

NOAA Science Collaboration Program

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NOTICE OF FUNDING OPPORTUNITY

EXECUTIVE SUMMARY

Federal Agency Name(s): Oceanic and Atmospheric Research (OAR), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce

Funding Opportunity Title: NOAA Science Collaboration Program

Announcement Type: Initial

Funding Opportunity Number: NOAA-OAR-CPO-2021-2006797

Catalog of Federal Domestic Assistance (CFDA) Number: 11.431, Climate and Atmospheric Research

Dates: Full Applications: Full applications for competition must be received by 5:00 p.m. Eastern Time, on May 10, 2021.

Funding Opportunity Description: The NOAA Science Collaboration Program (NSCP) supports research, programs, projects and other activities related to NOAA's mission, primarily through collaborations among scientists and professionals in areas of mutual interest across the full spectrum of NOAA sciences. This includes the support of undergraduate, graduate, and postdoctoral researchers and scientists with expertise in NOAA-related sciences. It is expected that some of the scientists will collaborate onsite at NOAA facilities and laboratories.

Through this funding opportunity, NOAA is also interested in supporting complementary Earth systems research and modeling efforts, social science and interdisciplinary research efforts which can serve as a catalyst for collaborations between NOAA professionals and scientists supported through this program.

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; or 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.

NOAA, OAR, and the Climate Program Office (CPO) encourage applicants and awardees to support the principles of diversity and inclusion when writing their proposals and performing their work. Diversity is defined as a collection of individual attributes that together help organizations achieve objectives. Inclusion is defined as a culture that connects each employee to the organization. Promoting diversity and inclusion improves creativity, productivity, and the vitality of the climate research community in which NOAA engages.

This announcement provides requirements and details for the technical program, evaluation criteria, and competitive selection procedures.

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 five priority areas:

1. 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.

2. 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.
3. 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.
4. 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.
5. Develop and conduct integrated, interdisciplinary approaches and collaborations to produce usable and actionable science to inform, support, and otherwise improve weather, water and climate risk reduction and resilience.

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:

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 advance scientific understanding and 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. 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. CPO 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.

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. Additional focus may include research and development to improve coupled storm surge, wave, and freshwater inundation modeling, and associated grids, to support operational forecasts, hindcasts, and coastal community preparedness.

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.

NWS/Office of Science and Technology Integration (OSTI)

NWS/OSTI performs portfolio management for planning, research and development, and integration efforts for science and technology improvements across the NWS. OSTI develops potential scientific and technological solutions through coordination with partners within NOAA and with the external research community; and sponsors applied research and development of programs/projects to address these requirements. Major research and development areas of the Office include, but are not limited to, improvement of operational atmosphere, ocean, land, sea ice, hydrological and other components of environmental prediction models, operational guidance and decision support tools, and social science integration. OSTI's modeling programs prioritize the development of the Unified Forecast System (UFS), a community-based, coupled, comprehensive Earth modeling system. The UFS numerical applications span local to global domains and predictive time scales from sub-hourly analyses to seasonal predictions. It is designed to support the Weather Enterprise (<https://www.weather.gov/about/weather-enterprise>) and to be the source system for NOAA's operational numerical weather prediction applications. The office is also responsible for developing models and databases for post storm assessments as required by the Consumer Option for an Alternative System to Allocate Losses (COASTAL) Act. To achieve these mission goals and objectives, OSTI will support visiting scientists and postdoctoral research associates in the following program areas: 1) establishing the science priorities, organizational structures and strategies of the UFS; 2) supporting and facilitating scientific communications in disaster weather events, model development, and data collection to accelerate science and technology integration; 3) developing components and applications of the UFS, including model physics, coupling infrastructure, data assimilation algorithms and their integration with UFS.[1]

OAR/Geophysical Fluid Dynamics Laboratory (GFDL)

Opportunities for visiting scientists to collaborate with NOAA researchers at GFDL under a new award would include: comprehensive long-lead-time research and numerical modeling that is fundamental to advancing the scientific understanding of the physical, dynamical, chemical and biogeochemical processes governing the behavior of the atmosphere, oceans, land, and ice components and their interactions with the ecosystem. Development and use of GFDL models, including, among others, AM4, CM4, Earth System Models (ESMs), Finite-Volume Cubed-Sphere Dynamical Core (FV3)-based systems, High Resolution Atmospheric

Model (HiRAM), Modular Ocean Model version 6 (MOM6), Seamless System for Prediction and Earth System Research (SPEAR), and System for High-resolution modeling for Earth-to-Local Domains (SHIELD), while contributing to and leveraging analysis of the Coupled Model Intercomparison Project Phase 6 (CMIP6) ensembles.

OAR/Weather Program Office (WPO)

WPO 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 volume of environmental remote sensing satellite data presents a challenge with respect 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 scientists 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;
- 15 U.S.C. 111, Weather Research and Forecasting Innovation Act
- 49 U.S.C. 44720(b), 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. 893(a), 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, 2021, and ending date of September 30, 2026. 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

Application packages are at grants.gov. For applicants without Internet access, please contact the NOAA Program Officer, Kendra Hammond by mail at NOAA Climate Program Office (R/CP1), SSMC3, Room 12705, 1315 East-West Highway, Silver Spring, MD 20910 to obtain an Application Package.

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, 2021 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 Narrative. 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](https://www.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. Additional budget narrative guidance provided by NOAA Grants Management Division can be found here:
https://www.noaa.gov/sites/default/files/atoms/files/gmd_budget_narrative_guidance_-_05-24-2017_final.pdf

If indirect charges are included in the budget, a copy of the institution's current Indirect Cost Rate Agreement (IDCRA) must be included. The IDCRA does not, however, count as part of the required page limit. To obtain an indirect cost rate if your organization does not already have one, applicant must submit an indirect cost proposal to its cognizant agency and negotiate an indirect cost agreement. If an applicant has not previously (ever) 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 2C.F.R. 200.414). This document is not a part of the page limit.

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 requested 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)

In order to submit an application through Grants.gov, an applicant must register for a Grants.gov user ID and password. Note that this process can take between three to five business days or as long as four weeks if all steps are not completed correctly. To avoid delays, applicants are strongly encouraged to start early and not wait until the approaching application deadline before registering, logging in, reviewing the application instructions, and applying. Information about the Grants.gov registration process for organizations can be found at http://grants.gov/applicants/organization_registration.jsp.

Please note that organizations already registered with Grants.gov do not need to re-register; however, all registered organizations must keep their Grants.gov password and SAM database (which now incorporates CCR) registration up-to-date or their applications will not be accepted by Grants.gov. Note that your CCR username will not work in SAM. You must create a new SAM user account to renew or update your registration. Registration on SAM is a requirement. To obtain additional information and to verify that all required registrations are current, please visit www.sam.gov/portal/public/SAM.

If you experience a Grants.gov systems issue (technical problems or glitches with the Grants.gov website) that you believe threatens your ability to complete a submission before the application deadline, please do all of the following:

Print any error message received

Call the Grants.gov Contact Center at 1-800-518-4726 for immediate assistance

Contact NOAA using the contact information in section VIII. of this NOFO prior to the close of the competition

Ensure that you obtain a case number regarding your communications with Grants.gov

In the event of a confirmed systems issue, NOAA reserves the right to accept an application

in an alternate format prior to the application deadline. Problems with an applicant organization's computer system or equipment are not considered systems issues. Similarly, an applicant's failure to do the following are not considered systems issues:

- Complete the required registration
- Ensure that a registered Authorized Organization Representative (AOR) submits the application
- Read an email message with guidance from Grants.gov

D. Submission Dates and Times

The deadline for receipt of proposals is 5:00 p.m. Eastern Time, on May 10, 2021. 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. 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

All applications should be submitted through grants.gov. If an applicant does not have Internet access, the NOAA Program Officer, Kendra Hammond should be contacted by mail at NOAA Climate Program Office (R/CP1), SSMC3, Room 12705, 1315 East-West Highway, Silver Spring, MD 20910 for hard copy submission instructions.

Faxed or emailed copies of applications will not be accepted.

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 a group of scientist with diverse backgrounds and areas of expertise 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 applications will occur during Spring 2021, and funding decisions will be made in June 2021. Funding is expected to begin during October of 2021. October 1, 2021, 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 Grants Officer will provide notice to the applicant that they have received the award. Successful applicants will receive notification that the application has been recommended for funding by an official of the NOAA Climate Program Office. This notification is not an authorization to begin performance of the project. The official notification of funding, signed by a NOAA Grants Officer, is the authorizing document that allows the project to begin. Notifications will be issued to the Authorizing Official and the Principal Investigator of the project. Unsuccessful applicants will be notified that their application was 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.

B. Administrative and National Policy Requirements

UNIFORM ADMINISTRATIVE REQUIREMENTS, COST PRINCIPLES, AND AUDIT REQUIREMENTS. Through 2 C.F.R. § 1327.101, the Department of Commerce adopted Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards at 2 C.F.R. Part 200, which apply to awards in this program. Refer to <http://go.usa.gov/SBYh> and <http://go.usa.gov/SBg4>.

DOC TERMS AND CONDITIONS. Successful applicants who accept a NOAA award under this solicitation will be bound by Department of Commerce Financial Assistance Standard Terms and Conditions. This document will be provided in the award package in NOAA's Grants Online system at <http://www.ago.noaa.gov> and at <http://go.usa.gov/hKbj>.

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 30, 2014 (79 FR 78390) are applicable to this solicitation and may be accessed online at <http://www.gpo.gov/fdsys/pkg/FR-2014-12->

30/pdf/2014-30297.pdf.

LIMITATION OF LIABILITY - Funding for programs listed in this notice is contingent upon the availability of continuing Congressional appropriations. Applicants are hereby given notice that funds have not yet been appropriated for the programs listed in this notice. In no event will NOAA or the Department of Commerce be responsible for proposal preparation costs. Publication of this announcement does not oblige NOAA to award any specific project or to obligate any available funds.

UNPAID OR DELINQUENT TAX LIABILITY. In accordance with Federal appropriations law, an authorized representative of the selected applicant(s) may be required to provide certain pre-award certifications regarding federal felony and federal criminal tax convictions, unpaid federal tax assessments, and delinquent federal tax returns.

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.nepa.noaa.gov/NAO216_6.pdf, and the Council on Environmental Quality implementation regulations, http://energy.gov/sites/prod/files/NEPA-40CFR1500_1508.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). 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 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. 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.

REVIEW OF RISK - After applications are proposed for funding by the selecting official, the Grants Office will perform administration reviews. These may include assessments of the financial stability of an applicant and the 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. Special conditions that address any risks determined to exist may be applied. Applicants may submit comments to the Federal Awardee Performance and Integrity Information System (FAPIIS) about any information included in the system about their organization for consideration by the awarding agency.

DATA SHARING PLAN - 1. Environmental data and information collected or created under NOAA grants or cooperative agreements must be made discoverable by and accessible to the general public, in a timely fashion (typically within two years), free of charge or at no more than the cost of reproduction, unless an exemption is granted by the NOAA Program. Data should be available in at least one machine-readable format, preferably a widely-used or open-standard format, and should also be accompanied by machine-readable documentation (metadata), preferably based on widely used or international standards. 2. Proposals submitted in response to this Announcement must include a Data Management Plan of up to two pages describing how these requirements will be satisfied. Administrative and National Policy Requirements, below for additional information on what the plan should contain. The Data Management Plan should be aligned with the Data Management Guidance provided by NOAA in the Announcement. The contents of the Data Management Plan (or absence thereof), and past performance regarding such plans, will be considered as part of proposal review. A typical plan should include descriptions of the types of environmental data and information expected 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; methods for providing data access; approximate total volume of data to be collected; and prior experience in making such data accessible. The costs of data preparation, accessibility, or archiving may be included in the proposal budget unless otherwise stated in the Guidance. Accepted submission of data to the NOAA National Centers for Environmental Information (NCEI) is one way to satisfy data sharing requirements; however, NCEI is not obligated to accept all submissions and may charge a fee, particularly for large or unusual datasets. 3. NOAA may, at its own discretion, make publicly visible the Data Management Plan from funded proposals, or use information from the Data Management Plan to produce a formal metadata record and include that metadata in a Catalog to indicate the pending availability of new data. 4. Proposal submitters are hereby advised that the final pre-publication manuscripts of scholarly articles produced entirely or primarily with NOAA funding will be required to be submitted to NOAA Institutional Repository after acceptance, and no later than upon publication. Such manuscripts shall be made publicly available by NOAA one

year after publication by the journal.

INDIRECT COST RATE - If an applicant has 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. 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, MD 20910 lamar.revis@noaa.gov.

MINORITY SERVING INSTITUTIONS - The Department of Commerce/National Oceanic and Atmospheric Administration (DOC/NOAA) is strongly committed to increasing the participation of Minority Serving Institutions (MSIs), i.e., Historically Black Colleges and Universities, Hispanic-serving institutions, Tribal colleges and universities, Alaskan Native and Native Hawaiian institutions, and institutions that work in underserved communities.

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, 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 the Freedom of Information Act (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. The contents of funded applications may be subject to requests for release under the FOIA. Based on the information provided by you, the confidentiality of the content of funded applications will be maintained to the maximum extent permitted by law.

PAPERWORK REDUCTION ACT – This notification involves collection-of-information requirements subject to the Paperwork Reduction Act. The use of Standard Forms 424, 424A, 424B, and SF-LLL and CD-346 has been approved by the Office of Management and Budget (OMB) under control numbers 0348-0043, 0348-0044, 0348-0040, and 0348-0046 and 0605-0001. 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 PRA unless that collection of information displays a currently valid OMB control number.

Sexual Harassment, Other Forms of Harassment, or Sexual Assault.

The Climate Program Office (CPO) will not tolerate sexual harassment, other forms of

harassment or sexual assault within the agency, at awardee organizations, or anywhere CPO-funded science and education are conducted. As the primary funding agency of fundamental science and engineering research in the U.S., CPO is committed to promoting safe, productive research and education environments for current and future scientists and engineers. CPO considers the PI/PD and any co-PI/co-PDs(s) identified on a CPO award to be in positions of trust.

The PI/PD and co-PI/co-PD and all award personnel must comport themselves in a responsible and accountable manner during the performance of award activities whether at the grantee organization, on-line, or conducted outside the organization, such as at field sites, or facilities, or during conferences and workshops.

The many U.S. institutions of higher education and other organizations that receive CPO funds are responsible for fully investigating complaints and for compliance with federal non-discrimination laws, regulations and executive orders. In support of this position, CPO has taken steps to bolster our commitment to a safe research environment, including development and implementation of an award term and condition that requires CPO to be notified: 1) of any past or present findings/determinations regarding the PI/PD or co-PI/co-PD that demonstrate a violation of awardee codes of conduct, policies, regulations or statutes relating to sexual harassment, other forms of harassment, or sexual assault; or 2) if the awardee places, or has placed, the PI/PD, or co-PI/co-PD on administrative leave or imposes, or has imposed, an administrative action relating to a finding or investigation of a violation of awardee policies, codes of conduct, statutes or regulations relating to sexual harassment, other forms of harassment, or sexual assault. New awards funded in FY21 and beyond will have this special award condition (SAC) in the award terms and conditions.

CPO expects all research organizations to establish and maintain clear and unambiguous standards of behavior to ensure harassment-free workplaces wherever science is conducted. A community effort is essential to eliminate sexual and other forms of harassment in science and to build a scientific workspace where people can learn, grow and thrive.

C. Reporting

Award recipients are required to submit financial and technical progress reports. These reports are to be submitted electronically via <https://grantsonline.rdc.noaa.gov>. The first technical progress report covering the first nine 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. Technical progress reports should report on adherence to the Data/Information Sharing Plan and all listed publications resulting from the award should adhere to the requirements established in said section.

The Federal Funding Accountability and Transparency Act, 31 U.S.C. 6101 note, includes a requirement for awardees of applicable Federal grants to report information about first-tier subawards and executive compensation under Federal assistance awards. All awardees of applicable grants and cooperative agreements are required to report to the Federal Sub-award Reporting System (FSRS) available at <https://www.fsrs.gov/> on all sub-awards over \$25,000. Refer to 2 CFR Parts 170.

VII. Agency Contacts

The point of contact is Kendra Hammond, NOAA Program Officer, NOAA/OAR/Climate Program Office, 1315 East West Highway, Rm. 12705, Silver Spring, Maryland 20910, or by phone at 301-734-1223, or via email at kendra.hammond.

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).