

## 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: Regional Ecosystem Prediction Program; Center for Sponsored Coastal Ocean Research, Multiple effects of ocean acidification and nutrient loading to coastal marine ecosystems

Announcement Type: Initial

Funding Opportunity Number: NOAA-NOS-NCCOS-2015-2004160

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

Dates: Letters of Intent (LOI) are required for this announcement. The deadline for receipt of required Letters of Intent at the NCCOS/CSCOR office is 5 p.m., Eastern Time on August 11, 2014. LOIs should be submitted by email to [Mary.Payne@noaa.gov](mailto:Mary.Payne@noaa.gov). The deadline for receipt of full applications at the NCCOS/CSCOR office is 3 p.m., Eastern Time on October 23, 2014. Applications received after the closing date and time will not be accepted. Full applications that did not previously submit a LOI by the LOI deadline will not be accepted. Please note: Validation or rejection of your application by [Grants.gov](http://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 Coastal Hypoxia Research Program in conjunction with the NOAA Ocean Acidification Program for projects expected to last 3 years in duration. Research applications will focus on examining Ocean Acidification (OA) in the context of eutrophication, hypoxia and other stresses in coastal environments. This research will project regional impacts to economically important species and ecosystem services and provide a wider ecosystem context for the single-species studies and carbonate system measurements and monitoring undertaken by NOAA and other agencies. 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 \$1,500,000 per year for awards of 3 years. Approximately 3 – 5 projects are expected to be funded at the level of approximately \$300,000 - \$500,000 per year per proposal.

Electronic Access: The following web sites furnish supplementary information:

NOAA's Ocean Acidification Program: <http://oceanacidification.noaa.gov/>

Center for Sponsored Coastal Ocean Research – Regional Ecosystem Research and Coastal Hypoxia Research 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

NCCOS/CSCOR's Regional Ecosystem Prediction and Coastal Hypoxia Research Programs:

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.

The aim of the Regional Ecosystem Prediction Program (REPP) is to develop predictive capabilities for marine ecosystems on a regional basis, with an emphasis on transition to operation and/or application. Research priorities are currently determined through a multi-tiered process which includes Congressional direction, NOAA mandates and strategic plans, engagement of resource managers and stakeholders, and identification of strategic opportunities by the scientific community. NCCOS/CSCOR regional ecosystem research is implemented on a geographic basis in the Great Lakes, Northeast Shelf, Southeast Shelf, Caribbean Sea, Gulf of Mexico, California Current, Alaska Ecosystem Complex, and the Pacific Islands Ecosystem Complex. Although there are different management concerns in each of these areas, there are also many fundamental similarities in the types of problems between regions and the science needed to address them. Therefore, it is important in a national program such as the REPP that relevant science constructs

(e.g. modeling frameworks) developed nationally and internationally are fully utilized and adapted to the particular issue and region of interest so as to gain efficiencies from past research investments.

CSCOR's Ocean Acidification subcomponent of the RER program is part of a broader NOAA effort funded and administered by the Ocean Acidification Program (OAP), based in NOAA's Oceanic and Atmospheric Research (OAR) Line Office (<http://oceanacidification.noaa.gov>). The OAP coordinates and administers a multi-faceted program that comprises monitoring the changes in ocean chemistry, measuring the biological response of ecologically and economically important species, assessing the socio-economic impacts of the changes and responses, management of data streams, assisting to create and implement adaptation strategies and coordinating and conducting education and outreach. While many of the OAP research efforts are conducted within NOAA, the program benefits from robust extramural engagement. CSCOR's RER program administers competitive extramural awards for the OAP and manages these awards to support the overall OAP goals.

The CSCOR Coastal Hypoxia Research Program (CHRP) is authorized by the Harmful Algal Bloom and Hypoxia Research and Control Act and provides research results and modeling tools which will be used by coastal resource managers to assess alternative management strategies for preventing or mitigating the impacts of hypoxia on coastal ecosystems and to make informed decisions regarding this important environmental phenomenon. Determining the causes of hypoxia, developing the capability to predict its occurrence in response to varying levels of anthropogenic stress, and evaluating the subsequent ecological, economic, and social impacts are necessary to assess potential management alternatives.

Over half of U.S. estuaries experience natural or human-induced hypoxic conditions at some time each year and the frequency and duration of hypoxic events have increased over the last few decades. Most of these events are related to nutrient inputs and eutrophication. Hypoxia can have large impacts on the affected ecosystems, often with economic repercussions. Hypoxia is now a persistent problem in the Gulf of Mexico, Chesapeake Bay, Lake Erie, Puget Sound, Narragansett Bay and many other freshwater and marine centers of recreational and commercial importance. Several geographic areas that are susceptible to hypoxia are also expected to be impacted by coastal acidification, and it is necessary to determine the current and future impacts of these interacting stressors on coastal ecosystems, economies and communities.

#### Ocean Acidification:

The amount of carbon dioxide in the atmosphere has been rapidly increasing for the past 150 years, since the onset of the industrial revolution. The world's oceans act as a sink for a portion of the carbon dioxide emitted by humans, and this absorption is causing a reduction in surface ocean pH, otherwise known as ocean acidification (OA). A growing number of laboratory experiments now demonstrate that OA adversely affects many marine organisms, especially organisms that construct their shell material from calcium carbonate. Ocean acidification has the potential to

seriously threaten the future health of the world's oceans and the significant economic benefits they provide to humankind. This rapidly emerging scientific issue has raised serious concerns across the scientific and resource management communities as to possible ecological, economic and societal impacts.

Ocean Acidification could impact commercially important species either through direct physiological effects and/or by altering the production of lower trophic levels or habitat-building species (e.g., corals, oysters, seagrasses), thus altering food supply or habitats. Additional impacts from the warming of sea surface temperatures, increased nutrient inputs leading to low oxygen (hypoxia), and/or pollutants have been shown to impart synergistic (or antagonistic) effects with OA, leading to predictions of a “hot, sour and breathless” ocean.

It is important to realize that acidification in estuaries and near coastal regions can be influenced by different sources. Oceanic input of acidified waters is caused in response to increased CO<sub>2</sub> in the atmosphere. Coastal acidification is also influenced by input from land-based sources of freshwater and carbon as well as nutrient delivery (largely nitrogen) that fuels metabolic growth and results in CO<sub>2</sub> additions from respiration and decomposition. It is largely unknown how OA and nutrient enrichment interact to influence coastal ecosystem processes, overall productivity and ecosystem services. Hypoxia occurs simultaneously with CO<sub>2</sub> enrichment, yet their combined effects have yet to be fully studied. Even at nutrient levels where hypoxia does not occur, interactive effects with OA have been observed in laboratory studies. Furthermore, many OA experimental studies do not take local carbonate system variability into account. The paucity of studies and information creates difficulties in predicting impacts to ecosystem services and thus impacts to coastal communities and economies.

The Federal Ocean Acidification Research and Monitoring (FOARAM) Act of 2009 provides authority and requires NOAA to respond to this pressing issue. Under FOARAM, Federal agencies were required to produce an integrated Strategic Plan, which calls out the following two priorities:

1. Modeling to Predict Changes in the Ocean Carbon Cycle and Impacts on Marine Ecosystems and Organisms
2. Assessment of Socioeconomic Impacts and Development of Strategies to Conserve Marine Organisms and Ecosystems

According to the FOARAM legislation, it is important to determine the potential impacts of rising CO<sub>2</sub> levels and the associated reduced ocean pH and carbonate ion availability on marine ecosystems, which includes a broad array of key species critical to NOAA-managed living marine and place-based resources. It is also important to determine the potential socio-economic impact as a result of effects on these managed resources, especially since OA has the potential to intersect with other NOAA mandates such as the Coral Reef Conservation Act, Harmful Algal Bloom and Hypoxia Research and Control Act, Magnuson-Stevens Act, and Endangered Species Act.

The NOAA Ocean and Great Lakes Acidification Research Plan (<http://oceanacidification.noaa.gov/AboutUs/OAResearchPlan.aspx>) contains priorities for national and regional OA research within NOAA. For the purposes of this announcement, the main priority is contained in section 1.3, "Biogeochemical and Ecosystem Models", especially Task 1.3.2: "Develop regional ecological and bioeconomic models coupled to regional biogeochemical models to predict local changes in ecosystem, food web, and economic interactions." As a component of developing the necessary understanding of ecological processes and linkages, physiological research on targeted species or groups of ecologically related species may be included. In situ process studies and/or field work may also be included, if it is shown to be directly applicable to model development. Proposals that focus specifically on single-organism studies should show how their results fit into a larger ecosystem modeling and evaluation framework. Biogeochemical modeling to predict future OA conditions should be considered to be part of ecological models. Proposers should use realistic (e.g., 50 - 100 year) projections of atmospheric CO<sub>2</sub>, temperature and pH change as well as precipitation changes as determined by recent models (e.g., Intergovernmental Panel on Climate Change, IPCC). Increased understanding of the ecological effects of OA in concert with other stresses should inform the development of vulnerability assessments and/or adaptation and management plans for coastal species, ecosystems and habitats at risk from OA.

States have also passed legislation to understand the impacts of OA to local resources. Washington's Senate Bill 5603, Section 4 created the Washington Marine Resources Advisory Council to maintain a sustainable coordinated focus on ocean acidification; advise and work with the Washington Ocean Acidification Center on the effects and sources of ocean acidification; and deliver recommendations to the Governor and Legislature on ocean acidification. Maine recently passed L.D. 1602, which will set up an 11-member commission to study the Gulf of Maine's increasing acidic waters and seek methods to ease the problem and correct its ill effects. Maryland's House Bill 118 will establish a task force to analyze the best available science regarding ocean acidification and the potential effects of acidification on the ecology of Maryland waters and on state fisheries; and make recommendations regarding potential strategies to mitigate the effects of acidification on state waters and on state fisheries.

In addition to the FOARAM and state legislation, several national-level and regional reports can provide background information on OA research and strategies:

- 1) The 2014 Strategic Plan for Federal Research and Monitoring of Ocean Acidification from the Interagency Working Group on Ocean Acidification, [http://www.whitehouse.gov/sites/default/files/microsites/ostp/NSTC/iwg-oa\\_strategic\\_plan\\_march\\_2014.pdf](http://www.whitehouse.gov/sites/default/files/microsites/ostp/NSTC/iwg-oa_strategic_plan_march_2014.pdf),
- 2) The 2013 Implementation plan for Executive Order 13547 for the Stewardship of the Ocean, Our Coasts, and the Great Lakes, [http://www.whitehouse.gov/sites/default/files/national\\_ocean\\_policy\\_implementation\\_plan.pdf](http://www.whitehouse.gov/sites/default/files/national_ocean_policy_implementation_plan.pdf). Some of the high-level priorities in the Implementation Plan include:

Determine the impacts of interacting stressors on ecological systems, economies, and communities,

Assess the vulnerability of coastal communities and ocean environments to climate change and ocean acidification, and

Provide the high-quality data and tools necessary to support science-based decision-making and ecosystem-based management.

3) The Washington State Blue Ribbon Task Force for OA, <http://www.ecy.wa.gov/water/marine/oa/panel.html>

4) The West Coast OA and Hypoxia Science panel, <http://calost.org/science-advising/?page=ocean-acidification-and-hypoxia-panel>

Proposals should justify their work and approaches by reference to one or more of these guiding documents, or some similar compilation of research needs and approaches within their geographic region.

## B. Program Priorities

NOAA/NOS/NCCOS/CSCOR is accepting proposals which:

1. Evaluate potential vulnerabilities of priority species (e.g. economically or ecologically important) to combined effects of coastal acidification and other coastal stresses, especially those related to eutrophication,
2. Determine the relative contributions of oceanic and land-based drivers of coastal acidification, their sources and time scales of variability, and how these might change in the future,
3. Examine future scenarios of coastal acidification, eutrophication, hypoxia and other stressors (temperature, precipitation, sea level rise, etc.) to predict impacts on priority species and identify particular habitats and ecosystem components at risk from OA and multiple stressor impacts,
4. Identify management practices that would foster the greatest resiliency or mitigate the aforementioned impacts and quantitatively evaluate their effectiveness through predictive modeling on multi-decadal time scales and regional to national spatial scales,
5. Incorporate human dimensions and economic modeling to provide predictions of social and economic impacts. This will require an ecosystem approach, including ecosystem services and impacts to coastal communities and economies.

A single proposal is not required to address all of the components listed above, but should produce regional or national projections of the combined ecosystem impacts of OA and eutrophication, including an understanding of short-term coastal

variability in the context of long-term trends in oceanic pH. Understanding the complex combined effects of OA and eutrophication may require field observations and laboratory experiments and the integration of these measurements through biogeochemical modeling coupled with food web or ecosystem models. Proposals are expected to be multi-disciplinary and may include components that address biogeochemistry, ecology, human dimensions and ecosystem services. Stakeholder involvement will be required during the course of the research through the incorporation of coastal management representatives as co-PIs and/or through a robust advisory committee to guide, from the outset of the project, the transition of research results toward applications in a management or policy framework.

Models and projections developed through this announcement should capitalize on NOAA's other investments in OA, hypoxia and related research, modeling and observations. NOAA investigators are eligible to apply (see eligibility information below), however proposals must include participants from outside NOAA. Where appropriate, proposals should show explicit linkages to, and utilization of, wider research, monitoring and modeling efforts supported through Federal, state or regional entities. Proposers are encouraged to use existing data streams and prior experimental work to accelerate progress.

The NOAA Ocean Acidification Program website (<http://oceanacidification.noaa.gov/>) provides information about all of its activities, including regional perspectives on OA (<http://noaa.maps.arcgis.com/apps/MapTour/?appid=1c33c6304fb9466a9185adb0d12a4e7c>).

NOAA National Marine Fisheries Service (NMFS) studies are focused on assessing the physiological effects on individual living marine resources and the resulting ecosystem impacts. All of the regional fisheries science centers have species that may be affected by OA. However, OA research at NMFS is supported primarily through experimental facilities at the Northwest Fisheries Science Center (<http://oceanacidification.noaa.gov/AboutUs/CurrentProjects/NorthwestFisheriesScienceCenterOceanAcidificationResearchFacility.aspx>), Northeast Fisheries Science Center (<http://nefsc.noaa.gov/nefsc/Milford/acidification.html>), and Alaska Fisheries Science Center (<http://www.afsc.noaa.gov/HEPR/acidification.php>).

NOAA's Pacific Marine Environmental Laboratory (<http://www.pmel.noaa.gov/co2/story/Ocean+Acidification>) and Atlantic Oceanographic and Meteorological Laboratory (<http://www.aoml.noaa.gov/ocd/ocdweb/oa.html>) maintain robust OA observing programs and work closely with other divisions of NOAA in assessing the potential impacts of the changing ocean chemistry.

The NOAA National Ocean Service manages NOAA marine protected areas under its National Estuarine Research Reserve System (NERRS; <http://www.nerrs.noaa.gov/>) and the National Marine Sanctuaries (NMS; <http://sanctuaries.noaa.gov>). The NERRS plans to add new ocean acidification-related parameters to long-term estuarine water quality monitoring and the NMS have developed an Ocean Acidification Action Plan for the West Coast National



Marine Sanctuaries ([http://sanctuaries.noaa.gov/about/pdfs/wc\\_onms\\_plan.pdf](http://sanctuaries.noaa.gov/about/pdfs/wc_onms_plan.pdf)).

The National Centers for Coastal Ocean Research (NCCOS, <http://coastalscience.noaa.gov/about/>) supports field laboratory facilities in Charleston, SC, Beaufort, NC, Oxford, MD, and Kasitsna Bay, AK. In addition, coastal monitoring and assessments are coordinated nationwide through the national headquarters office. NCCOS scientists are involved in monitoring coastal environments for changes in pH, assessing coral health and diversity, and developing models of coastal OA.

The U.S. Integrated Ocean Observing System (IOOS) is a federal, regional, and private-sector partnership working to enhance the accessibility of coastal, ocean, and Great Lakes data and information. IOOS regional associations (RAs; <http://www.ioosassociation.org/regionalIOOS>) are participating in NOAA's OA observing network and several RAs have regional ecosystem modeling frameworks.

The National Ocean Data Center (NODC) serves as the data management focal point for the NOAA Ocean Acidification Program (<http://www.nodc.noaa.gov/oceanacidification/index.html>). All data resulting from NOAA OAP projects are archived and accessible through NODC.

Any one proposal is not expected to incorporate information or collaborations from all of the resources mentioned above. However, proposals must include collaborations with one or more of the groups listed above, other NOAA groups such as the National Weather Service River Forecasting Centers (<http://water.weather.gov/ahps/rfc/rfc.php>) or NOAA's Climate Program Office (<http://cpo.noaa.gov/>), or other Federal, state or regional management or regulatory bodies.

Proposals should follow ocean acidification research best practices guides such as those detailed in the Guide to Best Practices for Ocean Acidification Research and Data Reporting (<http://www.epoca-project.eu/index.php/guide-to-best-practices-for-ocean-acidification-research-and-data-reporting.html>) and the Guide to Best Practices for Ocean CO<sub>2</sub> Measurements ([http://cdiac.ornl.gov/oceans/Handbook\\_2007.html](http://cdiac.ornl.gov/oceans/Handbook_2007.html)). Failure to comply with the best practices will result in a downgrade of the proposal. All NOAA environmental data developed through this announcement shall adhere to the guidelines documented in the NOAA Administrative Order 212-15 ([http://www.corporateservices.noaa.gov/ames/administrative\\_orders/chapter\\_212/212-15.html](http://www.corporateservices.noaa.gov/ames/administrative_orders/chapter_212/212-15.html)).

Proposals should indicate the expected outputs and outcomes of the research, in addition to research activities. 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.

Also, 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).

## C. Program Authority

Subtitle D of the Omnibus Public Land Management Act of 2009: Federal Ocean Acidification Research and Monitoring Act of 2009. Public Law 111-11II; Harmful Algal Bloom and Hypoxia Amendments Act of 2004 (HABHRCA 2004, Public Law 108-456)

## 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 \$1,500,000 per year for projects expected to last 3 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 3 year(s) (depending on the type of proposal submitted), 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

Letters of Intent are required for this announcement. A full proposal that did not submit a LOI will not be considered and will be returned to the proposer without review.

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; <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. Letter of Intent (LOI)

The purpose of the LOI process is to provide information to potential applicants on the relevance of their proposed project and the likelihood of it being funded in advance of preparing a full application. Full applications will be encouraged only for LOIs deemed relevant, however the final decision to submit a full proposal is made by the investigator, regardless of feedback they receive from the LOI process. The LOI should provide a concise description of the proposed work and its relevance to the targeted Competition. The LOI should be no more than two pages in length, single spaced in 12-point font with 1-inch margins and should include in order the components listed below. If the below components are not included, the LOI risks a delayed response and may not be considered.

1) Identification of the Competition that is being targeted in the LOI.

2) Specification of a tentative project title in the LOI.

3) Name(s) phone number(s), email address(s) and institution(s) of all Principal Investigator(s), and specification of which individual is the Lead Principal Investigator.

4) Approximate cost of the project, with and without ship costs.

5) Statement of the problem, geographic area studied, and nature of interacting factors to be studied.

6) Brief summary of work to be completed, methodology to be used, relevant stakeholder groups and the plan for coordination with ongoing NOAA and other funded OA work.

Program Managers from CSCOR, the OA program, and other NOAA programs associated with the OA Program will review each LOI to determine whether it is responsive to the Program's goals and priorities, as advertised in this notice. Emails to proposers are scheduled to be sent out two weeks after the due date to encourage or discourage a full application. In general, full proposals will be encouraged if they show evidence of application to the program priorities above, clear statements of the problem addressed and the methodologies to be used, understanding of stakeholder concerns, and strong collaboration with NOAA, a NOAA-related program as indicated above, or other Federal, state or regional management bodies.

The final decision to submit a full application will be made by the investigator, regardless of the recommendations of the program manager regarding the LOI. Late LOIs will not be considered and any associated full applications will not be accepted.

## 2. 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](http://www.cop.noaa.gov/opportunities/grants/pdf/sample_application.pdf) and FAQs are also available.

## 3. 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: OA2015 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 Data 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/recipient/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 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](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.omaο.noaa.gov/charterreq.html>.

A separate budget justification is required for each institution in a multi-institutional 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, post-docs, 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](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](mailto: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 Contracts 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 required Letters of Intent at the NCCOS/CSCOR office is 5 p.m., Eastern Time on August 11, 2014. LOIs should be submitted by email to [Mary.Payne@noaa.gov](mailto:Mary.Payne@noaa.gov). The deadline for receipt of full applications at the NCCOS/CSCOR office is 3 p.m., Eastern Time on October 23, 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.

#### 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](http://www.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. (40 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 (25 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. (15 percent)

4. Project costs: The Budget is evaluated to determine if it is realistic and commensurate with the project needs and time-frame. (5 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. The applicant must demonstrate clear connections to relevant management needs. (15 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 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 to the CSCOR Director who will, in conjunction with the Director of the OA Program, develop the final recommendation to forward to the Selecting Official, the Director of NCCOS, for the final funding 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.

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

Based on the panel review scores and other selection factors, the Program Manager will provide a listing of proposals in rank order along with a justification for their recommendations for proposals to fund to the appropriate Branch Chief which will review and, in turn provide their recommendations to the CSCOR Director. A Program Manager, Branch Chief or the CSCOR Director may justify proposals to 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 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 - formally the Central Contractor Registration - CCR) capabilities accessible through the U.S. Department of Treasury's System for Award Management <https://www.sam.gov/portal/public/SAM/> Central Contractor Registration and 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), [http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&tpl=/ecfrbrowse/Title02/2cfr25\\_main\\_02.tpl](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

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/>.

##### Limitation of Liability

In no event will NOAA or the Department of Commerce be responsible for application preparation costs if these programs fail to receive funding or are cancelled because of other agency priorities. 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](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](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](http://www.FSRS.gov) on all subawards over \$25,000.

### Data Reporting Requirement

Please consult the NODC Ocean Acidification website for more information about ocean acidification data sharing expectations (<http://www.nodc.noaa.gov/oceanacidification/>). 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/EnvironmentalData.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: Elizabeth Turner, Program Manager for CSCOR, 603-862-4680, Internet: Elizabeth.turner@noaa.gov

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## 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 4040-0004, 4040-0006, 4040-0007 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 Form

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)