

## TABLE OF CONTENTS

I. Funding Opportunity Description.....	4
A. Program Objective.....	4
B. Program Priorities.....	4
C. Program Authority.....	9
II. Award Information.....	10
A. Funding Availability.....	10
B. Project/Award Period.....	10
C. Type of Funding Instrument.....	10
III. Eligibility Information.....	11
A. Eligible Applicants.....	11
B. Cost Sharing or Matching Requirement.....	11
C. Other Criteria that Affect Eligibility.....	11
IV. Application and Submission Information.....	11
A. Address to Request Application Package.....	11
B. Content and Form of Application.....	11
C. Unique entity identifier and System for Award Management (SAM).....	13
D. Submission Dates and Times.....	14
D. Intergovernmental Review.....	14
E. Funding Restrictions.....	14
F. Other Submission Requirements.....	14
V. Application Review Information.....	14
A. Evaluation Criteria.....	14
B. Review and Selection Process.....	16
C. Selection Factors.....	16
D. Anticipated Announcement and Award Dates.....	17
VI. Award Administration Information.....	17
A. Award Notices.....	17
B. Administrative and National Policy Requirements.....	18
C. Reporting.....	20
VII. Agency Contacts.....	20
VIII. Other Information.....	21

## ANNOUNCEMENT OF FEDERAL FUNDING OPPORTUNITY

## EXECUTIVE SUMMARY

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

Funding Opportunity Title: NOAA Science Collaboration Program

Announcement Type: Initial

Funding Opportunity Number: NOAA-NWS-NWSPO-2017-2004858

Catalog of Federal Domestic Assistance (CFDA) Number: 11.462, Hydrologic Research

Dates: Proposals must be received by NOAA via grants.gov no later than 5:00 p.m., CDT, June 13, 2016. Proposals will receive an electronic date stamp by grants.gov to determine timeliness. The award start date is October 1, 2016.

Funding Opportunity Description: The NOAA Science Collaboration Program (NSCP) represents an effort to support the development of undergraduate, graduate, and postdoctoral researchers and scientists with expertise in NOAA-related sciences. This will be accomplished through collaborations between these scientists and professionals in areas of mutual interest across the full spectrum of NOAA sciences. It is expected that some of the scientists will collaborate onsite at NOAA facilities and laboratories. NOAA will also support associated workshops that will serve to further enhance collaborative relationships.

Through this funding opportunity, NOAA is also interested in supporting complementary earth-systems modeling efforts in areas such as hydrology and coastal dynamics which can serve as a catalyst for collaborations between NOAA professionals and scientists supported through this program. NOAA will support social science research that evaluates the impact of NOAA-related science to society and seeks to find ways to determine how environmental and related sciences can be communicated and utilized more effectively to protect life and property, assist decision makers, and enhance economic development.

Eligible applicants must be academic institutions of higher learning which offer doctoral degrees in NOAA-related sciences; consortia of academic institutions of higher learning which offer doctoral degrees in NOAA-related sciences; and non-profit research institutions. Multi-institution applications will not be accepted.

The total NOAA funding amount available for the NSCP is anticipated to be approximately \$10,000,000 to \$15,000,000 per year or a total of \$50,000,000 to \$75,000,000 for the five-year

period. There will be appropriation of some funds at the start of the award. NOAA anticipates making one award for the five year period and anticipates providing funds one or more times each year for five years. NOAA has no obligation to provide additional funding in connection with that award in subsequent years. Funding for each subsequent year of a multi-year proposal is at the discretion of NOAA and is subject to the availability of funds.

## FULL ANNOUNCEMENT TEXT

## I. Funding Opportunity Description

## A. Program Objective

NOAA's mission is to understand and predict changes in climate, weather, oceans, and coasts; to share that knowledge and information with others; and to conserve and manage coastal and marine ecosystems and resources. NOAA maintains a vision of resilience that will guide the organization and its partners in a collective effort to reduce the vulnerability of communities and ecological systems in the short-term, while helping society avoid or adapt to potential long-term environmental, social, and economic changes. To achieve this vision, we must understand current Earth system conditions, project future changes, and help people make informed decisions that reduce their vulnerability to environmental hazards and stresses that emerge over time, while at the same time increase their ability to cope with them.

To move ahead in these areas, NOAA must employ a scientific workforce that is trained and prepared to communicate and collaborate across multiple disciplines. It is just as important that undergraduate- and graduate-level students and early-career post-graduate and postdoctoral scientists, who possess expertise and interest in NOAA-related sciences, be provided opportunities to interact and collaborate with NOAA researchers and professionals to enhance understanding and ensure that the Nation's scientists are working to accomplish important goals to preserve and sustain the environment.

Effective science must be well communicated to achieve maximum impact. As research yields better understanding and innovative techniques, decision-makers and the public must be made aware of these advances in a clear and understandable way to ensure that life and property can be protected and the economy grown while sustaining the environment. NOAA will continue the task to address this goal by supporting research which improves understanding and quantification of the societal impact of NOAA-related science and operations and by determining methods for better communication of scientific results and findings.

## B. Program Priorities

NOAA expects the award recipient to address the following four programmatic areas:

I. Identify, manage, and develop postdoctoral and visiting scientists with expertise across the full spectrum of NOAA-related sciences who will collaborate with NOAA professionals and

other researchers either in NOAA facilities or in other research environments.

II. Promote undergraduate and graduate exposure and participation in NOAA-related science through the development of innovative workshops and collaboration opportunities with professional researchers and scientists inside and outside of NOAA.

III. Conduct research which improves the understanding and quantification of societal impacts of NOAA-related science and operations and determines methods for better communication of scientific results and findings.

IV. Conduct research to develop earth-system models which complement and serve as a catalyst for collaborative activities between NOAA scientists and early career and visiting scientists supported through the program.

Applicants are encouraged to develop innovative methods to achieve these program priorities. We anticipate participation across numerous NOAA programs, offices, and scientific foci. Several collaboration opportunities are listed below, but proposals are not limited to these areas:

National Weather Service (NWS)/National Water Center (NWC)

The NWC is a geographically distributed organization which includes elements in Maryland, Minnesota and Alabama. Its vision is to deliver scientific excellence and innovation driving water prediction to support decisions for a water-resilient nation. The NWC collaboratively researches, develops and delivers state-of-the-science National hydrologic analyses, forecast information, data, decision-support services and guidance to support and inform essential emergency services and water management decisions. In partnership with NWS national, regional and local offices, the NWC coordinates, integrates and supports consistent water prediction activities from global to local levels.

Within the NWC Interdisciplinary Science and Engineering and the Analysis and Prediction Divisions, visiting scientists may collaborate on projects to develop cutting edge scientific techniques for all aspects of water resources forecasting and verification. This includes development, enhancement, testing, and evaluation of components such as meteorological ensemble preprocessors, hydrologic ensemble post-processors, verification techniques, and data assimilators. Other opportunities related to hydrometeorological forcing data derivation and hydrologic/hydraulic modeling are also available.

Within the NWC Geo-Intelligence Division, visiting scientist may work on techniques to integrate modeling output information with geospatial datasets in order to develop

environmental intelligence for water resources. Additionally within the Hydrometeorological Design Studies Center, opportunities exist for visiting scientists to work with NWC researchers on the development of updated precipitation frequency estimates for the Nation, including data collection, quality control, regionalization, frequency distribution selection, frequency calculations, and derivation of short duration estimates, ensuring both internal consistency at observing and spatially interpolated locations.

Within the NWC Social Intelligence Division, visiting scientists may collaborate on the integration of social science disciplines with new high-resolution water intelligence to better meet stakeholder's requirements for information and services supporting critical decision making.

The NWC has adopted the National Center for Atmospheric Research-developed WRF-Hydro system as the initial framework for a National Water Model. The demonstration, evaluation, and continued development of this modeling system will serve as an opportunity for collaboration between scientists supported by the NSCP, NWC and other NOAA staff.

#### NWS/National Centers for Environmental Prediction (NCEP)

NCEP delivers national and global weather, water, climate and space weather guidance, forecasts, warnings and analyses to NWS field offices, government agencies, emergency managers, private sector meteorologists, and meteorological organizations and societies throughout the world. NCEP products and services are used to protect life and property, enhance the nation's economy and support the nation's growing need for environmental information. NCEP consists of nine Centers: Aviation Weather Center, Climate Prediction Center, Environmental Modeling Center, National Hurricane Center, NCEP Central Operations, Ocean Prediction Center, Space Weather Prediction Center, Storm Prediction Center, and Weather Prediction Center.

Visiting scientists will have the opportunity to help NCEP centers accelerate the transition of scientific advances into NOAA operations supporting a Weather Ready Nation capable of anticipating and responding to extreme weather, water and climate events. Visitors integrated within operational units will assist in NOAA Research to Operations (R2O) transition activities, bringing new concepts, tools, processes, and innovation to the conduct of operations more efficiently. Their presence will enhance ongoing activities and catalyze new efforts at several of the onsite test-beds while promulgating an environment ripe for innovation. By immersing visiting scientists in the NCEP culture and operational infrastructure, the visitors can carry valuable insights and capabilities back to their home institutions, thereby facilitating Operations to Research (O2R) support.

Opportunities exist to strategically engage visiting scientists in areas such as numerical and ensemble modeling, product verification, forecast tools and techniques, and development of probabilistic prediction techniques. Visiting scientists can work with NCEP Centers to help communities, businesses, and governments to understand and adapt to weather and climate-related risks. Visiting scientists will have opportunities to experiment with operational NOAA modeling systems spanning land, atmosphere and ocean. Areas of investigation may include advanced data assimilation techniques, model physics development and testing, and dynamic core formulation and advanced numerical grid techniques. In addition, visitors can focus on applied research on satellite data and their potential application to operational forecasts.

#### NWS/Office of the Assistant Administrator (AA)

The NWS AA is interested in supporting studies to 1) determine the effectiveness of operational forecast products in communicating risk and uncertainty in products and services for better decision-making by emergency managers, media, the general public, and other entities, 2) conduct cost-benefit analyses of operational products and services, 3) develop educational materials in the social sciences and societal impacts, and 4) participate in existing natural science testbeds or operational proving grounds to evaluate new operational processes (including the integration of social science into new skill sets, communication tools and decision support tools) in an effort to illustrate the value to the general public of incorporating social science in operational products.

#### Office of Oceanic and Atmospheric Research (OAR)/Climate Program Office (CPO)

The goal of CPO's support of postdoctoral programs is to grow the pool of scientists qualified to transfer advances in climate science and climate prediction into climate-related decision framework(s) and decision tools. The program pairs early-career climate scientists with hosting institutions. The hosts provide the climate research expertise and opportunities for the scientists to immerse themselves in a decision-making culture and learn from each other. CPO plans to support an additional program that will help create and train the next generation of researchers needed for climate studies. It was anticipated that several prominent NOAA climate observing project efforts would generate a tremendous amount of data that would require the attention of an enlarged research community here and abroad. In the larger view, it was necessary to attract some of the new postdoctoral scientists to the community to establish scientific leadership for future programs. The program plans to accomplish this by attracting outstanding postdoctoral researchers in the sciences relevant to the NOAA Climate and Global Change Program. The program supports research on climate variations with time scales of seasons to centuries.

#### OAR/Geophysical Fluid Dynamics Laboratory (GFDL)

Opportunities for visiting scientists to collaborate with NOAA researchers at GFDL under a new award would include: research on high resolution atmospheric models, with a focus on tropical storms and other aspects of the tropical atmosphere; analysis of high-resolution present-day climate simulations using the GFDL HiRAM at 12.5 km resolution; experimental global cloud-resolving experiments with GFDL's HiRAM with improved cloud micro-physics; study of decadal variability and predictability using new mathematical techniques; development of a methodology for optimally estimating parameters for climate models; focus on various issues related to the Atlantic ocean and climate, comparing observed Atlantic ocean circulation and variability to that simulated in models; work on issues related to ocean observations and assimilation for studies of climate variability and change; modeling and analysis of atmospheric chemistry and climate; development of a new parameterization for boundary layers and clouds for CM3; use of ARM observations to evaluate behavior of clouds in GFDL climate models.

#### OAR/Office of Weather and Air Quality (OWAQ)

OWAQ opportunities will include funding to support postdoctoral, visiting scientists, and researchers to serve as experts and liaisons between the meteorological community and groups working on disaster risk communication and other relevant societal impacts research to aid in improving policies and weather products and services. This activity will provide support on the use of social science research in the area of hazardous weather, in particular in the creation of weather decision support tools and disseminating forecasts and warnings to the nation, and how this research can be transitioned into operational environments. This work will also conduct research and produce analyses in the social and behavioral sciences to improve high-impact weather forecasts such that the information invokes the necessary human response to protect life and property and make recommendations on improvements to public policies, products, and services by recommending research and analyses that are needed between the social sciences and meteorological communities.

#### National Ocean Service (NOS)/Coastal Survey Development Laboratory (CSDL)

The CSDL program builds community interactions by bridging early career scientists with experienced scientists to learn and perform research with NOS scientists. The learning and sharing of ideas continues to strengthen the collaborative ties of the visiting scientists, NOS, the university community, and the public benefits from the advancements from this research and development program. Visiting scientists will have the opportunity to partner with NOS scientists on various research issues related to coastal and oceanic modeling and observational and environmental studies, which help support the health and safety of our nation's coastal ecosystem. Research and development activities include: development of hydrodynamic model-based forecast systems; development of tidal models; development of coupled storm surge, tidal and wave inundation modeling and forecast capabilities; and

coupling of hydrodynamic and ecological models for short-term coastal forecasting of water quality and for longer-term projections of the impacts of climate change and sea level rise.

#### NOS/National Geodetic Survey (NGS)

NGS provides the framework for all positioning activities in the Nation. The foundational elements - latitude, longitude, elevation and shoreline information - contribute to informed decision making and impact a wide range of important activities including mapping and charting, flood risk determination, transportation, land use and ecosystem management. NGS' authoritative spatial data, models and tools are vital for the protection and management of natural and manmade resources and support the economic prosperity and environmental health of the Nation. Opportunities will be available to early career scientists to collaborate with NGS professionals in projects consistent with the NGS mission.

#### National Environmental Satellite, Data, and Information Service (NESDIS)/ Center for Satellite Applications and Research (STAR)

At NESDIS STAR, opportunities will be available in the Ocean Surface Winds Project. This effort involves the development and validation of new and existing satellite microwave remotely-sensed ocean surface wind products from active (i.e., QuikSCAT, ASCAT, RapidScat and ScatSat) and passive (i.e., WindSat and AMSR-2) sensors, and the development of methodologies for proper utilization of these products. The project works closely with international partners, such as EUMETSAT, JAXA and ISRO, in addition to NASA and university partners. Additional areas for collaboration fall in the area of intelligent data system design and development. This effort involves the design and development of database management schemes. The ever growing voluminous amounts of environmental remote sensing satellite data presents a challenge when it comes to sorting and extracting information to address a specific problem (time, geographic location and data type). This effort aims to address these challenges to benefit the broader satellite data community.

#### NOAA Workshop Support

NOAA plans to provide support to establish forums and workshops complementary to NOAA operational and science programs that host visiting scientist and fellows. Through these activities, the community has the opportunity to understand the impacts of NOAA-related science on technology, infrastructure and the economy, as well as improve operational science, products, services, and applications to serve a broad and growing user community.

#### C. Program Authority

NOAA's authority to support the research and associated activities anticipated by this

FFO is contained in one or more of the following:

-- 15 U.S.C. § 313, the Weather Service Organic Act;

-- 49 U.S.C. § 44720, which authorizes NOAA, inter alia, to maintain agreements and support research projects in meteorology through the use of private and Governmental research facilities; and

-- 33 U.S.C. § 893a, the provision of the America COMPETES Act which authorizes NOAA to conduct, develop, support, promote, and coordinate formal and informal educational activities at all levels to enhance public awareness and understanding.

## II. Award Information

### A. Funding Availability

The total NOAA funding amount available for the NSCP is anticipated to be approximately \$10,000,000 to \$15,000,000 per year or a total of \$50,000,000 to \$75,000,000 for the five-year period. There will be appropriation of some funds at the start of the award. NOAA anticipates making one award for the five year period and anticipates providing funds one or more times each year for the five years. NOAA has no obligation to provide additional funding in connection with that award in subsequent years. Funding for each subsequent year of a multi-year proposal is at the discretion of NOAA and is subject to the availability of funds.

### B. Project/Award Period

This program announcement is for support of a program for up to a 5-year period, with an anticipated start date of October 1, 2016, and ending date of September 30, 2021, unless otherwise directed. Funding for each subsequent year of a multi-year proposal is at the discretion of NOAA. It will be contingent upon satisfactory progress in relation to the stated goals of the proposal and the availability of funds. Applications must include a program narrative and a budget for the entire proposed award period broken out in yearly periods.

### C. Type of Funding Instrument

The funding instrument used for this program will be a cooperative agreement since several NOAA organizations and programs will be substantially involved in working with the award recipient. An example of substantial involvement includes, but is not limited to, collaboration between a postdoctoral scientist interacting with a NOAA research scientist on a project of joint interest.

### III. Eligibility Information

#### A. Eligible Applicants

Eligible applicants must be academic institutions of higher learning which offer doctoral degrees in NOAA-related sciences; consortia of academic institutions of higher learning which offer doctoral degrees in NOAA-related sciences; and non-profit research institutions. Multi-institution applications will not be accepted.

#### B. Cost Sharing or Matching Requirement

No cost sharing is required under this program.

#### C. Other Criteria that Affect Eligibility

None.

### IV. Application and Submission Information

#### A. Address to Request Application Package

The standard application package is available at <http://www.grants.gov>. An application package may also be requested by contacting Sam Contorno, Research, Grants, and University Liaison, National Water Center, NOAA/NWS, 205 Hackberry Lane, Tuscaloosa, Alabama 35401, Phone: 205-347-1313, email: [samuel.contorno@noaa.gov](mailto:samuel.contorno@noaa.gov).

#### B. Content and Form of Application

Proposals should total no more than 50 pages in length, single spaced. Additional pages will not be considered during proposal evaluation. It is strongly recommended that Times New Roman 12 point font, or an equivalent, be used. Federally mandated forms, tables of content, principal investigator (PI) and staff vitae, budget tables and any letters of support are not included within the page count.

Multi-year proposals up to a maximum of five years will be considered; however, funding beyond the first year will be dependent upon satisfactory performance and the availability of funds. October 1, 2016 is to be used as the proposed start date on proposals unless otherwise directed by the NOAA Program Officer.

The application elements listed below are required before an award can be made. Failure to submit elements 1, 4, and 5 by the deadline will result in the application not being reviewed if the omissions are not corrected prior to the deadline. The program office will make an effort to notify the applicant of any omissions, but there is no guarantee this can occur prior

to the application deadline. The aforementioned application elements are as follows:

1. **Title Page.** The title page must be officially authorized by the institutional representative. The PI and institutional representative should be identified by full name, title, organization, telephone number, and address. It is requested that the title page clearly indicates the total amount of requested Federal funds for each budget period.
- 2 **Abstract Page.** An abstract should be included and should contain an introduction of the problem, rationale, and a brief summary of work to be completed. The abstract should appear on a separate page, headed with the proposal title, institution's investigators, total proposed cost, and budget period.
3. **Results from Prior Training and/or Research.** The results of relevant projects should be described, including their relation to the currently proposed work. Reference to each prior award should include the title, agency, award number, PIs, period of award, and total award. The section should be a brief summary and should not exceed five pages total.
4. **Project description.** The proposed project must be completely described, including identification of the problem; scientific objectives; proposed methodology; relevance to the program priorities; and scientific merit. Benefits of the proposed project to the general public and the broader scientific and educational community must be discussed. A year-by-year summary of proposed work must be included.
5. **Budget, Proposed Budget Justification, and Other Required Forms.** Applicants must submit a Standard Form (SF) 424, Application for Federal Assistance, including a detailed budget using the SF 424A, Budget Information--Non-Construction Programs. (The forms are available on grants.gov.) Applicants should pay careful attention to show the yearly budget breakout on the SF 424A for multi-year proposals. In addition, the body of the proposal should include a separate table showing total and annual budgets (if multi-year) corresponding with the project description. Additional text to justify expenses should be included as necessary.

If indirect charges are included in the budget, applicants must have an approved negotiated Indirect Cost Rate Agreement. If applicants have not previously established an indirect cost rate with a Federal agency they may choose to negotiate a rate with the Department of Commerce or use the de minimis indirect cost rate of 10% of MTDC (as allowable under 2 C.F.R. §200.414). The negotiation and approval of a rate is subject to the procedures required by NOAA and the Department of Commerce Standard Terms and Conditions Section B.06.

The NOAA contact for indirect or facilities and administrative costs is:

Lamar Revis, Grants Officer  
NOAA Grants Management Division  
1325 East West Highway  
9th Floor Silver Spring, Maryland 20910  
Lamar.revis@noaa.gov

The application must also include form SF-424B, Assurances – Non-Construction Programs; form CD-511, Certifications; and (5) SF-LLL, Disclosure of Lobbying Activities.

6. Vitae. Abbreviated curriculum vitae are sought with each proposal. Reference lists should be limited to all publications in the last five years with up to five other relevant papers.

7. Current and Pending Support. For each investigator, submit a list which includes project title, supporting agency with grant number, investigator months, dollar value, and duration. Requested values should be listed for pending support.

8. National Environmental Policy Act (NEPA) Questionnaire: This program does not require any NEPA questions to be answered as part of the application.

C. Unique entity identifier and System for Award Management (SAM)

The identifier for this competition is: NOAA-NWS-NWSPO-2017-2004858 .

Each applicant is required to:

- (i) Register in SAM before submitting an application;
- (ii) Provide a valid unique entity identifier in the application; and
- (iii) Continue to maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by NOAA (or any other Federal agency).

NOAA may not make a Federal award to an applicant until the applicant has complied with all applicable unique entity identifier and SAM requirements. If an applicant has not fully complied with the requirements by the time NOAA is ready to make a Federal award, NOAA may determine that the applicant is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another applicant.

#### D. Submission Dates and Times

The deadline for receipt of proposals is 5:00 p.m. CDT on June 13, 2016. For proposals submitted through grants.gov, a date and time receipt indication is included and will be the basis of determining timeliness. Grants.gov requires applicants to register with the system prior to submitting an application. This registration process can take several weeks and involves multiple steps. In order to allow sufficient time for this process, you should register as soon as you intend to apply, even if you are not yet ready to submit your application. Hard copy proposals will be date and time stamped when they are received in the program office. Proposals received after the deadline will be rejected or returned to the sender without further consideration.

#### E. Intergovernmental Review

Applications under this program are not subject to Executive Order 12372, Intergovernmental Review of Federal Programs.

#### F. Funding Restrictions

Funding beyond the first year will be dependent upon satisfactory performance and the continued availability of funds.

#### G. Other Submission Requirements

Applications are to be submitted to Grants.gov. If that is not possible, hard copy applications may be sent to:

Sam Contorno, Grants, Research, and University Liaison, National Water Center,  
NOAA/NWS, 205 Hackberry Lane, Tuscaloosa, Alabama 35401.

### V. Application Review Information

#### A. Evaluation Criteria

The evaluation criteria and weighting of the criteria are as follows:

1. Importance/Relevance and Applicability of Proposal (25 percent): This criterion ascertains whether there is intrinsic value in the proposed work and/or relevance to NOAA, federal, regional, state, or local activities. For the NOAA Science Collaboration Program competition this includes:

- a) What is the likelihood that the proposed scientific collaborations will develop research personnel across the full spectrum of NOAA-related sciences with a stronger understanding of these sciences and NOAA fields of work?
- b) Can the proposed research activities lead to improved understanding of NOAA-related science by society?
- c) What is the degree and quality of collaboration with multiple NOAA units throughout the project?

2. Technical/Scientific Merit (20 percent): This criterion assesses whether the approach is technically sound and/or innovative, if the methods are appropriate, and whether there are clear project goals and objectives. For the NOAA Science Collaboration Program competition this includes:

- a) Was a sound strategy developed to identify, develop, and manage the scientists that will enter the program and work with NOAA professionals across numerous science areas?
- b) Were focused scientific objectives and strategies, including data management considerations, project milestones, and timelines used?

3. Overall Qualification of Applicants (30 percent): This criterion ascertains whether the applicant possesses the necessary education, experience, training, facilities, and administrative resources to accomplish the project. For the NOAA Science Collaboration Program competition this includes:

- a) Do PIs clearly document past experience with identifying, developing, and managing undergraduate, graduate, and postdoctoral scientists in NOAA-related sciences and have the technical expertise to conduct research in the societal related impacts of environmental and related sciences?
- b) Have past experiences been successful?
- c) Are the PIs and scientists brought into the program likely to maintain effective and consistent interactions with NOAA professionals throughout the course of the proposed research program?
- d) Have PIs demonstrated the ability to conduct successful program management and coordinate research activities?

4. Project Costs (15 percent): This criterion evaluates the budget to determine if it is realistic and commensurate with the project needs and time-frame. For the NOAA Science Collaboration Program competition this includes:

- a) Is there an efficient plan in place to identify, develop, and manage collaborating scientists entering the program?
- b) Through the proposed project plan, do the PIs demonstrate the ability to manage resources effectively?

5. Outreach and education (10 percent): 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 NOAA Science Collaboration Program competition this includes:

- a) Will scientists entering the program develop a richer understanding and knowledge of NOAA-related science?
- b) Will research results be communicated in an effective way to develop an awareness of environmental sciences and the potential impact on society?

#### B. Review and Selection Process

An initial administrative review/screening is conducted to determine compliance with requirements/completeness. All proposals will be evaluated and individually ranked in accordance with the assigned weights of the above evaluation criteria by an independent peer panel review. Four to seven NOAA employees, primarily representing units that will likely be involved with scientific collaborations with the applicant, may be used in this process. The merit reviewers' ratings are used to produce a rank order of the proposals. The Selection Official selects proposals after considering the peer panel reviews and selection factors listed below. In making the final selections, the Selecting Official will award in rank order unless the proposal is justified to be selected out of rank order based upon one or more of the selection factors.

#### C. Selection Factors

The Merit review ratings shall provide a rank order to the Selecting Official for final funding recommendations. The Selecting Official shall award in the rank order unless the proposal is justified to be selected out of rank order based upon one or more of the following factors:

1. Availability of funding
2. Balance and distribution of funds:
  - a. By research area
  - b. By project type
  - c. By type of institution
  - d. By type of partner
  - e. Geographically
3. Duplication of other projects funded or considered for funding by NOAA/federal agencies.
4. Program priorities and policy factors.
5. Applicant's prior award performance.
6. Partnerships with/Participation of targeted groups.
7. Adequacy of information necessary for NOAA staff to make a National Environmental Policy Act (NEPA) determination and draft necessary documentation before recommendations for funding are made to the NOAA Grants Officer.

#### D. Anticipated Announcement and Award Dates

Subject to the availability of funds, review of proposals will occur during June 2016, and funding should begin during October of 2016. October 1, 2016, should be used as the proposed start date on proposals, unless otherwise directed by the Program Officer.

## VI. Award Administration Information

### A. Award Notices

The successful applicant will receive notification that the application has been recommended for funding to the NOAA Grants Management Division. This notification is not an authorization to begin performance of the project. Official notification of funding from the NOAA grants Officer is the authorization that allows the project to begin. Notification will be issued to the Authorizing Official and the PI of the project either electronically or in hard copy. Unsuccessful applicants will be notified that their proposals

were not selected for recommendation.

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 proposal awarded in response to this announcement will be required to use the 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 (2013),

[http://www.ecfr.gov/cgi-bin/textidxSID=1ccffb4c1d4de03add6a041113460f9&mc=true&n ode=se2.1.200\\_1300&rgn=div8](http://www.ecfr.gov/cgi-bin/textidxSID=1ccffb4c1d4de03add6a041113460f9&mc=true&n ode=se2.1.200_1300&rgn=div8).

#### B. Administrative and National Policy Requirements

1. The Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements. Administrative and national policy requirements for all Department of Commerce awards are contained in the Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements published in the Federal Register on December 30, 2014 (79 FR 78390). You may obtain a copy of this notice by contacting the agency contact, or by going to the website at <http://www.gpoaccess.gov/fr/index.html>.

2. Unpaid or delinquent tax liability. 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. If a form is provided, an award may not be issued until it is returned and accepted by NOAA.

3. Data Sharing Plan. 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.

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.

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.

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.

4. 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.

5. 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.osec.doc.gov/bmi/daos/216-6.htm>, and the Council on Environmental Quality implementation regulations, [http://ceq.eh.doe.gov/nepa/regs/ceq/toc\\_ceq.htm](http://ceq.eh.doe.gov/nepa/regs/ceq/toc_ceq.htm). 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). 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 feasible measures to reduce or avoid any identified adverse environmental impacts of their proposal. The failure to do so shall be grounds for not selecting an application. In some cases if additional information is required after an application is selected, funds can be withheld by the Grants Officer under a special award condition requiring the recipient to submit additional environmental compliance information sufficient to enable NOAA to make an assessment on any impacts that a project may have on the environment.

6. Executive Order 12906. The recipients must comply with Executive Order 12906

regarding any and all geospatial data collected or produced under grants or cooperative agreements. This includes documenting all geospatial data in accordance with the Federal Geographic Data Committee Content Standard for digital geospatial data.

7. Review of Risk. After applications are proposed for funding by the selecting official, the Grants Officer performs administration reviews. These may include financial stability of an applicant, quality of the applicant's management systems, history of performance, and the applicant's ability to effectively implement statutory, regulatory, or other requirements imposed on non-federal entities. Also, if appropriate, special conditions that correspond to the degree of risk may be applied.

8. Freedom of Information Act (FOIA). In the event that an application contains information or data that you do not want disclosed prior to award for purposes other than the evaluation of the application, you should mark each page containing such information or data with the words "Privileged, Confidential, Commercial, or Financial Information - Limited Use" at the top of the page to assist NOAA in making disclosure determinations. DOC regulations implementing FOIA are found at 5 U.S.C 552, which sets forth rules for DOC to make requested materials, information, and records publicly available under FOIA.

### C. Reporting

Award recipients will be required to submit financial and performance (technical) reports. These reports are to be submitted electronically through the NOAA Grants Online system on a semi-annual (financial) and annual (technical) basis. All financial reports are routed directly to the NOAA Grants Officer. Performance reports are routed to the NOAA Federal Program Officer.

The first technical progress report covering the first 9 months of a multi-year award is due 10 months after the start date of the award. Each subsequent technical progress report covering a period of 12 months is due 12 months after the previous report. The comprehensive final technical progress report is due 90 days after the expiration date of the award.

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.

## VII. Agency Contacts

The point of contact is Sam Contorno, Research Grants, and University Liaison, National Water Center, NOAA/NWS, 205 Hackberry Lane, Tuscaloosa, Alabama 35401, or by phone at 205-347-1313, or via email at [samuel.contorno@noaa.gov](mailto:samuel.contorno@noaa.gov).

#### VIII. Other Information

To use [grants.gov](https://www.grants.gov), applicants must have a Dun and Bradstreet Data Universal Numbering System (DUNS) number and be registered in the Central Contractor Registry (CCR). Allow a minimum of five days to complete the CCR registration. [Note: Your organization's Employer Identification Number (EIN) will be needed on the application form.] Applicants are strongly encouraged not to wait until the application deadline date to begin the application process through [grants.gov](https://www.grants.gov).