

Collaborative Science, Technology, and Applied Research (CSTAR) Program

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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: Collaborative Science, Technology, and Applied Research (CSTAR) Program

Announcement Type: Initial

Funding Opportunity Number: NOAA-NWS-NWSPO-2019-2005754

Catalog of Federal Domestic Assistance (CFDA) Number: 11.468, Applied Meteorological Research

Dates: Letters of Intent (LOIs) submitted by Principal Investigators (PIs) must be received by email no later than 5:00 p.m. Eastern Time (ET) on Tuesday, October 30, 2018. Response letters to PIs will be sent from NOAA by about Wednesday, November 14, 2018. Full application packages must be submitted through Grants.gov no later than 5:00 p.m. ET on Friday December 14, 2018. Expected project start date is May 1, 2019.

Funding Opportunity Description: Through the Collaborative Science, Technology, and Applied Research (CSTAR) Program, the NWS Office of Science and Technology Integration is soliciting proposals to conduct research and development activities. NOAA/NWS believes its warning and forecast mission will benefit significantly from a strong partnership with outside investigators in the broad academic community. The CSTAR Program represents a NWS effort to create a cost-effective transition from basic and applied research to operations and services through collaborative research between operational forecasters and academic institutions which have expertise in the environmental sciences. These activities will engage university researchers and students in applied research of interest to the operational meteorological community for the provision of improving the accuracy of forecasts and warnings of environmental hazards. This announcement is for research and development topics identified as priorities by the NWS to support field forecasting operations. There is one grant competition under this announcement valued at \$700,000 for approximately four to seven new projects.

NOAA's Office of Oceanic and Atmospheric Research (OAR) has announced a Fiscal Year (FY) 2019 federal funding opportunity with eight separate grant competitions reflecting multiple science objectives. Please search for funding opportunity number NOAA-OAR-OWAQ-2019-2005820 in <https://www.grants.gov> to learn more about this NOAA/OAR funding announcement.

FULL ANNOUNCEMENT TEXT

I. Funding Opportunity Description

A. Program Objective

The objective of the Collaborative Science, Technology and Applied Research (CSTAR) Program is to improve the overall forecast and warning capabilities of the operational hydrometeorological community by addressing science and technology research priorities through collaborative research efforts between the National Weather Service (NWS) and academic institutions that have expertise in the environmental sciences. These activities engage university researchers and students in applied research of interest to the operational meteorological community. A goal of this announcement is to foster long-term collaborative interactions between a university and NWS operational offices.

The focus of this funding opportunity is on current science challenges of NWS field offices and NCEP Centers. The research themes of this FFO focus on the application of new science, data, and technologies for the provision of improving the following: i) lead time and accuracy of forecasts and warnings for high impact weather, water, and climate events; and ii) impact-based decision support services (IDSS) and the application and integration of physical and social sciences for improved messaging of weather, water, and climate hazards.

Principal investigators (PIs) should indicate specific collaborative plans for appropriate interactions with personnel at operational NWS units, including Weather Forecast Offices (WFOs), regional NWS offices, and/or NCEP Centers. The focus of the research and development should be on high-impact events, and have long-term potential to be applied on a national scale for operational implementation by NOAA. PIs are encouraged to access the CSTAR Community within the NOAA Virtual Laboratory in order to enhance collaboration and share publication links of project activities and results. Link: <https://vlab.ncep.noaa.gov/>. For additional details on the CSTAR Program, go to http://www.weather.gov/sti/r2o_cstar.

B. Program Priorities

1. Improving the lead-time and accuracy of forecasts and warnings for high impact weather, water, and climate events. This may include:
 - a. Utilizing convection-allowing models and storm-scale ensemble systems to advance Warn-on-Forecast (WoF) capabilities.
 - b. Improving application of Numerical Weather Prediction (NWP) information in the forecast and warning process at various time scales.
 - c. Improving the use of ensemble prediction systems in order to:

- i) enable more effective forecaster assessment of uncertainty and historical context of potential high impact events; and
 - ii) develop Probabilistic Hazard Information (PHI).
- d. Developing improved surface analyses using data fusion to aid in the identification and characterization of high impact events in complex terrain, including rain, snowfall, and terrain-driven wind events.

2. Improving IDSS (Impact-Based Decision Support Services) and the application and integration of physical and social sciences for improved messaging of weather, water, and climate hazards. This may include:

- a. Developing innovative methodologies with experienced social scientists to enable better understanding and communication of Probabilistic Hazard Information (PHI).
- b. Incorporating social science knowledge and practices to more effectively communicate forecast confidence, uncertainty, and impact-based historical context, and identifying potential improvements to warning systems to make them more effective.

C. Program Authority

Authority is provided by the following: 15 U.S.C. 313; 49 U.S.C. 44720 (b); 33 U.S.C. 883d; 15 U.S.C. 2904; 15 U.S.C. 2934.

II. Award Information

A. Funding Availability

The total funding amount available is expected to be approximately \$700,000 per year. Funding of any proposals is contingent upon the availability of these funds. Individual annual awards are limited to a maximum of \$150,000 total per year for no more than three years. It is anticipated that approximately 4-7 awards will be provided.

B. Project/Award Period

This program announcement is for projects to be conducted by university investigators for a 1-year, 2-year, or 3-year period, with an anticipated start date of May 1, 2019 unless otherwise directed. When a proposal for a multi-year award is approved, funding will initially be provided for only the first year of the program. If an application is selected for initial funding, the NWS 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 the NWS. It will be contingent upon 1) satisfactory progress as presented in regular written performance reports in relation to the stated goals of the proposal to address specific science needs and priorities of the NWS, and 2) the availability of funds.

C. Type of Funding Instrument

The funding instrument will be a Cooperative Agreement, since one or more NOAA components, such as NWS forecast offices, NCEP centers, and/or regional headquarters will be substantially involved in the project. NOAA/NWS believes its warning and forecast mission will benefit significantly from a strong partnership with outside investigators in the broad academic community.

III. Eligibility Information

A. Eligible Applicants

Eligible applicants are United States institutions of higher education and other nonprofits.

B. Cost Sharing or Matching Requirement

No cost sharing is required under this program.

C. Other Criteria that Affect Eligibility

Principal Investigators (PIs) must be a full, assistant, or associate college or university professor with substantial documented involvement in the proposal. In addition, collaboration with PIs at different universities is allowed, but there must be a single application from a lead university with sub-awards to any participants from other institutions. Other arrangements will not be considered. Proposals should clearly state the role of each PI in the project. Federal government employees (including federal contractors) are not allowed to be listed as PIs or receive funding, although collaboration between the academic community and NOAA within the project is required. While an eligible institution may submit more than one application, the Selecting Official may require that proposals be combined to increase the cost-benefit to the public. Only one proposal per principal investigator or co-principal investigator at a given institution may be funded.

If the applicant is a university that has a NOAA Joint or Cooperative Institute (CI), the university is encouraged to submit a proposal on behalf of the CI. At the time of submission, each proposal application package must include a cover letter describing the intent to incorporate the terms of the CI Memorandum of Agreement (MOA). The cover letter will specify the name of the CI, the current CI award number, and the NOAA-approved research theme and task applicable to the research to be performed in the proposal's project narrative. The proposal should use the facilities and administrative rate (F&A or indirect cost rate) associated with the CI.

If the CI proposal is selected for funding, NOAA will notify the university that a separate competitive award will be issued with its own award number. However, the competitive award will include a Specific Award Condition (SAC) that evidences the link between it and the CI award. The SAC would provide that (1) the university has submitted the proposal on behalf of the CI; (2) the existing University/NOAA Memorandum of Agreement will be incorporated by reference into the terms of the competitive award; and (3) any progress report(s) for the competitive award must follow the timetable of and be submitted by the CI directly to the funding program. Copies of these progress reports will be attached to the CI's performance report as an appendix.

IV. Application and Submission Information

A. Address to Request Application Package

The standard application package for full proposals is available at: <http://www.grants.gov>. There is no similar official application package for Letters of Intent (LOIs) other than the requirements identified below in Section IV.B.1.

B. Content and Form of Application

The instructions for preparation of LOIs and full proposals provided below are mandatory. Failure to adhere to these requirements will result in LOIs and/or full proposals being rejected and returned without review.

1. Letter of Intent (LOI)

The purpose of the LOI process is to provide information to potential applicants on the relevance of their proposed project in advance of preparing a full application. For this announcement, PIs are strongly encouraged, but not required, to submit a pre-application in the form of a LOI for each planned project. The LOI should identify a targeted priority area outlined in Section I.B., include the principal and co-investigator(s) names and institution(s), summarize anticipated project scope and yearly budget, and be no more than 2 pages in length. LOI's will be reviewed by the Program Office. All PIs will be notified through email by the Federal Program Officer whether a full proposal is encouraged or discouraged about 2 weeks after the LOI due date. Full applications will be encouraged only for LOIs deemed relevant to the program objectives and top priorities specified in this announcement. Even though a proposal may be discouraged, a PI is not precluded from submitting a full proposal.

2. Full Proposal

A complete and full proposal must contain all of the following information. Failure to include all mandatory information will result in rejection of the proposal. Proposals should total no more than 25 pages in length, single spaced including the title page and abstract. It is strongly recommended that Times New Roman 12 point font, or an equivalent, be used. Federally mandated forms, indirect cost-rate agreements, tables of contents, and any letters of support are not included within the page count, but all other information must be included. Multi-year proposals up to a maximum of three years will be considered; however, funding beyond the first year will be dependent upon satisfactory performance and the availability of funds. May 1, 2019 is to be used as the proposed start date for proposals unless otherwise directed by the NOAA Program Officer. The application elements listed below are required before an award can be made, and should be submitted as a part of the application package via grants.gov.

The aforementioned application elements are as follows:

(a) Title Page. The title page must be officially authorized by the institutional representative. All PIs and the institutional representative should be identified by full name, title, organization, telephone number, email address and mailing address. The title page should clearly indicate the priority area(s) being addressed, and the total and annual amount of Federal funds requested.

(b) Abstract Page. A one-page abstract must be included and 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.

(c) Results from Prior Research. The results of relevant projects supported by NOAA and other agencies should be described, including their relation to the currently proposed work. Reference to each prior research award should include the title, agency, award number, PIs, period of award, and total award. This section should be a brief summary and should not exceed two pages total.

(d) Project Description. The proposed project must be completely described, including identification of the problem; scientific objectives; proposed methodology; relevance to the program priorities outlined in Section I.B.; potential operational applicability and/or technology transfer; scientific merit; past collaborations with operational atmospheric scientists; and cost effectiveness of research. The benefits of the proposed project to the general public and the scientific community should be discussed. A year-by-year summary

of proposed work must be included.

(e) Budget and Proposed Budget Justification. The body of the proposal should include a table breaking out total and annual budgets (if multi-year) corresponding with the project description.

In order to fully evaluate the appropriateness of costs, all applications must include a detailed budget narrative and justification to support all proposed budget categories for each project year. The budget narrative must be consistent with the budget table and should be broken out and detailed using the same budget categories as the SF-424A budget form. The information in the budget narrative must be consistent with and justify the budget figures on the SF-424A.

The budget should not include budget information for PIs or co-PIs at other institutions who may be contributing to a joint project but are receiving funding through a separate source, however an additional summary budget may be submitted to document the budget for all partners on a joint project alongside the detailed budget for the submitting PI's own institution.

The applicant should reference the NOAA Grants Management Division budget narrative guidance for the information and level of detailed required in the budget narrative for each budget category. The guidance can be found at <http://www.ago.noaa.gov/grants/training.html> or http://www.ago.noaa.gov/grants/docs/gmd_budget_narrative_guidance_-_05-24-2017_final.pdf.

Applicants requesting an approved Federal indirect cost rate are required to submit a copy of their current and signed indirect cost rate agreement with the application package in order to support the rate used to budget. See VI.B. Administrative and National Policy Requirements, 11. Indirect Cost Rate for more information on indirect cost rates.

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

(g) 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.

(h) A Data Sharing Plan of up to 2 pages must be included. See Section VI.B.6.,

Administrative and National Policy Requirements for information on what the plan should contain.

(i) Letters of support are encouraged but not required.

(j) The full proposal package includes the information described above as well the following required federal forms: (1) Application for Federal Assistance (SF-424), (2) Budget Information--Non-Construction Programs (SF-424A): For multi-year proposals, pay careful attention to show the yearly budget breakout on the SF-424A, (3) Certification Regarding Lobbying (CD-511), (4) Assurances - Non Construction Programs (SF-424B), (5) Disclosure of Lobbying Activities (SF-LLL). Current versions of these forms are available on Grants.gov.

(k) This announcement does not require any National Environmental Policy Act (NEPA) questions to be answered as part of the application. This will be done after project selection if NOAA needs additional information beyond what is described in the proposal package. For additional information on NEPA, see section VI.B.5.

C. Unique Entity Identifier and System for Award Management (SAM)

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, 31 U.S.C. 6101 note, to the extent applicable, any proposal awarded in response to this announcement will be required to use the System for Award Management (SAM), which may be accessed online at <https://www.sam.gov/portal/public/SAM/>. Applicants are also required to use the Dun and Bradstreet Universal Numbering System, as identified in OMB guidance published at 2 CFR Parts 25, which may be accessed at https://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title02/2cfr25_main_02.tpl.

Each applicant is required to:

- (i) Register in SAM before submitting an application.
- (ii) Provide a valid unique entity identifier in the application.
- (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

LOIs must be received by e-mail to christopher.hedge@noaa.gov no later than 5:00 p.m. Eastern Time (ET) on Tuesday, October 30, 2018. NOAA determines whether an LOI has been submitted before the deadline by the date and time on the e-mail. LOIs received after the deadline will not be reviewed, but PIs are still permitted to submit a full proposal. It is expected that response letters to all PIs who submitted LOIs by the due date will be sent via e-mail around 2 weeks after the LOI deadline.

Complete application packages must be submitted through [Grants.gov](https://www.grants.gov) no later than 5:00 p.m. ET on Friday, December 14, 2018. The date and time receipt indication from [Grants.gov](https://www.grants.gov) will be the basis of determining timeliness. Applications received after that time will be rejected and will not be reviewed.

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. NOAA is not responsible for proposal preparation costs.

G. Other Submission Requirements

Applicants are strongly encouraged not to wait until the application deadline date to begin the application process through <https://www.grants.gov>. It can take between 3-5 business days or as long as 3 weeks to register with [grants.gov](https://www.grants.gov) if all steps are not completed in a timely manner. Registration is required only once. [Grants.gov](https://www.grants.gov) users will be able to download a copy of the application package, complete it offline, and then upload and submit the application via the <https://www.grants.gov> site. If an applicant has problems downloading the application forms through <https://www.grants.gov>, contact Customer Support at 1-800-518-4726 (domestic), 1-606-545-5035 (international), or support@grants.gov. To use <https://www.grants.gov>, applicants must have a Dun and Bradstreet Universal Numbering System (DUNS) number and current registration in the System for Award Management (SAM) system. Applicants should allow a minimum of five days to complete the SAM registration. Registration is required only once, but must be renewed periodically. In all, there are approximately eight steps needed to set up your institution's <https://www.grants.gov> account (see <https://www.grants.gov/web/grants/applicants/registration.html>).

V. Application Review Information

A. Evaluation Criteria

Applicants are required to address in their proposal the criteria described in this section, which serves as the fundamental basis for reviewing, scoring, and ranking of the proposals. The evaluation criteria and weighting of the criteria are as follows (for a total of 100 points):

1. Importance/Relevance and Applicability of Proposed Projects to Program Goals (35 points): This criterion ascertains whether there is intrinsic value in the proposed work and relevance to NOAA's top priorities. This includes:
 - a. How well does the proposal address one or more of the science priorities listed in Section I.B.?
 - b. What is the likelihood that the proposed science activities can improve operational meteorological services?
 - c. Does the proposal identify an appropriate degree of collaboration with one or more NOAA operational unit throughout the project?
 - d. Can the proposed research activities, if successful, be transferred to forecast operations by NOAA in a reasonable time frame?
2. Technical/Scientific Merit (30 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. This includes:
 - a. Are the proposal methods and proposed solution technically sound and achievable?
 - b. What is the intrinsic scientific value and maturity of the subject and the proposed study as they relate to the specific science priorities identified in Section I.B.?
 - c. Were focused scientific objectives and strategies, including data management considerations, project milestones, and timelines used?
3. Overall Qualification of Applicants (20 percent): This criterion ascertains whether the applicant possesses the necessary education, experience, training, facilities, and administrative resources to accomplish the project. This includes:
 - a. Do PIs clearly document past scientific collaborations with operational scientists?
 - b. Have researchers demonstrated the ability to conduct successful research?
 - c. Are researchers likely to maintain effective and appropriate interactions with NOAA scientists throughout the course of the proposed research project?
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. This includes:

- a. Are the requested costs realistic, reasonable, allowable, allocable, necessary and commensurate with the project needs and time period?
- b. Has the applicant proposed cost-efficient ways of accomplishing the project?
- c. What is the appropriateness and reasonableness of the budget relative to the benefits to be gained?
- d. Is there a high ratio of operationally useful results versus proposed costs?

B. Review and Selection Process

Once a full application has been received, an administrative review will first be conducted to determine compliance with all submission requirements, completeness of the application, and responsiveness to the NOAA priorities in Section I.B. If all requirements are satisfied and the application is responsive to the NOAA priorities, the application will move to the next stage of review. If not, the application will be rejected and the PIs will be notified.

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. At least 3 NOAA experts, primarily representing NWS Regions and NCEP, may be used in this process. The merit reviewers' ratings are used to produce a rank order of the proposals. The Selecting Official selects proposals after considering the rank order and selection factors listed below.

Any application considered for funding may be required to address issues raised in the evaluation of the application by the reviewers, Program Office, Selecting Official, and/or Grants Officer before a selection recommendation decision is made and/or before an award is made.

C. Selection Factors

The Selecting Official shall award in the rank order of the review unless the applications are justified to be selected out of rank order based upon one or more of the following factors:

1. Availability of funding.
2. Balance/distribution of funds by: a) geographic area; b) type of institutions; c) type of partners; d) research areas; and e) project types.
3. Duplication of other projects funded or considered for funding by NOAA or other federal agencies.

4. Program priorities and policy factors.
5. Applicant's prior award performance.
6. Partnerships and/or participation of targeted groups.
7. Adequacy of information necessary for NOAA staff to make a NEPA determination and draft necessary documentation before recommendations for funding are made to the Grants Officer.

Regarding Selection Factor 2b, while an institution may submit more than one application, the Selecting Official may limit the awards to only one per institution.

D. Anticipated Announcement and Award Dates

Applicants should use May 1, 2019 as the proposed start date.

VI. Award Administration Information

A. Award Notices

After completion of the review process, applicants will receive notification from the NWS Program Office that the application has either been recommended or not recommended for funding to the NOAA Grants Management Division. Notices of recommendation for funding are not an authorization to initiate the project. Official notification of funding of the grant award, signed by a NOAA Grants Officer, will occur typically two to three months later (if approved) and is the only official approval document.

B. Administrative and National Policy Requirements

1. 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>.

2. 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>.

3. 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

<https://grantsonline.rdc.noaa.gov/flows/home/Login/LoginController.jspf> and is also available at http://www.ago.noaa.gov/grants/external_links.html, as well as

http://www.osec.doc.gov/oam/grants_management/policy/documents/Department%20of%20Commerce%20Standard%20Terms%20&%20Conditions%2031%20March%202017.pdf.

4. LIMITATION OF LIABILITY. Funding for programs listed in this notice is contingent upon the availability of appropriations. Applicants are hereby given notice that funds may not have been appropriated yet 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.

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.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.

6. 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. 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.

7. UNPAID OR DELINQUENT TAX LIABILITY. In accordance with Section 523 of Division B and Sections 744 and 745 of Division E of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235) or a future public law, an authorized representative of the selected applicant(s) will be required to provide certain pre-award representations regarding federal felony and federal criminal tax convictions, unpaid federal tax assessments, and delinquent federal tax returns. The form must be completed and submitted with grant applications for: (a) all for-profit and non-profit organization applicants (Part I, and if required, Part II); and (b) all non-Federal entity applicants anticipating receipt of \$5 million or more in the current Federal Fiscal Year appropriated funding (Part II only). The form can be found at <http://www.ago.noaa.gov/grants/forms.html>.

8. UNIQUE ENTITY IDENTIFIER AND SYSTEM FOR AWARD MANAGEMENT (SAM). 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, 31 U.S.C. 6101 note, to the extent applicable, any proposal awarded in response to this announcement will be required to use the System for Award Management (SAM), which may be accessed online at <https://www.sam.gov/portal/public/SAM/>. Applicants are also required to use the Dun and Bradstreet Universal Numbering System, as identified in OMB guidance published at 2 CFR Parts 25, which may be accessed at:

<http://www.ecfr.gov/cgi-bin/text-idx?SID=2dae4a7dcd5848a6364bb94d2d7786dd&mc=true&tpl=/ecfrbrowse/Title02/2subtitleA.tpl>.

9. REVIEW OF RISK. After applications are proposed for funding by the Selecting Official, the Grants Office will perform administrative reviews, including an assessment of risk posed by the applicant under 2 C.F.R. 200.205. 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.

10. 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), 5 U.S.C 552, are found at 15 C.F.R. Part 4, 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 the applicant, the confidentiality of the content of funded applications will be maintained to the maximum extent permitted by law.

11. 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, Maryland 20910

lamar.revis@noaa.gov

12. 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.

13. NOAA SEXUAL ASSAULT AND SEXUAL HARASSMENT PREVENTION AND RESPONSE POLICY. If NOAA-operated, leased, or owned facilities are involved in any awards funded under this announcement, such awards are subject to the NOAA Sexual Assault and Sexual Harassment Prevention and Response Policy Applicable to Financial Assistance Awards Involving NOAA-Operated Facilities (May 2018) found at: http://www.ago.noaa.gov/grants/facilities_assault_policy.html.

C. Reporting

Award recipients will be required to submit financial and project performance (technical) progress reports via NOAA's Grants Online system. The NWS Program Office will provide a content template and guidance. Progress reports will be submitted on a semi-annual schedule and must be submitted no later than 30 days following the end of each 6-month period from the start date of the award. A comprehensive final report is due 90 days after the award expiration. Copies of all submitted reports will become the property of the U.S. Government.

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

For questions about this announcement, contact Christopher Hedge, CSTAR Program Manager, via email at christopher.hedge@noaa.gov.

VIII. Other Information

None.