 2014. Applications received after the closing date and time will not be accepted. Please note: Validation or rejection of your application by Grants.gov may take up to 2 business days after submission. Please consider this process in developing your submission timeline.

Funding Opportunity Description: The purpose of this document is to advise the public that NOAA/NOS/NCCOS/CSCOR is soliciting research applications under the Northern Gulf of Mexico Ecosystems and Hypoxia Assessment Program (NGOMEX) for projects expected to last 2 years in duration. Research applications will propose pilot studies to test application of gliders to measure dissolved oxygen in the large hypoxic zone ("dead zone") along the northern Gulf of Mexico continental shelf and, within 2 years, complete a comprehensive plan to transition to operations the deployment of gliders for hypoxic zone monitoring east and west of the Mississippi delta, to complement shipboard and fixed (mooring/platform) observing system monitoring. Funding is contingent upon the availability of Fiscal Year 2015 Federal appropriations. It is anticipated that projects funded under this announcement will have a September 1, 2015 start date. Total funding for this research: approximately \$125,000 per year for awards expected to last 2 years. One to two proposals are expected to be funded at the level of approximately \$50,000 - \$125,000 per year per proposal.

Electronic Access: The following web site furnishes supplementary information:

Center for Sponsored Coastal Ocean Research – Ecosystem Stressors Research and Hypoxia and Nutrient Pollution Programs:

http://coastalscience.noaa.gov/about/centers/cscor

Applications should be submitted through Grants.gov, http://www.grants.gov.

FULL ANNOUNCEMENT TEXT

I. Funding Opportunity Description

A. Program Objective

The Center for Sponsored Coastal Ocean Research (CSCOR), part of the National Oceanic and Atmospheric Administration (NOAA) National Centers for Coastal Ocean Science (NCCOS) develops and improves predictive capabilities for managing the Nation's use of its coastal resources through competitive research programs. NCCOS/CSCOR also supports efforts to translate the results of its research investments, and those of others, into accessible and useful information for coastal managers, planners, lawmakers, and the public to help balance the needs of economic growth with those of conserving the resources of our Nation's oceans, coasts, and Great Lakes. NCCOS/CSCOR provides a focal point for regional ecosystem-scale, multidisciplinary coastal ocean research within the NOAA National Ocean Service. Together with partners in NOAA and other organizations responsible for coastal resources, NCCOS/CSCOR advances the scientific understanding needed to protect coastal resources and ensure their viability for future generations. This increased understanding of the ocean, coasts, and Great Lakes directly benefits the management of U.S. coastal and ocean resources, and helps NOAA, other Federal agencies, and state, tribal, and local governments achieve their stewardship responsibilities.

A key objective of NCCOS/CSCOR research is the production of user-driven predictive tools that will enable resource managers to assess alternative management strategies to restore degraded ecosystems and protect healthy ones. Research supported is outcome-oriented towards predictions, as well as increased scientific understanding that will provide managers and the public with sound scientific information for making decisions in support of societal objectives.

A symptom of ecosystem degradation that affects greater than 50% of U.S. estuaries is hypoxia. Sustained or recurring low oxygen conditions can lead to living resource mortalities, ecosystem alterations, loss of habitat, and impacts to fisheries. The largest hypoxic zone in the U.S., and the second largest for the world's coastal ocean, is in the northern Gulf of Mexico off Louisiana, Texas, and Mississippi. This issue has become a focal point for considerable scientific and policy attention because of the hypoxic zone's enormous size and implications for watershed management for more than 40% of the contiguous U.S. The interagency Mississippi River/Gulf of Mexico Watershed Nutrient Task Force (i.e. Hypoxia Task Force, HTF), as authorized through the Harmful Algal Bloom and Hypoxia Research and Control Act of 1998 (HABHRCA), submitted to Congress and the President in January 2001 the Action Plan for Reducing, Mitigating, and Controlling Hypoxia in the Northern Gulf of Mexico. The Action Plan (revised in 2008) http://water.epa.gov/type/watersheds/named/msbasin/actionplan.cfm calls for a voluntary and incentive-based management plan that is founded on science and lays out a strategy to reduce the size of the hypoxic zone. The areal extent of the hypoxic

zone, monitored in mid-summer since 1985, averaged 6,900 km2 from 1985-1992, but has averaged 15,610 km2 since then. NGOMEX research has shown that the intensification and expansion of Gulf hypoxia over recent decades has been related to increases in nitrogen and phosphorus loading from the Mississippi River watershed. The HTF Action Plan has a Coastal Goal to reduce the hypoxic zone to an annual average size of 5,000 km2 by 2015.

Monitoring of the hypoxic zone to inform the HTF of the progress of watershed management activities to reduce hypoxia and mitigate its ecosystem impacts is conducted by a combination of data collection through ship surveys and observing systems, but these have limitations in terms of temporal and spatial coverage and costliness. The HTF Action Plan (Action 9, p. 54) emphasized the need for a more comprehensive monitoring and assessment program in the Gulf, one that would adequately characterize its magnitude and the processes that lead to its development, maintenance, and distribution.

To meet this need for improved hypoxia monitoring and assessment, the Summit on Long-Term Monitoring of the Gulf of Mexico Hypoxic Zone: Developing the Implementation Plan for an Operational Observation System was held in 2007 to "produce an implementation plan for achieving a comprehensive, integrative, sustainable monitoring program for the Gulf hypoxic zone". The Summit led to development of the Gulf of Mexico Hypoxia Monitoring Implementation Plan (2009, revised in 2012) http://gcoos.tamu.edu/meetingreports/2011_Mar/documents/gulf-of-mexico-hypoxia-monitoring-implementation-plan.pdf. One of the Core System Requirements of the Implementation Plan is "deployments of Autonomous Underwater Vehicles (e.g. gliders) with dissolved oxygen sensors".

The Plan called for a "workshop to determine optimal glider design and glider monitoring strategy for temporal/spatial coverage that complements ship surveys and observing systems". To meet this need, a Gulf Hypoxia Glider Application Meeting, held in April 2013 (part of the Forum for Gulf of Mexico Hypoxia Research Coordination and Advancement), http://www.ncddc.noaa.gov/activities/healthy-oceans/gulf-hypoxia-stakeholders/workshop-2013/ led to production of the Glider Implementation Plan for Hypoxia Monitoring in the Gulf of Mexico http://coastalscience.noaa.gov/news/wp-content/uploads/2014/05/Glider-Implementation-Plan-for-Hypoxia-Monitoring-in-the-Gulf-of-Mexico.pdf to help inform the application of gliders for enhanced monitoring of the hypoxic zone.

The use of gliders for higher resolution hypoxic zone monitoring requires a pilot study to demonstrate the technique's effectiveness, efficiency, and accuracy, and to determine whether gliders could fully document the extent of hypoxia for Task Force applications. One challenge for glider application to Gulf hypoxia monitoring is the ability to map bottom and surface waters in a coastal environment where salinity, temperature, dissolved oxygen and associated parameters change rapidly over small spatial scales. Important in the determination of areal and volumetric extent of hypoxia is the ability to gather data as close to the bottom as possible. A pilot project would be required to determine the feasibility of this sampling mode, and to quantify the related effects on spatial coverage (i.e., sufficient closeness to both the seabed

and the surface, adequate response time of sensors to strong gradients in physical and biological parameters, ability to maintain buoyancy in a highly variable salinity field and other considerations).

B. Program Priorities

The intention of this competition is to support a pilot study that will test the application of gliders toward improving Gulf of Mexico hypoxic zone monitoring, with the ultimate goal of contributing to the development of a robust, comprehensive, and sustainable (operational) monitoring program. Glider applications should be complementary to shipboard surveys and fixed (mooring/platform) observing system data collection. The current hypoxic zone monitoring program is described in Section B.2 of the Glider Implementation Plan for Hypoxia Monitoring in the Gulf of Mexico, http://coastalscience.noaa.gov/news/wp-content/uploads/2014/05/Glider-Implementation-Plan-for-Hypoxia-Monitoring-in-the-Gulf-of-Mexico.pdf and includes shelf-wide ship surveys west of the Mississippi River Delta in June, July, and August, and additional ship surveys east of the Mississippi River. Historically, additional cross-shelf transects off Terrebonne Bay and Atchafalaya Bay were conducted on a monthly to bimonthly basis, and several observing systems outfitted with dissolved oxygen sensors were maintained in the hypoxic zone region. However, reduced funding support has led to the cessation of cross-shelf transects since 2012 and the loss of all but one observing system. Because of the uncertainty in operational support for hypoxic zone monitoring components in future years, proposers should be evaluating glider capabilities in a scalable fashion over a range of monitoring scenarios and should plan on participating in the Annual NOAA/NGI Hypoxia Research Coordination Workshops, to ensure that glider evaluations best integrate into other hypoxia monitoring efforts.

This competition strives to achieve the following goals:

- Complete a pilot study that determines the efficacy of glider application to Gulf of Mexico hypoxic zone monitoring, and;
- If it is determined that gliders can be an important element of a comprehensive operational monitoring program for the northern Gulf of Mexico hypoxic zone, develop a comprehensive plan that integrates glider capabilities into a range of ongoing and planned Gulf of Mexico hypoxic zone monitoring efforts.

NOAA/NOS/NCCOS/CSCOR is accepting proposals which will best achieve the following objectives:

- 1) Field testing of gliders within the hypoxic zone region to demonstrate their capability and operational robustness to obtain dissolved oxygen data as part of a comprehensive approach to hypoxic zone monitoring.
- 2) In conjunction with field testing, utilize past research and testing to fully evaluate the effectiveness of gliders for routine hypoxic zone characterization in

terms of efficiency (time, cost), accuracy, resolution, breadth (e.g. closeness to bottom, areal and volumetric expanse), telemetric capabilities (e.g. near real-time), and sensor response time;

- 3) Based on the results of the evaluation (Obj. 2), develop a scalable glider monitoring implementation plan for the hypoxic zone that can be used for transitioning glider applications to operations by 2017. This may or may not follow the approach described in the Glider Implementation Plan for Hypoxia Monitoring in the Gulf of Mexico, http://coastalscience.noaa.gov/news/wp-content/uploads/2014/05/Glider-Implementation-Plan-for-Hypoxia-Monitoring-in-the-Gulf-of-Mexico.pdf but should:
- integrate into the existing or planned hypoxia monitoring efforts and complement ongoing shipboard surveys and fixed (mooring/platform) observing systems;
- provide a comprehensive assessment of costs over a range of scenarios for deployment of gliders as part of a future operational monitoring program for northern Gulf of Mexico hypoxia;
 - include technical specifications for recommended gliders; and
- include specifications for observational density in space and time and how this relates to rigorous statistical assessments of hypoxic volume and area.

Proposals to this announcement should capitalize on potential partnership opportunities with ongoing and planned activities addressing glider application for Gulf of Mexico monitoring purposes in NOAA, with the Gulf of Mexico Coastal Ocean Observing System (GCOOS) and others in the governmental, scientific and private sectors. These include, but are not limited to the aforementioned Gulf of Mexico Hypoxia Monitoring Implementation Plan and Glider Implementation Plan for Hypoxia Monitoring in the Gulf of Mexico, and:

• a proof-of-concept demonstration study supported by NOAA/NOS/NCCOS and the U.S. Integrated Ocean Observing System (IOOS®) to test the utility of several glider models for measuring dissolved oxygen in the Gulf of Mexico; a summary of demonstration study findings is posted at:

http://coastalscience.noaa.gov/news/?p=12743

• the IOOS National Underwater Glider Network Plan, posted at:

http://www.ioos.noaa.gov/glider/strategy/glider network whitepaper final.pdf

• the IOOS Regional Association, Gulf of Mexico Coastal Ocean Observing System's (GCOOS) Build Out Plan, A Sustained, Integrated Ocean Observing

System for the Gulf of Mexico (GCOOS) Infrastructure for Decision-making, Version 2.0:

http://gcoos.tamu.edu/BuildOut/BuildOutPlan-V2.pdf

Proposals should indicate the expected outputs and outcomes of the research, in addition to research activities. For reference, NCCOS/CSCOR provides perspective on project outputs vs. outcomes

(http://coastalscience.noaa.gov/funding/recipients/outcomes). Funded proposals will be required to include outputs and outcomes in their annual reports.

All proposals must include a data management plan which considers how to provide data as soon as feasible to the public (see Data Reporting Requirements). IOOS will make available to the project(s) their Glider Data Assembly Center (DAC) https://github.com/IOOSProfilingGliders/Real-Time-File-Format The proposed hypoxia glider monitoring system is encouraged to use the DAC for data management and communication (access, distribution, archive, etc.).

C. Program Authority

Coastal Ocean Program, § 201(c) of Public Law 102-567, as amended by 108-456;

The Harmful Algal Bloom and Hypoxia Research and Control Act Pub.L. 105-383, as amended by 108-456 and 113-125; 16 U.S.C. § 1451 note (Pub. L. No. 105-383, Title VI, 112 Stat. 3447 (Nov 13, 1998)

II. Award Information

A. Funding Availability

Funding is contingent upon availability of Federal appropriations. NOAA is committed to continual improvement of the grants process and accelerating the award of financial assistance to qualified recipients in accordance with the recommendations of the Business Process Reengineering Team. In order to fulfill these responsibilities, this solicitation announces that award amounts will be determined by the applications and available funding. It is anticipated that total funding for this research will be approximately \$125,000 per year for projects expected to last 2 years.

Applicants are hereby given notice that funds have not yet been appropriated for this program. In no event will NOAA or the Department of Commerce be responsible for application preparation. There is no guarantee that sufficient funds will be available to make awards for all qualified projects. Publication of this notice does not oblige NOAA to award any specific project or to obligate any available funds. If one incurs any costs prior to receiving an award agreement signed by an authorized NOAA official, one would do so solely at one's own risk of these costs not being included under the award.

Publication of this notice does not obligate any agency to any specific award or to obligate any part of the entire amount of funds available. Recipients and subrecipients are subject to all Federal laws and agency policies, regulations and procedures applicable to Federal financial assistance awards.

B. Project/Award Period

Full applications may cover a project/award period up to 2 years, but shorter-term project proposals are also welcome.

Multi-year awards may be funded incrementally on an annual basis, but once awarded those awards will not compete for funding in subsequent years. Each award requires a project description that can be easily divided into annual increments of meaningful work representing solid annual accomplishments.

The following is a description of multi-year awards for those applicants subsequently recommended for award. Multi-year awards are awards that have an award/project period of more than 12 months of activity. Multi-year awards are partially funded when the awards are approved, and are subsequently funded in increments. One of the purposes of multi-year awards is to reduce the administrative burden on both the applicant and the operating unit. For example, with proper planning, one application can suffice for the entire multi-year award period. Funding for each year's activity is contingent upon the availability of funds from Congress, satisfactory performance, and is at the sole discretion of the agency. Multi-year funding is appropriate for projects to be funded for 2 to 5 years. Once approved, full applications are not required for the continuation out years.

During the implementation phase of research projects funded under this announcement, regardless of the funding mechanism used, CSCOR Program Managers will analyze financial statements and progress reports for each continuing award, and will have dialogue with the Principal Investigators and Authorized Representatives of the recipient institutions to discuss research progress and expected time lines for the remaining award period. If NOAA experiences budget reductions in future fiscal years, the amount of funding provided in any given fiscal year will be determined by the remaining tasks to be completed, the overall pace of the research and the length of time remaining on the award and/or across the board reductions.

Regardless of the budget for any given fiscal year, Program Managers will consider the length of time remaining for each project, the amount of funds available, the tasks to be completed in the upcoming fiscal year, the pace of research, and any

delayed progress relative to that originally proposed, before determining the funding amount in any given fiscal year.

C. Type of Funding Instrument

Funding instruments will be through cooperative agreements. The application should be presented in a manner that demonstrates the applicant's ability to address the research problem in a collaborative manner with the Federal government or Federal researchers. This means that the recipient can expect substantial agency collaboration, participation, or intervention in project performance. Substantial involvement exists when: responsibility for the management, control, direction, or performance of the project is shared by the assisting agency and the recipient; or the assisting agency has the right to intervene (including interruption or modification) in the conduct or performance of project activities.

NOAA will review the applications in accordance with the evaluation criteria. The CSCOR Program Manager will participate in important activities which may include evaluation and selection of applicants for funding, education about and discussion of research activities, participation in meetings, guidance on NOAA philosophy, directions, and priorities, and research strategy discussions.

In an effort to maximize the use of limited resources, applications from non-Federal, non-NOAA Federal and NOAA Federal applicants will be evaluated in the same competition. If the grantee is at an institution that has a NOAA Cooperative Institute (CI), they are allowed to submit applications that reference the CI by attaching a cover letter to the application stating their desire to have the application associated with the CI. This letter should specify the name of the cooperative institute, the CI cooperative agreement number, and the NOAA-approved research theme and task that applies to the proposal. The application will use the F&A rate associated with main CI agreement. If the application is selected for funding, NOAA will notify the university that a separate award will be issued with its own award number. However, the award will include two Special Award Conditions (SACs): (1) the existing University/NOAA Memorandum Of Agreement (MOA) would be incorporated by reference into the terms of the competitive award, and (2) any performance report(s) for the competitive project must follow the timetable of the funding program and be submitted directly to the funding program. Report(s) will be copied to the CI's administrator when due, to be attached to the main cooperative agreement progress report as an appendix. This will allow the CI to coordinate all the projects submitted through the CI, since the terms of these awards will specify that this is a CI project via the MOA.

Research applications selected for funding from non-Federal researchers will be funded through a cooperative agreement. Research applications selected for funding from a NOAA Federal applicant will be funded through an intra-agency transfer and

research applications selected for funding from non-NOAA Federal applicants will be funded through an interagency transfer, provided legal authority exists for the Federal applicant to receive funds from another agency. PLEASE NOTE: Before non-NOAA Federal applicants may be funded, they must demonstrate that they have legal authority to receive funds from another Federal agency. Because this announcement is not proposing to procure goods or services from the applicants, the Economy Act (31 U.S.C. section 1535) is not an appropriate basis. Support may be solely through NCCOS/CSCOR or partnered with other Federal offices and agencies.

III. Eligibility Information

A. Eligible Applicants

Eligible applicants are institutions of higher education, other non-profits, state, local, Indian Tribal Governments, commercial organizations, US Territories and NOAA and other Federal agencies that possess the statutory authority to receive financial assistance. DOC/NOAA supports cultural and gender diversity and encourages women and minority individuals and groups to submit applications to the CSCOR programs. In addition, DOC/NOAA is strongly committed to broadening the participation of historically black colleges and universities, Hispanic serving institutions, tribal colleges and universities, and institutions that work in underserved areas. DOC/NOAA encourages applications involving any of the above institutions to apply.

Please note that:

- (1) NCCOS/CSCOR will not normally fund any Federal Full Time (FTE) salaries, but will fund travel, equipment, supplies, and contractual personnel costs associated with the proposed work. If an applicant thinks that they are eligible for an exception, they should provide the CSCOR Program Manager with appropriate documentation and obtain approval prior to submitting an application.
- (2) Researchers must be employees of an eligible entity listed above; and applications must be submitted through that entity. Non-Federal researchers should comply with their institutional requirements for application submission.
- (3) Non-NOAA Federal applicants will be required to submit certifications or documentation showing that they have specific legal authority to accept funds for this type of research.
 - (4) Foreign researchers may apply as subawards through an eligible US entity
- (5) Non-Federal researchers affiliated with NOAA-University Cooperative/Joint Institutes should comply with joint institutional requirements; they will be funded through cooperative agreements either to their institutions or to joint institutes.

B. Cost Sharing or Matching Requirement

None.

C. Other Criteria that Affect Eligibility

Each full proposal must substantially comply with the sixteen elements listed under Required Elements, (1)-(16), or it will be returned to sender without further consideration.

A checklist with the required and requested application elements can be found in the Section VIII.

CSCOR adheres to the principals of scientific integrity. This policy can be found at; http://nrc.noaa.gov/scientificintegrity.html.

It is the applicant's responsibility to obtain all necessary Federal, state and local government permits and approvals where necessary for the proposed work to be conducted. Applicants are expected to design their proposals so that they minimize the potential adverse impact on the environment. If applicable, documentation of requests or approvals of environmental permits must be received by the Program Manager prior to funding. Applications will be reviewed to ensure that they have sufficient environmental documentation to allow program staff to determine whether the proposal is categorically excluded from further National Environmental Policy Act (NEPA) analysis, or whether an Environmental Assessment is necessary in conformance with requirements of the NEPA. For those applications needing an Environmental Assessment, affected applicants will be informed after the peer review stage; and will be requested to assist in the preparation of a draft of the assessment (prior to award). Failure to apply for and/or obtain Federal, state, and local permits, approvals, letters of agreement, or failure to provide environmental analysis where necessary (e.g. NEPA environmental assessment) will also delay the award of funds if a project is otherwise selected for funding.

IV. Application and Submission Information

A. Address to Request Application Package

Laura Golden

1305 East West Hwy

SSMC 4 Station 8240

Silver Spring, MD 20910

B. Content and Form of Application

1. Applications

The provisions for full applications preparation provided here are mandatory. Applications received after the published deadline (refer to DATES) or applications that deviate from the prescribed format will be returned to the sender without further consideration. Information regarding this announcement and additional background information are available on the NCCOS/CSCOR home page. An example application can be found at:

http://www.cop.noaa.gov/opportunities/grants/pdf/sample_application.pdf and FAQs are also available.

2. Required Elements

For clarity in the submission of applications, the following definitions are provided for applicant use:

Funding and/or Budget Period - The period of time when Federal funding is available for obligation by the recipient. The funding period must always be specified in multi-year awards, using fixed year funds. This term may also be used to mean budget period. A budget period is typically 12 months.

Award and/or Project Period - The period established in the award document during which Federal sponsorship begins and ends. The term award period is also referred to as project period in 15 CFR 14.2(cc).

Applications with multi- institutions - Collaborative applications with more than one institution requesting direct funding by NOAA. Each multi-institution must send their application documents to the lead institute for submission via grants.gov. If funded, each institution receives a separate award from NOAA.

Applications with sub-contractors - Collaborative applications with only the lead institution requesting direct funding by NOAA. If funded, the lead institution will disburse funds to the subcontractor institutions.

Each application must substantially comply with the following sixteen elements or it will be returned to sender without further consideration. The Summary, Title page, Abstract, Project Description, References, Biographical Sketch, Budget Narrative and Collaborators List must be single spaced in 12-point font with 1-inch margins. The sixteen elements are as follows:

(1) Standard Form 424. At the time of application submission, all applicants requesting direct funding must submit the Standard Form, SF-424, "Application for Federal Assistance," to indicate the total amount of funding proposed for their institution for the whole project period. This form is to be the cover page for the original application and is the first required form in the grants.gov application package. Multi-institutional applications must include signed SF-424 forms from all institutions requesting direct funding. Original signatures are required on SF-424

forms provided to a lead institution by a collaborating institution for grants.gov submission.

- (2) Summary title page. One page maximum. The Summary title page identifies the project's title, starting with the acronym: NGOMEX 2015 and the Principal Investigator's (PI) name and affiliation, complete address, phone and E-mail information. The requested funding amounts for each fiscal year with and without ship funding should be included on the Summary title page. Multi-institution applications must also identify the lead investigator for each institution and the requested funding with and without ship funding for each fiscal year for each institution on the title page. Lead investigator and separate budget information is not requested on the title page for institutions that are proposed to receive funds through a subaward to the lead institution; however, an accompanying budget justification must be submitted for each subaward. For further details on budget information, please see (14) Standard Form SF-424A of this part.
- (3) One-page abstract/project summary. The summary (abstract) should appear on a separate single page, headed with the proposal title, institution(s), investigator(s), total proposed cost (with and without ship funds), and budget period. It should be written in the third person. The summary is used to help compare proposals quickly and allows the respondents to summarize these key points in their own words. Project summaries of applications that receive funding may be posted on program related websites.

The project summary shall include an introduction of the problem, rationale, scientific objectives and/or hypotheses to be tested, and a brief summary of work to be completed.

(4) Project description. The description of the proposed project must include narratives of the Proposed Research and not be more than 17 pages in length (including up to 2 pages for data sharing policy).

The Proposed Research Narrative must be thorough and explicitly indicate its relevance to the program goals and scientific priorities by:

- (a) Identifying the topic that is being addressed by the proposal;
- (b) Describing the proposed scientific objectives and research activities in relation to the present state of knowledge in the field and in relation to previous and current work by the proposing principal investigator(s). Each award requires a project description that can be easily divided into annual increments of meaningful work representing solid accomplishments.
 - (c) Discussing how the proposed project lends value to the program goals;
- (d) Identifying the function of each PI. The Lead PI (s) will be responsible for communicating with the Federal Program Manager on all pertinent verbal or written information.

(e) Providing a detailed data management plan which describes how metadata and data collected as part of the project will be disseminated to the broader community, and plans for longer term archiving of these data. Principal Investigators that propose to collaborate with data centers or networks are advised to obtain letters of commitment that affirm the collaboration. Where possible, all PIs are strongly encouraged to use existing data centers and data portals to archive and disseminate their data. Costs associated with use of data centers, or data archiving, should be included in the application budget. See the section on the NOAA Date Reporting requirements below (Section VI. C.).

The Applications to Management Narrative should establish the connection to relevant resource management needs by explicitly identifying the end user group(s) including evidence of the linkage between the scientific questions and management needs. If applicable, the format and role of management and technical advisory committees should be included in this section. If required, proposals should specifically identify direct participation of resource manager(s) as co-Principal Investigators.

This narrative should provide the management justification for the research through:

- (a) Articulating the coordination with one or more management entities;
- (b) Discussing the expected significance of the project to resource management priorities and needs. Specific management targets, with proposed outputs and outcomes, should describe how this project will improve management capabilities. Outputs are defined as products (e.g. publications, models) or activities that lead to outcomes (changes in management knowledge or action). Definitions and examples of outputs and outcomes can be accessed at http://coastalscience.noaa.gov/funding/recipients/outcomes. The timeline for achieving outcomes should be included in the Milestone Chart (below).
- (c) Describing specific activities, such as workshops or development of outreach materials, that will enhance information transfer from project scientists to relevant management entities, other end-users, or the public.
- (5) References cited. Reference information is required. Each reference must include the names of all authors in the same sequence they appear in the publications, the article title, volume number, page numbers, and year of publications. While there is no established page limitation, this section should include bibliographic citations only and should not be used to provide parenthetical information outside of the 17 page proposal descriptions.
- (6) Milestone chart. Provide time lines of major tasks covering the duration of the proposed project.
- (7) Biographical sketch. All principal and co-investigators must provide summaries of up to 2 pages that include the following:

- (a) A listing of professional and academic credentials and mailing address;
- (b) A list of up to five publications most closely related to the proposed project and five other significant publications. Additional lists of publications, lectures, and the rest should not be included;
- (8) Current and pending support. Describe all current and pending federal financial/funding support for all principal and co-investigators, including unfunded collaborators making a substantial contribution to the research. Continuing grants must also be included. The capability of the investigator and collaborators to complete the proposed work in light of present commitments to other projects should be addressed. Therefore, please discuss the percentage of time investigators and collaborators have devoted to other Federal or non-Federal projects, as compared to the time that will be devoted to the project solicited under this notice. A current and pending support form is not required but is available on the CSCOR web site for your use: http://coastalscience.noaa.gov/funding/applicants/forms. You must respond to the requirement whether or not you have any current and/or pending support.
- (9) A list of all applicable permits that will be required to perform the proposed work. You must respond to this requirement element whether or not permits are required
- (10) Accomplishments from Prior Federal Support. If any PI or co-PI identified on the project has received federal funding in the past five years for research, information on the award(s) is required. Each PI and co-PI who has received more than one award (excluding amendments) must report on the award most closely related to the proposal and funded by NCCOS/CSCOR.

The following information must be provided:

- a) the award number, amount and period of support;
- b) the title of the project;
- c) a summary of the results of the completed work;
- d) publications resulting from the award;
- e) a brief description of outputs and outcomes; and
- f) as appropriate, a description of the relation of the completed work to the proposed work.

Reviewers will be asked to comment on the quality of the prior work described in this section of the proposal. You must respond to the requirement whether or not you have accomplishments from prior NCCOS/CSCOR support

(11) Budget narrative/justification. In order to allow reviewers to fully evaluate the appropriateness of costs, all applications must include a detailed budget narrative and a justification to support all proposed budget categories for each fiscal year.

Personnel costs should be broken out by named PI and number of months and percentage of time requested per year per PI. Support for each PI should be commensurate with their stated involvement each year in the milestones chart (see Required Elements (6) Milestone chart).

Any unnamed personnel (graduate students, post-doctoral researchers, technicians) should be identified by their job title, and their personnel costs explained similar to PI personnel costs above. The contribution of any personnel to the project goals should be explained. Travel costs should be broken out by number of people traveling, destination and purpose of travel, and projected costs per person. Equipment costs should describe the equipment to be purchased, and its contribution to the achievement of the project goals. For additional information concerning each of the required categories and appropriate level of disclosure please see http://coastalscience.noaa.gov/funding/applicants/requirements

Any ship time needs must be clearly identified in the proposed budget. The applicant is responsible for requesting ship time through appropriate channels and for meeting all requirements to ensure the availability of requested ship time. Copies of relevant ship time request forms (e.g. UNOLS ship request forms at http://www.unols.org/info/strs intro.html should be included with the proposal.

If any NOAA personnel will be present during ship operations, vessel safety clearances must be obtained through the NOAA Office of Marine and Aviation Operations (OMAO) in advance of the cruise. Required information and procedures are detailed in a Charter Vessel Acquisition and Safety NOAA Administrative Order which can be accessed via the OMAO website at http://www.omao.noaa.gov/charterreq.html.

A separate budget justification is required for each institution in a multiinstitutional project and for each subcontract. Signed approval from each subaward and contractor's institution is also required.

- (12) CD 511. Certification Regarding Lobbying. Lead institutions can submit these forms through the grants.gov CD511 document placeholder without a hard signature because electronic signatures are allowed on documents from the submitting institution. However, these forms submitted through grant.gov as "Optional Documents" must have hard signatures i.e. collaborating institutions sending this form to the lead.
- (13) SF 424B. Assurances Non-Construction Programs. Lead institutions can submit these forms through the grants.gov SF 424B document placeholder without a hard signature because electronic signatures are allowed on document from the submitting institutions. However, these forms submitted through grants.gov as "Optional Documents" must have hard signatures i.e. collaborating institutions sending this form to the lead.
- (14) Standard Form 424A. At time of application submission, all applicants are required to submit a SF-424A Budget Form which identifies the budget for each

fiscal year of the proposal. Place each fiscal year in separate columns in Section B of page 1 on the SF424A. (Note that this revised 424A Section B format is a NOAA requirement that is not reflected in the Instructions for the SF 424A). The budget figures must correspond with the descriptions contained in the proposal. Multi-institution applications must include a SF-424A for each institution, and multi-investigator applications using a lead investigator with a subaward approach must submit a SF-424A for each subaward. Each subaward should be listed as a separate item.

Provide separate budgets for each subaward and contractor regardless of the dollar value and indicate the basis for the cost estimates. Describe products/services to be obtained and indicate the applicability or necessity of each to the project. List all subaward and contractor costs under line item 6.f. contractual on the SF-424A. Signed approval from the institution of each subaward and contractor must be provided. Indirect cost may not be applied to ship costs.

- (15) Provide one list that includes all (US and Foreign) collaborators, advisors, and advisees for each investigator (principal and co-principal investigators, postdocs, and subawardees), complete with corresponding institutions. Submit only one, combined and alphabetized list per application. Collaborators are individuals who have participated in a project or publication within the last 48 months with any investigator, including co-authors on publications in the resumes. Collaborators also include those persons with which the investigators may have ongoing collaboration negotiations. Advisees and Advisors do not have a time limit. Advisees are persons with whom the individual investigator has had an association as thesis advisor or postdoctoral sponsor. Advisors include an individual's own graduate and postgraduate advisors. Unfunded participants in the proposed study should also be listed (but not their collaborators). This information is critical for identifying potential conflicts of interests and avoiding bias in the selection of reviewers.
- (16) Key Contacts form. At the time of application submission, all applicants must submit the Key Contacts form. This form can be found on the NCCOS/CSCOR website: http://coastalscience.noaa.gov/funding/docs/key_contacts_form.pdf. This form identifies the official applicant contacts.

Application format and assembly. Applications submitted via Grants.gov APPLY should follow the format guidelines below:

Attachments must be submitted in Adobe Acrobat PDF format to maintain format integrity. Please submit the required documents as described below. Follow the instructions found on the Grants.gov web site for application submission into the Grants.gov system. All required forms that do not have specific placeholders in the Mandatory Document box must be submitted in the Optional Form box as Other Attachments and labeled with the document name: i.e. budget narrative, project description, milestone chart etc. For a collaborative application: The SF424's of the additional institutions should be uploaded separately and labeled using the name of the institution/SF424 and then submitted in the Optional Form box as Other Attachments. Combine all of the remaining required documents for the individual

institution into one PDF file and submit the file labeled with the name of the institution. Repeat this procedure for each collaborating institution.

Save your completed application package with two different names before submission to avoid having to re-create the package should you experience submission problems. If you experience submission problems that may result in your application being late, send an e-mail to support@grants.gov and call the Grants.gov help desk. Their phone number is posted on the Grants.gov web site. The Program Manager associated with the Federal Funding Opportunity notice will use programmatic discretion in accepting applications due to documented electronic submission problems. Please note: If more than one submission of an application is performed, the last application submitted before the due date and time will be the official version.

In addition to the sixteen required elements, it is requested that the indirect rate agreement be provided upon application submission. It is allowable for applicants to suggest merit reviewers on a page after the Summary Title Page. These forms can be uploaded in to the Optional Form box under Other Attachments in Grants.gov.

Collaborative applications must be submitted by the lead institution and the following documents must be attached to the application for each collaborating institute:

Multi-institutional submissions - SF424, SF424A, Budget Justification, SF-424B, CD511, Current and Pending and Key Contracts are required. PLEASE NOTE: Signed SF424s from each applicant requesting direct funding is a submission requirement. We also request submission of the indirect rate agreement, if applicable.

Sub contractor submissions - SF424A, Budget Justification, SF-424B, CD-511, Current and Pending, and Key Contacts are required. Signed approval from the institution of each subaward and contractor must be provided. We also request submission of the indirect rate agreement, if applicable.

*Permits, accomplishments, Biographical sketches and the collaborators list must also be supplied to the lead institution in order for them to be combined within the lead application information.

C. Submission Dates and Times

The deadline for receipt of full applications at the NCCOS/CSCOR office is 3 p.m., Eastern Time on November 18, 2014. Note that late-arriving hard copy applications will be accepted for review only if the applicant can document that:

1) The application was provided to a delivery service with delivery to the National Oceanic & Atmospheric Administration, 1305 East-West Highway, SSMC4, Mail Station 8240 8th Floor, Silver Spring, Maryland 20910-328;

- 2) Delivery was guaranteed by 3 pm, Eastern Time on the specified closing date; AND,
- 3) The application was received in the NCCOS/CSCOR office by 3 p.m., Eastern Time no later than 2 business days following the closing date.

Investigators submitting applications electronically are advised to submit well in advance of the deadline.

Important: All applicants, both electronic and paper, should be aware that adequate time must be factored into applicant schedules for delivery of the application. Electronic applicants are advised that volume on Grants.gov is currently extremely heavy, and if Grants.gov is unable to accept applications electronically in a timely fashion, applicants are encouraged to exercise their option to submit applications in paper format. Paper applicants should allow adequate time to ensure a paper application will be received on time, taking into account that guaranteed overnight carriers are not always able to fulfill their guarantees.

D. Intergovernmental Review

Applications under this program are not subject to Executive Order 12372, "Intergovernmental Review of Federal Programs." It has been determined that this notice is not significant for purposes of Executive Order 12866. Pursuant to 5 U.S.C. 553(a) (2), an opportunity for public notice and comment is not required for this notice relating to grants, benefits and contracts. Because this notice is exempt from the notice and comment provisions of the Administrative Procedure Act, a Regulatory Flexibility Analysis is not required, and none has been prepared. It has been determined that this notice does not contain policies with Federalism implications as that term is defined in Executive Order 13132.

E. Funding Restrictions

Indirect Costs: Regardless of any approved indirect cost rate applicable to the award, the maximum dollar amount of allocable indirect costs for which DOC will reimburse the recipient shall be the lesser of (a) the line item amount for the Federal share of indirect costs contained in the approved budget of the award or (b) the Federal share of the total allocable indirect costs of the award based on the indirect cost rate approved by a cognizant or oversight Federal agency and current at the time the cost was incurred, provided the rate is approved on or before the award end date. NCCOS/CSCOR will not fund start up or operational costs for private business ventures and neither fees nor profits will be considered as allowable costs. Ship costs may not be included in indirect cost calculations. NCCOS/CSCOR will not pay for ship overhead expenses. If indirect costs are applied, an approved indirect cost agreement will be required before an application can be recommended for funding.

F. Other Submission Requirements

Full applications must include evidence of linkages between the scientific

questions and management needs. Applications previously submitted to NCCOS/CSCOR FFOs and not recommended for funding must be revised and reviewer or panel concerns addressed before resubmission. Resubmitted applications that have not been revised will be returned without review.

Applications submitted in response to this announcement are strongly encouraged to be submitted through the Grants.gov web site. The full funding announcement for this program is available via the Grants.gov web site, http://www.grants.gov. This announcement will also be available by contacting the program official identified below. You will be able to access, download and submit electronic grant applications for NOAA Programs in this announcement at http://www.grants.gov. The closing dates will be the same as for the paper submissions noted in this announcement. NOAA strongly recommends that you do not wait until the application deadline date to begin the application process through Grants.gov.

Please refer to important information in Submission Dates and Times (Section IV.C.) to help ensure your application is received on time.

Applicants must contact the Program Manager for non-electronic submission instructions.

Facsimile transmissions and electronic mail submission of full applications will not be accepted.

Electronic submissions should be sent via grants.gov.

Electronic submissions should be sent via grants.gov.

Paper submissions should be sent to:

National Oceanic and Atmospheric Administration

1305 East West Highway

SSMC 4 Station 8240

Silver Spring, MD 20910

V. Application Review Information

A. Evaluation Criteria

- 1. Importance and/or relevance and applicability of proposed project to the program goals: This ascertains whether there is intrinsic value in the proposed work and/or relevance to NOAA, Federal, regional, state, or local activities. This will include the plans for data management and access. (30 percent)
- 2. Technical/scientific merit: This assesses whether the approach is technically sound and/or innovative, if the methods are appropriate, and whether there are clear project goals and objectives (30 percent)
- 3. Overall qualifications of applicants: This ascertains whether the applicant possesses the necessary education, experience, training, facilities, and administrative resources to accomplish the project. This includes the capability of the investigator and collaborators to complete the proposed work as evidenced by past research accomplishments, previous cooperative work, timely communication, and the sharing of findings, data, and other research products. (25 percent)
- 4. Project costs: The Budget is evaluated to determine if it is realistic and commensurate with the project needs and time-frame. (10 percent)
- 5. Outreach and education: NOAA assesses whether this project provides a focused and effective education and outreach strategy regarding NOAA's mission to protect the Nation's natural resources. For the purposes of this announcement, the applicant must demonstrate how this proposal provides effective outreach to partners and the user community for the products of this research. (5 percent)

B. Review and Selection Process

Once a full application has been received by NOAA, an initial administrative review is conducted to determine compliance with requirements and completeness of the application. All applications will be evaluated and scored individually in accordance with the assigned weights of the above evaluation criteria by independent peer mail review and/or by independent peer panel review. Both Federal and non-Federal experts may be used in this process. The peer mail reviewers will be several individuals with expertise in the subjects addressed by particular applications. Each mail reviewer will see only certain individual applications within his or her area of expertise, and score them individually on a scale of one to five, where scores represent respectively: Excellent (5), Very Good (4), Good (3), Fair (2), Poor (1). The merit reviewer applies a rating of 1 – 5 to each criterion and the total score is calculated from the weights. For example: If the criterion is given 40% weight and the reviewer give this criterion 4 out of 5 then the criterion is scored as a 32. (Rating

= 4 out of 5, Percentage = 40; Total = $4/5 \times 40 = 32$). Each criterion is scored in the same way. All scores are added together and the final score falls into the below ratings:

Rating: 5 Excellent = 100 - 90; 4 Very Good = 89 - 80; 3 Good = 79 - 70; 2 Fair = 69 - 60 and 1 Poor = 59 and below.

The peer panel will comprise 5 to 8 individuals, with each individual having expertise in a separate area, so that the panel, as a whole, covers a range of scientific expertise. The panel will have access to all mail reviews of proposals and will use the mail review in discussion and evaluation of the entire slate of proposals. All proposals will be evaluated and scored individually. The peer panel shall rate the proposals using the evaluation criteria and scores provided above and used by the mail reviewers. The individual peer panelists' scores shall be averaged for each application and presented to the Program Manager. No consensus advice will be given by the independent peer mail review or the review panel.

The Program Manager will neither vote or score applications as part of the independent peer panel nor participate in discussion of the merits of the applications. Those applications receiving an average panel score of ``Fair" or ``Poor" will not be given further consideration, and applicants will be notified of non-selection.

For the applications scored by the reviewers as either "Excellent," "Very Good," or "Good", the Program Manager will (a) create a ranking of the applications to be recommended for funding using the average panel scores (b) determine the total duration of funding for each application; and (c) determine the amount of funds available for each application subject to the availability of fiscal year funds. Awards may not necessarily be made in rank order. In addition, applications rated by the panel as either "Excellent," "Very Good," or "Good" that are not funded in the current fiscal period, may be considered for funding in another fiscal period without having to repeat the competitive review process.

Recommendations for funding are forwarded from the CSCOR Program Manager to the appropriate CSCOR Branch Chief and then CSCOR Director for development of the final recommendation to the Selecting Officials, the Director of NCCOS for the final funding recommendation decision. In making the recommendations, the Program Manager, Branch Chief or CSCOR Director will award in rank order from the peer-review process unless the proposal is justified to be selected out of rank order based on the selection factors listed below in C.

Investigators may be asked to modify objectives, work plans or budgets, and provide supplemental information required by the agency prior to the award. This may include allocating funding over 4 Federal fiscal years that are included within the project period. When a decision has been made (whether an award or declination), verbatim anonymous copies of reviews and summaries of review panel deliberations, if any, will be made available to the applicant. Declined applications will be held in NCCOS/CSCOR for the required 3 years in accordance with the current retention requirements, and then destroyed. NCCOS/CSCOR may retain

highly-ranked proposals for funding in future fiscal years, if FY15 funding is not adequate to support them.

In accordance with current Federal appropriations law, NOAA will provide a successful corporate applicant a form to be completed by its authorized representatives certifying that the corporation has no Federally-assessed unpaid or delinquent tax liability or recent felony criminal convictions under any Federal law.

C. Selection Factors

Proposals may be selected out of rank order based upon one or more of the following factors:

- 1. Availability of funding.
- 2. Balance/distribution of funds
- a. Geographically
- b. By type of institutions
- c. By type of partners
- d. By research topical areas
- e. By project types
- 3. Whether this project duplicates other projects funded or considered for funding by NOAA or other federal agencies.
 - 4. Program priorities and policy factors. Refer to section I.B.
 - 5. Applicant's prior award performance.
 - 6. Partnerships and/or participation of targeted groups.
- 7. Adequacy of information necessary for NOAA to make a NEPA determination and draft necessary documentation before recommendations for funding are made to the grants officer.

Awards may also be modified for selected projects depending on budget availability or according to the selection factors listed above.

D. Anticipated Announcement and Award Dates

Subject to the availability of funds, review of applications will begin in December 2014. Applicants should use a start date of September 1, 2015.

VI. Award Administration Information

A. Award Notices

The notice of award is signed by the NOAA Grants Officer and is the authorizing document. It is provided electronically through the Grants Online system to the appropriate business office of the recipient organization.

To enable the use of a universal identifier and to enhance the quality of information available to the public as required by the Federal Funding Accountability and Transparency Act of 2006, to the extent applicable, any application awarded in response to this announcement will be required to use the System for Award Management (SAM). The link is below:

https://www.sam.gov/portal/public/SAM/

Applicants are also required to use Dun and Bradstreet Universal Numbering System and be subject to reporting requirements, as identified in OMB guidance published at 2 CFR Parts 25, 170 (2010). The link is below:

http://ecfr.gpoaccess.gov/cgi/t/text/text-idx? c=ecfr&tpl=/ecfrbrowse/Title02/2cfr25 main 02.tpl

B. Administrative and National Policy Requirements

The Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements contained in the Federal Register notice of December 17, 2012 (77 FR 74634) are applicable to this solicitation. A copy of the notice may be obtained at: http://www.gpo.gov/fdsys/." Please note that on December 26, 2013, OMB published final guidance titled Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (OMB Uniform Guidance) (https://www.federalregister.gov/articles/2013/12/26/2013-30465/uniform-administrative-requirements-cost-principles-and-audit-requirements-for-federal-awards), which streamlines the language from eight existing OMB circulars, including Cost Principles (OMB Circulars A-21, A-87, A-122) and administrative requirements (OMB Circulars A-102 and A-110), into one consolidated set of guidance applicable to federal assistance awards. Once adopted, the OMB Uniform Guidance will supersede DOC's uniform administrative requirements set out at 15

C.F.R. parts 14 and 24. The DOC expects to adopt the OMB Uniform Guidance by December 26, 2014, meaning that the OMB Uniform Guidance will apply to all new awards and to additional funding to existing awards made after December 26, 2014. In addition, the audit requirements of the OMB Uniform Guidance will apply to audits of non-Federal entities beginning on or after December 26, 2014. Therefore, applicants should familiarize themselves with the OMB Uniform Guidance. Additional information on the substance of and transition to the OMB Uniform Guidance may be found at https://cfo.gov/cofar/.

Limitation of Liability

In no event will NOAA or the Department of Commerce be responsible for application preparation costs. Publication of this announcement does not oblige NOAA to award any specific project or to obligate any available funds.

National Environmental Policy Act (NEPA)

NOAA must analyze the potential environmental impacts, as required by the National Environmental Policy Act (NEPA), for applicant projects or proposals which are seeking NOAA federal funding opportunities. Detailed information on NOAA compliance with NEPA can be found at the following NOAA NEPA website: http://www.nepa.noaa.gov/, including our NOAA Administrative Order 216-6 for NEPA.

http://www.corporateservices.noaa.gov/ames/administrative_orders/chapter_216/216-6.html, and the Council on Environmental Quality implementation regulations, http://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-GuidanceRegulations.pdf. Consequently, as part of an applicant's package, and under their description of their program activities, applicants are required to provide detailed information on the activities to be conducted, locations, sites, species and habitat to be affected, possible construction activities, and any environmental concerns that may exist (e.g., the use and disposal of hazardous or toxic chemicals, introduction of non-indigenous species, impacts to endangered and threatened species, aquaculture projects, and impacts to coral reef systems).

Applicants to be recommended for funding will be required to answer relevant questions from the "Environmental Compliance Questionnaire for NOAA Federal Financial Assistance Applicants" (OMB Control No. 0648-0538). The Program Manager will determine which questions are relevant to each specific proposal. Answers must be provided before the application can be submitted for final funding approval.

In addition to providing specific information that will serve as the basis for any required impact analyses, applicants may also be requested to assist NOAA in drafting of an environmental assessment, if NOAA determines an assessment is required. Applicants will also be required to cooperate with NOAA in identifying and implementing feasible measures to reduce or avoid any identified adverse environmental impacts of their proposal. The failure to do so shall be grounds for the denial of an application.

Felony and Tax Certifications for Corporations.

In accordance with current Federal appropriations law, NOAA will provide a successful corporate applicant a form to be completed by its authorized representatives certifying that the corporation has no Federally-assessed unpaid or delinquent tax liability or recent felony criminal convictions under any Federal law."

C. Reporting

All performance (i.e. technical progress) reports shall be submitted electronically through the Grants Online system unless the recipient does not have internet access. In that case, performance (technical) reports are to be submitted to the NOAA Program Manager. All financial reports shall be submitted in the same manner. All ship time use must be reported by the PI or Chief Scientist on each cruise within the performance reports.

The Federal Funding Accountability and Transparency Act of 2006 includes a requirement for awardees of applicable Federal grants to report information about first-tier subawards and executive compensation under Federal assistance awards issued in FY 2011 or later. All awardees of applicable grants and cooperative agreements are required to report to the Federal Subaward Reporting System (FSRS) available at www.FSRS.gov on all subawards over \$25,000.

Data Reporting Requirement

Environmental data and information, collected and/or created under NOAA grants/cooperative agreements must be made visible, accessible, and independently understandable to general users, free of charge or at minimal cost, in a timely manner (typically no later than two (2) years after the data are collected or created), except where limited by law, regulation, policy or by security requirements.

- 1. Unless otherwise noted in this federal funding announcement, a Data/Information Sharing Plan of no more than two pages shall be required as part of the Project Narrative. A typical plan may include the types of environmental data and information to be created during the course of the project; the tentative date by which data will be shared; the standards to be used for data/metadata format and content; policies addressing data stewardship and preservation; procedures for providing access, data, and security; and prior experience in publishing such data. The Data/Information Sharing Plan will be reviewed as part of the NOAA Standard Evaluation Criteria, Item 1 -- Importance and/or Relevance and Applicability of Proposed Project to the Mission Goals.
 - 2. The Data/Information Sharing Plan (and any subsequent revisions or updates)

will be made publicly available at time of award and, thereafter, will be posted with the published data.

3. Failing to share environmental data and information in accordance with the submitted Data/Information Sharing Plan may lead to disallowed costs and be considered by NOAA when making future award decisions.

In conformance with the Uniform Administrative Requirements for Grants and Cooperative Agreements section 15 CFR 14.36, any data collected in projects supported by NCCOS/CSCOR should be delivered to a National Data Center (NDC), such as the National Oceanographic Data Center (NODC), in a format to be determined by the institution, the NDC, and the Program Manager. Information on NOAA NDC's can be found at http://www.nesdis.noaa.gov/about_nesdis.html. It is the responsibility of the institution for the delivery of these data; the DOC will not provide additional support for delivery beyond the award. Additionally, all biological cultures established, molecular probes developed, genetic sequences identified, mathematical models constructed, or other resulting information products established through support provided by NCCOS/CSCOR are encouraged to be made available to the general research community at no or modest handling charge (to be determined by the institution, Program Manager, and DOC).

VII. Agency Contacts

Technical Information: Alan Lewitus, Program Manager for CSCOR, 301-703-3338, Internet: Alan.Lewitus@noaa.gov or David Hilmer, Program Manager for CSCOR, 301-713-3338, Internet: David.Hilmer@noaa.gov.

Business Management Information: Laurie Golden, NCCOS/CSCOR Grants Administrator, 301-713-3338/extension 151, Internet: Laurie.Golden@noaa.gov.

VIII. Other Information

Collection of information requirements

Notwithstanding any other provision of law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection displays a currently valid OMB control number.

This notification involves collection-of-information requirements subject to the

Paperwork Reduction Act. The use of Standard Forms 424, 424A, 424B, and SF-LLL has been approved by the Office of Management and Budget (OMB) under control numbers 0348-0043, 0348-0044, 0348-0040 and 0348-0046.

FOIA- Freedom of Information Act

Department of Commerce regulations implementing the Freedom of Information Act (FOIA) are found at 15 C.F.R. Part 4, Public Information. These regulations set forth rules for the Department regarding making requested materials, information, and records publicly available under the FOIA. Applications submitted in response to this Federal Funding Opportunity may be subject to requests for release under the Act. In the event that an application contains information or data that the applicant deems to be confidential commercial information which is exempt from disclosure under FOIA, that information should be identified, bracketed, and marked as Privileged, Confidential, Commercial or Financial Information. Based on these markings, the confidentiality of the contents of those pages will be protected to the extent permitted by law.

Check List for Required and Requested Documents:

SF-424

Title Page

Abstract

Project Description

References

Milestone Chart

SF-424A (One for the lead institution and each institution in a multi-institutional project and/or each subcontract)

Budget Narrative and Justification (One for the lead institution and each institution in a multi-institutional project and/or each subcontract)

Bio Sketch

Current and Pending Support

Permits (if none, say so)

Alphabetized Collaborator List (ONE list for all)

Waiver, if applicable

Signed Approval from subaward/contractor institutes

Ship Request form, if applicable

SF-424B

CD-511

Key Contact form

Indirect Rate Agreement (requested)