Building the Environmental Literacy of K-12 Students and the Public for Community Resilience

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ANNOUNCEMENT OF FEDERAL FUNDING OPPORTUNITY

EXECUTIVE SUMMARY

Federal Agency Name(s): Office of the Under Secretary (USEC), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce

Funding Opportunity Title: Building the Environmental Literacy of K-12 Students and the Public for Community Resilience

Announcement Type: Initial

Funding Opportunity Number: NOAA-SEC-OED-2018-2005455

Catalog of Federal Domestic Assistance (CFDA) Number: 11.008, NOAA Mission-Related Education Awards

Dates: The deadline for pre-applications is 11:59 pm EST on December 19, 2017. The deadline for full applications is 11:59 pm EDT on April 6, 2018. Note that NOAA's Office of Education staff will only be available to answer questions until 5 PM Eastern Time. Pre-applications and full applications must be submitted online through Grants.gov; no hard copy or email pre- or full applications will be accepted. Grants.gov requires applicants to register with the system and with SAM.gov prior to submitting any application. These registration processes can take several weeks and involve multiple steps. In order to allow sufficient time for this process, applicants should register as soon as they decide they intend to apply, even if they are not yet ready to submit their pre-applications. Pre-applications and full applications submitted through Grants.gov are automatically date/time stamped when they are validated and submitted to the agency. PLEASE NOTE: When submitting through Grants.gov, you will receive 3 emails. An initial email will be sent to confirm your attempt to submit an application. This is NOT a confirmation of acceptance of your submission. It may take Grants.gov up to two business days to validate or reject the application. Please keep this in mind in developing your submission timeline.

PLEASE ALSO NOTE: For a list of software applications that allow you to successfully navigate the Grants.gov pages and complete your submission visit http://www.grants.gov/web/grants/applicants/applicant-faqs.html.

Two informational teleconferences with the program officers will occur on Tuesday, November 21, 2017 from 3:00 to 5:00 pm EST and Wednesday, November 29, 2017 from 2:00 to 4:00 pm EST. Interested applicants may obtain the phone number and related teleconference information by visiting http://www.noaa.gov/office-education/elp/grants/apply. Whenever possible, individuals from the same institution should try to join the teleconference from the same phone

line.

Funding Opportunity Description: The goal of this Federal Funding Opportunity (FFO) is to support the education of K-12 students and the public so they are knowledgeable of the ways in which their community can become more resilient to extreme weather events and/or other environmental hazards, and become involved in achieving that resilience.

Many U.S. communities are increasingly contending with issues related to preventing, withstanding, and recovering from disruptions caused by extreme weather and other environmental hazards (U.S. Department of Commerce FY2014-FY2018 Strategic Plan). These hazards include but are not limited to severe storms, tornadoes, hurricanes, flooding, heavy precipitation events, persistent drought, heat waves, increased global temperatures, acidification of the ocean, and sea level rise (Weather-ready Nation: NOAA's National Weather Service Strategic Plan 2011; Melillo et al., 2014). These extreme weather and climate events put stress on infrastructure, ecological systems, and the humans that live in the impacted places. U.S. communities can become more resilient to such events by exploring the hazards they face, assessing their specific vulnerabilities and risks, considering options, prioritizing and planning, and finally taking action (U.S. Climate Resilience Toolkit). This process is typically performed by scientists and municipal planners, but in order for resilience to occur, other members of a community must have some understanding of the hazards they face and how to mitigate them, both at the individual and the community level. Education projects focused on resilience enable and empower community members, including children and youth, to protect themselves and their communities from these hazards.

Projects should build the environmental literacy necessary for communities to become more resilient to extreme weather and other environmental hazards they face. In order for communities to become more resilient, their members must have the ability to reason about the ways that human and natural systems function and interact; to understand the scientific process and uncertainty; to reason about the ways that people and places are connected to each other across time and space; and to weigh the potential impacts of their decisions systematically. Projects should leverage and incorporate relevant state and local hazard mitigation and/or adaptation plans and collaborate with institutions that are involved in efforts to develop or implement those plans. Projects may focus on a single type of environmental hazard or a range of hazards that may impact a community or communities. Projects will be based on the established scientific evidence about current and future natural hazards and stresses facing communities and should consider relevant socio-economic and ecological factors in the targeted geographic area(s). Projects should engage participants in active learning activities. In addition, projects must utilize NOAA's scientific data, data access tools, data visualizations, and/or other physical and intellectual assets available on these topics. In order to facilitate the use of NOAA's assets,

projects are strongly encouraged to partner with relevant NOAA entities (offices, programs, etc.) and/or NOAA employees and affiliates. Applicants are also strongly encouraged to review the resilience education projects funded by this program since 2015 and proposed projects should be informed by the lessons learned by these current grantees.

Projects must be implemented within the United States and its territories. Projects will likely be implemented at the local level, but may occur in more than one locality. Project topics must relate to NOAA's mission in the areas of ocean, coastal, Great Lakes, weather, and climate sciences and stewardship and should focus on one or more of the goals of NOAA's Next Generation Strategic Plan: healthy oceans; weather-ready nation; climate adaptation and mitigation; and resilient coastal communities and economies.

Eligible applicants for this funding opportunity are limited to institutions of higher education; other nonprofits, including informal education institutions such as museums, zoos, and aquariums; K-12 public and independent schools and school systems; and state, local and Indian tribal governments in the United States. Federal agencies, for-profit organizations, foreign institutions, and individuals are not eligible to apply.

Proposed projects must be between 2 and 5 years in duration and have total federal requests of $250,000 to $500,000 for all years of the project. It is anticipated that awards funded under this announcement during this fiscal year will be made by September 30, 2018 and that the projects funded under this announcement will have a start date no earlier than October 1, 2018. Note: Links to helpful information for applying to this opportunity are available at http://www.noaa.gov/office-education/elp/grants/apply.

FULL ANNOUNCEMENT TEXT

I. Funding Opportunity Description

A. Program Objective

1. Overview

The NOAA Office of Education's Environmental Literacy Grants (ELG) support projects that educate and inspire people to use Earth system science toward both improving ecosystem stewardship and increasing resilience to environmental hazards (NOAA's Education Strategic Plan, 2015-2035). Since the program's inception in 2005, these grants have supported formal and informal education activities at local, regional, and national levels to address NOAA's mission of science, service, and stewardship. This mission is directed toward a vision of the future where communities and their ecosystems are healthy and resilient in the face of sudden or prolonged change. A vision of resilient communities guides NOAA 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, NOAA strives to 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 (NOAA's Next Generation Strategic Plan, 2010). To make the best social, economic, and environmental decisions, individuals should have the ability to understand scientific processes, consider uncertainty, and reason about the ways that human and natural systems interact (NOAA's Education Strategic Plan, 2015-2035). Therefore, education plays a critical role in achieving NOAA's mission and vision.

Preparing for and responding effectively to present and future environmental challenges enhances the resilience of communities. A report from the National Academies states that, "[to] create a culture of resilience, public education and communication are important to help shift the way that Americans perceive themselves in relation to disasters and ensure that the lessons learned from our history with disasters stay active in the public's consciousness." (National Academies, 2012, p. 136). Strengthening connections between community resilience initiatives and education efforts is key to ensuring that local communities make informed decisions to anticipate, prepare for, respond to, and recover from significant environmental hazards and stresses, with minimum damage to social well-being, the economy, and the environment (Melillo et al., 2014). Building these connections will be the emphasis of the Environmental Literacy Grants for the next several years.

Many U.S. communities are increasingly contending with issues related to preventing, withstanding, and recovering from disruptions caused by extreme weather and other environmental hazards (U.S. Department of Commerce FY2014-FY2018 Strategic Plan). These hazards include but are not limited to severe storms, tornadoes, hurricanes, flooding, heavy precipitation events, persistent drought, heat waves, increased global temperatures, acidification of the ocean, and sea level rise (Weather-ready Nation: NOAA's National Weather Service Strategic Plan 2011; Melillo et al., 2014). NOAA tracks weather and climate events across the United States that result in losses exceeding $1 billion (adjusted based on the Consumer Price Index). The United States is experiencing a rising number of these costly and damaging events. From 1980 to 2016, the annual average number of such events is 5.5. For the most recent 5 years (2012–2016), the annual average is 10.6 events. In 2016, there were 15 such events – including 4 floods, 8 severe storms, drought, wildfires, and a tropical cyclone (Smith, 2016).

These extreme weather and climate events put stress on infrastructure, ecological systems, and the humans that live in the impacted places. Minimizing the disruption, damage, and loss of life and property that occur from these hazards is essential to maintaining a healthy economy and the overall well being of our society. Resilience is defined as the ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events (National Research Council, 2012). U.S. communities can become more resilient by exploring the hazards they face, assessing their specific vulnerabilities and risks, considering options, prioritizing and planning, and finally taking action (U.S. Climate Resilience Toolkit). This process is typically performed by scientists and municipal planners, but in order for resilience to occur, members of a community must have some understanding of the hazards they face and how to mitigate them, both at the individual and the community level. Education projects focused on resilience enable and empower community members, including children and youth, to protect themselves and their communities from these hazards.

The goal of this Federal Funding Opportunity (FFO) is to support the education of K-12 students and the public so they are knowledgeable of the ways in which their community can become more resilient to extreme weather events and/or other environmental hazards, and become involved in achieving that resilience.

2. Description of Project Activities

Projects should build the environmental literacy necessary for communities to become more resilient to the extreme weather and other environmental hazards they face. In order for communities to become more resilient, their members must have the ability to reason about

the ways that human and natural systems function and interact; to understand the scientific process and uncertainty; to reason about the ways that people and places are connected to each other across time and space; and to weigh the potential impacts of their decisions systematically. Projects should leverage and incorporate relevant state and local hazard mitigation and/or adaptation plans and collaborate with institutions that are involved in efforts to develop or implement those plans (see http://www.noaa.gov/office-education/elp/resilience-assets for a list of state hazard mitigation officers). Projects may focus on a single type of environmental hazard or a range of hazards that may impact a community or communities. Projects will be based on the established scientific evidence about current and future natural hazards and stresses facing communities and should consider relevant socio-economic and ecological factors in the targeted geographic area(s). Projects should engage participants in active learning activities. In addition, projects must utilize NOAA's scientific data, data access tools, data visualizations, and/or other physical and intellectual assets available on these topics. In order to facilitate the use of NOAA's assets, projects are strongly encouraged to partner with relevant NOAA entities (offices, programs, etc.) and/or NOAA employees and affiliates. NOAA's education website (http://www.noaa.gov/education) and an additional list of relevant assets (http://www.noaa.gov/office-education/elp/resilience-assets) provide links to NOAA datasets, potential NOAA partners, and other resilience-related assets from federal and non-federal organizations. Applicants are strongly encouraged to review resilience education projects funded by this program since 2015 and proposed projects should be informed by the lessons learned by these current grantees. These lessons, as well as information on existing projects, can be found in the NOAA Environmental Literacy Program Resilience Education Grantee Workshop Report (see http://www.noaa.gov/sites/default/files/atoms/files/PDF-ELP2017GranteeWorkshopReport-110117-NOAA.pdf).

Project topics must relate to NOAA's mission in at least one of the areas of ocean, coastal, Great Lakes, weather, and climate sciences and stewardship and should focus on one or more of the goals of NOAA's Next Generation Strategic Plan (http://www.performance.noaa.gov/goals): healthy oceans; weather-ready nation; climate adaptation and mitigation; and resilient coastal communities and economies.

Projects must be implemented within the United States and its territories. The project description should include a justification of the proposed geographic scale of a project and discussion of the project components that might be applicable to projects in other places. The scale of implementation will likely be at the local level, but projects may be implemented in more than one locality. Applicants are encouraged to review the locations of the projects that are underway currently and the approaches that are being taken by those projects: 2015 Community Resilience Grantees (http://bit.ly/ELG2015CommunityResilience) and 2016

Community Resilience Grantees (http://bit.ly/ELG2016CommunityResilience).

Applications that propose the expansion or enhancement of a previously funded project – 2015 Community Resilience Grantees (http://bit.ly/ELG2015CommunityResilience) and 2016 Community Resilience Grantees (http://bit.ly/ELG2016CommunityResilience) – that meets the requirements of this funding opportunity are eligible. However, the applicants must explicitly demonstrate the accomplishments of the previous award and how the proposed project will significantly improve, and/or build on the previous award.

Community foundations often serve as conveners for diverse stakeholders to address local issues. Projects should consider engaging with community foundations on resilience projects. This community foundation locator may be useful: http://www.cof.org/community-foundation-locator.

NOAA offers other funding opportunities for resilience projects through the NOAA Coastal Resilience Grants Program (see https://coast.noaa.gov/resilience-grant/). While no current funding opportunities are open, over 19 projects were funded by NOAA in 2017 and the grantees may be partners for proposed projects to this funding opportunity. The NOAA Bay-Watershed Education and Training (B-WET) program funds locally relevant, authentic experiential learning for K-12 audiences through Meaningful Watershed Educational Experiences (MWEEs). MWEEs are multi-stage activities that include learning both outdoors and in the classroom and aim to increase understanding and stewardship of watersheds and related ecosystems. Healthy watersheds are key components of resilient communities (Source: https://www.epa.gov/hwp/benefits-healthy-watersheds). The B-WET program serves seven geographic areas of the country: California, Chesapeake Bay, Great Lakes, Gulf of Mexico, Hawai'i, New England, and the Pacific Northwest. Several competitions are now open, please visit http://www.noaa.gov/office-education/bwet/apply.

If the project area includes areas that are served by NOAA’s Sea Grant College programs, National Estuarine Research Reserves, and/or the Coastal Zone Management Program, applicants are encouraged to consider involving representatives from these programs as project advisors or partners, as these programs have a broad focus on resilience.

Finally, proposed projects in geographical regions that overlap with NOAA’s Regional Integrated Sciences and Assessments teams are encouraged to consider involving representatives of these teams as advisors or partners on their projects as they offer interdisciplinary expertise on climate-related risks and impacts and options for adaptive responses to them. (See http://cpo.noaa.gov/Meet-the-Divisions/Climate-and-Societal-Interactions/RISA/About-RISA)

3. Target Audiences

The target audiences for this funding opportunity are: the public, K-12 students, and may also include informal educators (including interpreters and docents) and formal educators (pre- or in-service, and including school administrators). Higher education students and professionals working in the area of community resilience are not target audiences for this funding opportunity.

There is an interest in projects that reach groups from under-served communities, which are often the most vulnerable to the risks associated with extreme weather events and other environmental hazards (Kersten et al., 2012).

There is also an interest in projects that engage children and youth, as their involvement not only benefits them but also their communities. Engaging youth in community conversations about resilience can benefit the planning process. Children benefit efforts that involve them since they are positive influencers, can become leaders, and are more confident during an actual emergency when they feel prepared for it (FEMA, 2013). Youth.gov, the U.S. government website designed to strengthen effective youth programs, states: “Programs that are developed in partnership with youth are more likely to be effective at engaging the population and, therefore, to have a greater impact” (see Involving Youth at https://youth.gov/youth-topics/positive-youth-development/how-can-youth-be-engaged-programs-promote-positive-youth-development). Also, empowering youth to work collaboratively with adults on decision-making allows for sharing of strengths and collective knowledge and can increase contributions by youth to their communities (Murdock et al., 2008). However, in order for children and youth to participate fully, they need improved scientific skills and opportunities to engage in the process of building community resilience.

4. Project Evaluation

All projects should include an evaluation component. Project descriptions for full applications should include robust evaluation plans (there is no requirement to describe evaluation plans in the pre-application). Evaluation plans should include measurement of the project’s progress towards meeting the project goals and objectives as well as the goal of this funding program. Plans for formative and summative project evaluations should be well constructed and should use best practices for evaluating the type of project. Discussion of both formative and summative evaluations should be included in the project description and in the budget section. Project evaluation should include assessment of changes in the target audiences' attitudes, knowledge, skills, and/or behaviors as a result of the activities

undertaken. The impact of the proposed project on the target audiences must be measurable during the award period. Particularly when dealing with vulnerable populations, the evaluation should reflect practices of cultural competence (http://www.eval.org/p/cm/ld/fid=92). Potential impacts of the project beyond the award period should be described. During the award period, reports of both outputs and outcomes for a project will be expected. Projects should be based on an existing front-end evaluation/needs assessment and there should be a description of that needs assessment in the project description. (Note: front-end evaluation/needs assessment does not necessarily have to be performed by the applicant.) Applicants shall also provide a logic model for their proposed project.

Project evaluation should be handled by external professional evaluators or by internal staff who have significant experience with each type of evaluation and are not otherwise substantively involved with the project. Applicants should include funding for project evaluation in their budgets. While the costs for project evaluation may vary considerably, 10 to 20 percent of the total budget is a reasonable estimate of costs associated with a comprehensive project evaluation. Selected applicants will be asked to update their evaluation plans 4 months after the start date of their award.

To further inform the broad fields of K-12 and informal science education about what was learned from the project, applicants are encouraged to develop appropriate project dissemination strategies. Project teams are encouraged to engage their peers in active discussion of relevant best practices. This may or may not be best accomplished by attending and presenting at annual meetings of professional societies. Principal Investigators (PIs) must provide summative project evaluation reports to NOAA. If applicable, PIs may also post evaluation reports to www.informalscience.org and include any resulting instructional products and materials in the National Science Digital Library (NSDL) Science and Math Informal Learning Educators (SMILE) Pathway (www.howtosmile.org).

5. Awards Dates and Mission Goal

NOAA anticipates that awards funded under this announcement during this fiscal year will be made by September 30, 2018 and that the projects funded under this announcement will have a start date no earlier than October 1, 2018.

This FFO meets NOAA's four Mission Goals: Climate Adaptation and Mitigation, Weather-Ready Nation, Healthy Oceans, and Resilient Coastal Communities and Economies (http://www.performance.noaa.gov/goals/).

6. Definitions

Active Learning: Active learning is a process whereby learners engage in activities, such as reading, writing, discussion, or problem solving that promote analysis, synthesis, and evaluation of information. Cooperative learning, problem-based learning, and the use of case methods and simulations are some approaches that promote active learning. (Adapted from http://www.crlt.umich.edu/tstrategies/tsal.)

Environmental Data: Environmental data are defined as recorded and derived observations and measurements of the physical, chemical, biological, geological, and geophysical properties and conditions of the oceans, atmosphere, space environment, sun, and solid earth, as well as correlative data, such as socio-economic data, related documentation, and metadata. Data and information collected as part of the project evaluation are not considered environmental data and information.

NOAA Assets: Resources, services, or sites that are used to support NOAA's mission and to communicate NOAA research, data, information, and knowledge to the public. These include education materials and programs, datasets and visualizations, subject matter experts, facilities, and managed natural resource areas. A partial listing of NOAA assets can be found at http://www.noaa.gov/office-education/elp/resilience-assets. A summary of NOAA programs and activities sorted by the state or territory in which they are based or focused is available at: www.legislative.noaa.gov/NIYS/. A summary of NOAA resources in various regions of the country is available at: http://www.noaa.gov/education/noaa-in-your-backyard. NOAA assets incorporated into education materials can be found at http://www.noaa.gov/education.

Outcomes: The changes that show movement toward achieving ultimate goals and objectives, e.g., the number of persons who, as a result of their participation in a project, demonstrate changes in: awareness and knowledge of specific concepts and/or issues; interest in and/or attitudes toward certain issues, careers, or courses of action; and behavior or skills. Outcomes may be changes that occur in the short term (e.g., knowledge, attitudes, skills and aspirations); medium term (e.g., practices and behaviors); or long term (e.g., social, economic, and environmental conditions). (Adapted from the Framework for Evaluating Impacts of Informal Science Education Projects (p.32, http://www.informalscience.org/sites/default/files/Eval_Framework.pdf).)

Outputs: The immediate results of an action (e.g., services, events, and products) that document the extent of implementation of a particular activity. They are typically expressed numerically, e.g., the number of educators involved in a capacity-building project or the

number of professional development workshops held. (Adapted from the Framework for Evaluating Impacts of Informal Science Education Projects (p.32, http://www.informalscience.org/sites/default/files/Eval_Framework.pdf).)

Resilience: the ability to prepare and plan for, absorb, recover from, and more successfully adapt to adverse events (National Research Council, 2012)

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B. Program Priorities

Refer to I.A., Program Objective. There are no other program priorities.

C. Program Authority

Authority for this program is provided by the following: 33 USC 893a, the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and

Science Reauthorization Act of 2010 ("America COMPETES Reauthorization Act of 2010").

II. Award Information

A. Funding Availability

NOAA anticipates that approximately $2,000,000 may be available in fiscal year (FY) 2018 for this announcement. NOAA anticipates making 4 to 6 awards in FY 2018. Top ranked proposals not funded in the current fiscal period may be considered for funding in FY 2019 without NOAA repeating the competitive process outlined in this announcement. NOAA's Office of Education plans to continue to focus on building the environmental literacy necessary for community resilience during the next few years of Environmental Literacy Grant competitions.

Proposed projects must be between 2 and 5 years in duration and the total federal amount requested from NOAA for each project must be no less than $250,000 and no more than $500,000 for all years of the project, including direct and indirect costs. Any project requesting total federal support from NOAA of less than $250,000 or more than $500,000 total for all years will not be considered for funding. It is anticipated that awards funded under this announcement and selected this fiscal year will be made by September 30, 2018 and that the projects funded under this announcement will have a start date no earlier than October 1, 2018.

The amount of funding available through this announcement will be dependent upon final FY 2018 and FY 2019 budgetary decisions. Publication of this notice does not obligate DOC/NOAA to award any specific project or to obligate any available funds. If an applicant incurs any costs prior to receiving an award agreement from an authorized NOAA Grants Officer, the applicant does so solely at his/her own risk of such costs not being included under the award. Pre-award costs are not allowed under the award unless approved by the NOAA Grants Officer in accordance with 2 C.F.R. §§ 200.308(d) and 200.458. The exact amount of funds that may be awarded will be determined in pre-award negotiations between the applicant and NOAA.

Multi-year funding may be considered for programs or long-term awards where funding for the subsequent year(s) is anticipated but not provided at the time the initial award is approved and where the estimated budget for future funding periods can be forecast with some degree of reliability.

B. Project/Award Period

Pre-applications and full applications must cover a project period of two to five years to be eligible for merit review. Start dates can be October 1, 2018 or later. Applicants selected to receive funding may be asked to modify the project start date.

C. Type of Funding Instrument

Full applications selected for funding will be funded through cooperative agreements, as described in 2 C.F.R. 200.24, meaning that NOAA expects to be substantially involved in many aspects of the award. Substantial involvement may include, but is not limited to, liaison activities between the grantee and NOAA personnel who are contributing data or expertise to the project.

III. Eligibility Information

A. Eligible Applicants

Eligible applicants for this funding opportunity are limited to institutions of higher education; K-12 public and independent schools and school systems, other nonprofits, including informal education institutions such as museums, zoos, and aquariums; state and local government agencies; and Indian tribal governments in the United States. For-profit organizations, foreign institutions, and individuals are not eligible to apply; however, for-profit organizations, foreign institutions, and individuals may participate with an eligible applicant as a project partner. Likewise, federal agencies are not eligible to receive federal assistance under this announcement, but may be project partners.

It is strongly encouraged that an individual serve as a Principal Investigator (PI) on only one application submitted to this funding opportunity. Institutions may submit more than one application and individuals may serve as co-PIs or key personnel on more than one application. Federal employees may not serve as PIs or co-PIs on any application, although they may be included as key personnel.

B. Cost Sharing or Matching Requirement

There is no cost share requirement.

C. Other Criteria that Affect Eligibility

Pre-applications and full applications that are lacking any of the required elements or do not follow the form prescribed in IV. B. will not be reviewed.

Pre-applications and full applications must be submitted by the due date and time provided in Section IV. D. Late pre-applications and full applications will not be considered

for funding. Submission time will be documented by electronic submission to Grants.gov.

IV. Application and Submission Information

A. Address to Request Application Package

Pre-application and full application packages, including required federal forms and instructions, are available through Grants.gov (http://www.grants.gov). Grants.gov requires applicants to register with the system prior to submitting any application. This registration process can take several weeks and involves multiple steps. In order to allow sufficient time for this process, applicants should register as soon as they decide they intend to apply, even if they are not yet ready to submit their pre-applications. Also, even if an applicant has registered with Grants.gov previously, the applicant's password may have expired or their System for Award Management (SAM) registration (formerly Central Contractor Registration [CCR]) may need to be renewed or updated prior to submitting to 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.) Grants.gov will not accept submissions if the applicant has not been authorized or if credentials are incorrect. Authorizations and credential corrections can take several days to establish. Please plan accordingly to avoid problems with the submission process. For further information please visit the SAM web portal (https://www.sam.gov/portal/public/SAM/).

Each applicant must be registered in Grants.gov. If any applicant has problems downloading the pre-application or full application forms from Grants.gov, uploading the pre-application or full application into the Grants.gov system, or using the Grants.gov Workspace feature, contact Grants.gov Customer Support at 1-800-518-4726 or support@grants.gov. Instructions for these forms are available at http://www.grants.gov/web/grants/form-instructions.html.

PLEASE NOTE: For a list of software applications that allow you to successfully navigate the Grants.gov pages and complete your submission visit http://www.grants.gov/web/grants/applicants/applicant-faqs.html.

B. Content and Form of Application

Each applicant must submit a pre-application through Grants.gov for review to prevent the expenditure of effort on full applications that are not likely to be successful. All applicants will receive a response to their pre-application via email from NOAA indicating whether or not they are authorized to submit a full application. Only those who receive authorization from NOAA are eligible to submit a full application.

Failure of an applicant to submit a pre-application or full application before the deadline will result in the project not being merit reviewed or receiving any additional consideration. See the Office of Education's frequently asked questions site: http://www.noaa.gov/environmental-literacy-grants-faqs for additional guidance during the preparation of applications.

Collaborative applications will not be funded through this announcement; rather projects will be supported through a single award to an institution that may include sub-awards to project partners.

Note: Links to helpful information for applying to this announcement is available at http://www.noaa.gov/office-education/elp/grants/apply.

Required Elements for Pre-Applications

Format Requirements

The page margin on standard letter-size paper should be one inch (2.5 cm) at the top, bottom, left, and right. All pages should be numbered. The typeface should be standard 11-point size or larger and must be clear and easily legible. All narrative sections of the pre-application should be single spaced and consist of the elements described in Section IV.B.1. Do not submit scanned documents or forms, other than letters of commitment.

Content Requirements

Each pre-application must contain the following three elements:

(a) SF-424, Application for Federal Assistance

(b) Title Page. Please use the title page template available at http://www.noaa.gov/office-education/elp/grants/environmental-literacy-grant-templates-and-models. Whether or not the title page template is used, a title page must be submitted and contain ALL of the following elements:

(i) Project’s title;

(ii) Proposed start and end dates;

(iii) Funding amount requested from NOAA;

(iv) Principal Investigator (PI) and co-PI names, affiliations, complete mailing addresses, email addresses, telephone numbers, and fax numbers. The PI listed on the title

page should be affiliated with the institution submitting the pre-application;

(v) Executive Summary (150 words maximum). The executive summary should be a concise overview of the objectives of the project, the project activities, the location of the project, the expected outcome(s), and the rationale for the work proposed;

(vi) List of project partners (including NOAA partners); and a

(vii) List of NOAA assets that will be used in proposed project (http://www.noaa.gov/office-education/elp/resilience-assets).

(c) Project Description (4 page limit). This section should summarize the proposed project, present the need for the project, and describe the specific project objectives to be achieved during the project period, describe the expected activities and related outputs and outcomes (see definitions in Section I.A.6), and explain how the project will support the goal of this funding opportunity and advance NOAA's mission, as described in section I.A. This description should include the location of activity (geographic not institutional), the extreme weather event(s) and/or environmental hazards specific to that location that your project will address, and a description of the audience(s) the project will target. Describe how NOAA assets will be integrated into the project activities. Describe the resiliency plans that are relevant in this location and how they will inform, and/or be integrated into, the proposed project activities. Also describe any collaborations with the individuals and/or institutions involved in implementing resilience plans relevant to the proposed project. Finally, briefly describe the institutional capabilities of the project team and partners (and individuals - if known) that will be involved in the project and the capabilities they will bring to the project.

Project descriptions that exceed the 4-page limit will be truncated beyond the fourth page in the information sent forward to reviewers.

Required Elements for Full Applications

Format Requirements

The page margin on standard letter-size paper should be one inch (2.5 cm) at the top, bottom, left, and right. All pages should be numbered. The typeface should be standard 11-point size or larger and must be clear and easily legible. Color or high-resolution graphics, unusually sized materials, or otherwise unusual materials submitted as part of the application are allowed, but should be employed only when necessary for adequate description of the proposed project. All narrative sections of the application should be single spaced and consist of the elements described in Section IV.B.2. Do not submit scanned documents or forms, other than letters of commitment.

Content Requirements

An application must include all elements (a) through (j) below; elements (k) and (l) are optional. Failure to provide this information in the required form and within prescribed page limits will result in the application being excluded from further review. Any non-requested elements submitted as part of a full application package will be removed from the application prior to merit review.

As there are many required elements of an application, it is recommended that you develop and use an application checklist of your own or the one we provide on our templates page (http://www.noaa.gov/office-education/elp/grants/environmental-literacy-grant-templates-and-models).

Full applications, which are submitted through the www.Grants.gov website, should include a maximum of four files (PDF files only) in addition to the federal application forms: 1) Title page; 2) Project narrative (not to exceed 15 pages total); 3) Budget table, budget narrative (including sub-award details), and the negotiated IDC rate agreement, if applicable); and 4) Supplemental information – all other attachments combined into one indexed file, such as resumes, current and pending support, data sharing plan, logic model, and letters of commitment.

(a) Required Forms.

At the time of full application submission, applicants must complete and submit the following forms with signatures of the Authorized Representative of the submitting institution. (Note: submission through Grants.gov results in automatic electronic signatures on these forms.Only the versions of these forms that are available in Grants.gov are acceptable):

(i) SF-424, Application for Federal Assistance

(ii) SF-424-A, Budget Information, Non-Construction Programs

(iii) SF-424-B, Assurances, Non-Construction Programs

(iv) CD-511, Certifications Regarding Lobbying

(v) SF-LLL, Disclosure of Lobbying Activities (only if applicable; see instructions on form).

(b) Title Page.

Please use the title page template available at http://www.noaa.gov/office-education/elp/grants/environmental-literacy-grant-templates-and-models. Whether or not the title page template is used, a title page must be submitted and contain ALL of the following elements:

(i) Project’s title;

(ii) Proposed start and end dates;

(iii) Funding amount requested from NOAA;

(iv) Principal Investigator (PI) and co-PI names, affiliations, complete mailing addresses, email addresses, telephone numbers, and fax numbers. The PI listed on the title page should be affiliated with the institution submitting the pre-application;

(v) Executive Summary (150 words maximum). The executive summary should be a concise overview of the objectives of the project, the project activities, the location of the project, the expected outcome(s), and the rationale for the work proposed. Please note: project summaries of applications that receive funding may be posted on program-related websites and/or included in notices that NOAA may send to members of Congress;

(vi) List of project partners (including NOAA partners); and a

(vii) List of NOAA assets that will be used in proposed project (http://www.noaa.gov/office-education/elp/resilience-assets).

(c) Project Description (15 page limit):

The project description section must not exceed 15 pages and must follow the requirements for full applications in IV.B.2, Content and Form of Application. Page limits are inclusive of figures and other visual materials, but exclusive of title pages, budget information, references, work plan/milestone chart, data sharing plan, resumes, description of NOAA involvement, current and pending support, and letters of commitment. A template for the project description can be found online at http://www.noaa.gov/office-education/elp/grants/environmental-literacy-grant-templates-and-models.

The proposed project must be described completely. The project description for a full application should clearly describe the project's goals, implementation, and management. It should provide a full justification/rationale for the project. Specifically, this section should include:

(i) Objective(s) and Expected Outcomes. Describe the specific project objectives to be achieved during the project period. Describe the expected outputs and outcomes (see definitions in Section I.A.6), and explain how the activities and expected outputs and outcomes support the goal of this funding opportunity and advance NOAA’s mission, as described in section I.A.

(ii) Proposed Activities. Describe the proposed activities, including: all activities that will be undertaken and/or products that will be created; the need for those products or activities; and the process that will be used to develop and implement all activities and products. Applications should clearly demonstrate how the proposed project is informed by best practices and should cite appropriate literature references that support the proposed approach. Some examples of the literature on best practices can be found at http://www.noaa.gov/office-education/elp/resilience-assets. Applications should clearly demonstrate how target audiences will be engaged through active learning. Examples of active learning include interactive discussions, deliberations, or investigations about an issue or participation in simulations where different scenarios and solutions are explored;

(iii) Geographic Scale. Provide a justification of the project's geographic scale and a discussion of the applicability of implementation at larger scales or in multiple locations;

(iv) Target Audience(s). Provide a discussion of the target audience(s) that will be served and why, specifically identifying whether the audience(s) is (are) K-12, public, or both, whether the proposed project will reach underserved groups and/or children/youth;

(v) Personnel. Describe the qualifications and capabilities of the personnel who will be involved in the project, as well as the institutional profiles and capabilities of the applicant and other partner institutions; include a justification for how the personnel/partnering institution(s) provide both educational and scientific expertise needed to carry out the project;

(vi) Project Partners. Describe the project partners' roles and the coordination among project partners; specifically, highlight any partnerships involving NOAA entities to facilitate the use of NOAA assets. (Note: letters of commitment articulating project partners' roles should be submitted as a separate section of the application.)

(vii) NOAA Assets. Describe how the project will incorporate NOAA data, data access tools, and/or other NOAA assets into the project activities (for a partial listing of NOAA assets, see http://www.noaa.gov/office-education/elp/resilience-assets);

(viii) Hazard Mitigation and/or Adaptation Plans. Provide a description of the relevant state and/or local hazard mitigation and/or adaptation plans exist for the project area, and if so, how the project will leverage and incorporate these plans into the proposed project; also include a discussion of how the project team will collaborate with institutions that are involved in efforts to develop or implement such plans (see http://www.noaa.gov/office-education/elp/resilience-assets for a list of state hazard mitigation officers and plans);

(ix) Project Evaluation. Describe how the project activities will be evaluated for their effectiveness in meeting stated project goals and objectives as well as the goal of this funding opportunity. Also discuss who will carry out the evaluation, and, if the evaluator is part of the applicant institution, verify that he/she is not otherwise substantively involved in the project. If institutional policy prohibits the selection of an evaluator prior to award, the applicant should state that and describe the criteria by which the evaluator will be selected post award. See Section I.A.4 for further guidance on project evaluation; and

(x) Dissemination. Provide a description of how project results will be disseminated beyond the audience immediately involved in the activities of the project and how awareness and use of NOAA resources will increase.

(d) Proposed Work Plan/Milestone Chart. Provide a timeline of major tasks and target milestones for important intermediate and final products and outcomes. The tasks should relate both to the budget and to the intended deliverables or activities, including the project evaluation. There is no page limit for this element.

(e) Resumes. Provide resumes of the Principal Investigators (PIs), co-Principal Investigators (co-PIs), and other key personnel critical to the success of the project. Ensure resumes include a list of professional and academic credentials and address qualifications relevant to conducting the proposed work as this will help reviewers assess the proposed project team's' qualifications. Limit resumes to a maximum of 3 pages each.

(f) Current and Pending Support for PI and Co-PIs. Describe all current and pending federal and non-federal funding, including application(s) to this funding opportunity, for all PIs and co-PIs listed on the title page. The capability of the designated PIs and co-PIs to complete the proposed work in light of present commitments to other projects must be assessable. Therefore, please list the percentage of time the individuals have committed to other federal or non-federal grant-funded projects. If any PI or Co-PI has no current or pending funding, this must be clearly indicated on a separate page under a heading "Current and Pending Support". There is no page limit for this element. A template for summarizing Current and Pending Support can be found online at http://www.noaa.gov/office-education/elp/grants/environmental-literacy-grant-templates-and-models.

(h) Budget. Provide a detailed budget table and budget narrative that clearly identifies and justifies the cost of separable elements of the proposed work. The detailed budget table should include a detailed year-by-year breakdown by category of cost (object class) separated into federal and non-federal shares (if applicable). The budget narrative should be sufficiently detailed to enable a clear understanding of the cost breakdown and calculations used to derive the line item subtotals in each object class of the SF-424A budget. The budget table and narrative should reference the GMD Budget Narrative Guidance at http://www.ago.noaa.gov/grants/training.html.

The budget section of the application should provide enough detail to allow Office of Education staff and the review panel to evaluate the level of effort proposed by investigators and staff on the project. The budget must include all anticipated expenses in order to realistically describe for reviewers what resources will be necessary to carry out the project. NOAA staff will review budget information in recommended applications to determine if costs are allowable, allocable, reasonable, and realistic. As appropriate, the narrative and table must provide details on:

- Personnel salaries and fringe benefits (specifying the salary plus the percent of time and/or number of months devoted to the project for every individual to be paid by the project).

- Travel, including costs (i.e., transportation, lodging, meals), a description of anticipated travel, destinations, the number of travelers, and a justification of how the requested travel is directly relevant to the successful completion of the project. If the actual

trip details are unknown, applicants should state the basis for the proposed travel costs. In order to facilitate a community of practice related to resilience education, applicants should request funding to allow one to two project team members to attend 2-day grantee workshops in Washington, DC every year during the award period. Travel costs may be charged on an actual cost basis, on a per diem, or mileage basis in lieu of actual costs incurred, or on a combination of the two, provided the method used is applied to an entire trip and not to selected days of the trip, and results in charges consistent with those normally allowed in like circumstances in the non-federal entity's non-federally-funded activities and in accordance with non-federal entity's written travel reimbursement policies. In the absence of an acceptable, written non-federal entity policy regarding travel costs, the rates and amounts established under 5 U.S.C. 5701-11, ("Travel and Subsistence Expenses; Mileage Allowances"), or by the Administrator of General Services, or by the President (or his or her designee) pursuant to any provisions of such subchapter must apply to travel under federal awards (48 C.F.R. 31.205-46(a)) Federal travel per diem rates: http://www.gsa.gov/portal/content/104877.

- Equipment and supplies, if applicable. See 2 C.F.R. §200.313 and See 2 C.F.R. §200.314 for additional guidance on equipment and supplies costs.

- Contractual costs. Applicants should provide the same amount of budget detail for any contracts as they did for the applicant institution (broken down by the categories shown on the SF-424A form). Applicants should indicate the basis for the cost and price estimates in budget description for each contract. Budget description should describe activities to occur or products or services to be obtained and indicate the applicability or necessity of each to the project. All contracts must be consistent with the requirements of 2 C.F.R. §§ 200.317-200.326 for procurement contracts.

- Other direct costs, including printing, publications, evaluations, and communication expenses as well as sub-awards to project partners. Applicants should provide the same amount of budget detail for any sub-awards as they did for the applicant institution (broken down by the categories shown on the SF-424A form). Applicants should indicate the basis for the cost and price estimates in budget description for each sub-award. The budget description should describe activities to occur and/or products to be developed, and indicate the applicability or necessity of each to the project. All sub-awards must be consistent with the requirements of 2 C.F.R. §§ 200.330-200.332.

- Indirect costs, if applicable. As defined at 2 C.F.R. § 200.56, indirect costs, which are sometimes referred to as facilities and administrative (F&A) costs, are those costs incurred for a common or joint purpose benefiting more than one cost objective, and not readily assignable to the cost objectives specifically being benefitted without an effort that is disproportionate to the results achieved. Indirect costs may include costs for basic operational functions, including lights, water, and insurance. If indirect costs are included, the negotiated rate must be requested, and the application must include a copy of the current,

approved negotiated indirect cost agreement with the federal government. Indirect-cost-rate-agreement documentation is required for sub-awardees and indirect cost rates at the negotiated levels should be paid by the primary awardee.

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 modified total direct costs (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

Applicants should include funding for project evaluation in their budgets. While the costs for project evaluation may vary considerably, 10 to 20 percent of the total budget is a reasonable estimate of costs associated with a comprehensive project evaluation.

If appropriate, include in the budget narrative a description of any in-kind resources or equipment that will be provided to support this project.

See http://www.ago.noaa.gov/grants/training.html for guidance on your budget narrative from NOAA’s Grants Management Division. See http://www.noaa.gov/office-education/elp/grants/environmental-literacy-grant-templates-and-models for a budget narrative template and model and a budget table model.

There is no page limit for this element.

(i) Data Management Plan. We anticipate that most proposed projects under this funding announcement will not involve the collection of environmental data. If no environmental data will be collected/created as part of the project, then this element of the application should consist of a single statement (on a separate page, under the heading "Data Management Plan") indicating that no data will be collected/created as part of this project. However, if an applicant's project does involve the collection of environmental data, the applicant should consult section VI.B.9 (Data Management Plan) for further instructions. Environmental data are defined as recorded and derived observations and measurements of the physical, chemical, biological, geological, and geophysical properties and conditions of the oceans, atmosphere, space environment, sun, and solid earth, as well as correlative data, such as socio-economic data, related documentation, and metadata. Data and information collected for the project evaluation are not considered environmental data and information.

Furthermore, environmental data that are not collected as part of a research project or ongoing environmental monitoring program do not require a management plan.

(j) Logic Model (5 page limit). Provide a logic model of the proposed project. The logic model should illustrate the relationships among the various project components and how they connect to the project evaluation questions and indicators of success. There is no one way to design a logic model but in general your logic model should identify: the initial situation your project aims to change; the resources needed to accomplish a set of activities (inputs); the activities designed to accomplish the project goals and objectives, as well as the audiences that participate in those activities (outputs); and the short-term (immediate), medium-term (2-3 years), and long-term (4-10 years) outcomes or impacts that are anticipated.

(k) References Cited. If literature references are cited in the project narrative, then a References Cited section should be included. Each reference should include the names of all authors in the same sequence in which they appear in the publication, the article title, publication or publication title, volume number, page numbers, and year of publication. While there is no established page limit, this section must include bibliographic citations only and must not be used to provide parenthetical information outside the 15-page project description.

(l) Letters of Commitment. If substantive partnerships are described in the project description, letters of commitment should be provided. Letters of commitment are important for demonstrating the concrete involvement of project partners (including NOAA partners) and are reviewed as part of the application. Project partners are strongly encouraged to submit letters of commitment indicating their interest in the topic and format of the proposed project, their willingness to participate in the project, and how the project complements their strategic priorities.

(m) NEPA Questionnaire. The Office of Education has determined that applicants do not need to provide answers to the NOAA NEPA Questionnaire.

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

To enable the use of an universal identifier and to enhance the quality of information available to the public as required by the Federal Funding Accountability and Transparency Act, 31 USC 6101 Note, to the extent applicable, any application 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 (DUNS), as identified

in OMB guidance, 2 CFR Part 25, which may be accessed at http://www.ecfr.gov/cgi-bin/text-idx?SID=2dae4a7dcd5848a6364bb94d2d7786dd&mc=true&tpl=/ecfrbrowse/Title02/2subtitleA.tpl.

D. Submission Dates and Times

The deadline for pre-applications is 11:59 pm EST on December 19, 2017. The deadline for full applications is 11:59 pm EDT on April 6, 2018. (Note that NOAA's Office of Education staff will only be available to answer questions until 5 PM Eastern Time.) Pre-applications and full applications must be submitted online through Grants.gov; no hard copy or email applications will be accepted. Late applications are neither reviewed nor considered for funding.

Pre-applications and full applications submitted through Grants.gov will be accompanied by an automated receipt of the date and time of submission. Pre- and full applications submitted through Grants.gov will be accompanied by three automated email responses (the first email confirms receipt by Grants.gov, not NOAA; the second email confirms that the submission is acceptable and timely; and the third validates that the pre-application or full application has been forwarded to NOAA for further processing). If all email notifications are not provided within two (2) days of submission, contact the Grants.gov Help Desk and oed.grants@noaa.gov. PLEASE NOTE: It may take Grants.gov up to two business days to validate or reject the submission. Please keep this in mind in developing your submission timeline. Applicants are responsible for ensuring that all required elements have been appropriately submitted before the deadline. Additional instructions for Grants.gov can be found at http://www.noaa.gov/environmental-literacy-grants-faqs.

E. Intergovernmental Review

Pre-applications and full applications submitted to this funding opportunity are not subject to Executive Order 12372, Intergovernmental Review of Federal Programs.

F. Funding Restrictions

There are no funding restrictions.

G. Other Submission Requirements

Please refer to important information in Submission Dates and Times above to help ensure your pre- and full applications are received on time.

PLEASE ALSO NOTE: For a list of software applications that allow you to successfully navigate the Grants.gov pages and complete your submission visit

http://www.grants.gov/web/grants/applicants/applicant-faqs.html.

V. Application Review Information

A. Evaluation Criteria

a. Pre-Application Evaluation Criteria

(1) Importance/relevance and applicability of proposed project to the program goals (3 points): This criterion ascertains whether there is intrinsic value in the proposed work and/or relevance to NOAA's federal, regional, state or local activities. The application should describe how well the proposed project addresses NOAA's stated objectives and priorities. Reviewers will evaluate:

- How well the project addresses NOAA’s mission and the goal of this funding opportunity, which is, to support the education of K-12 students and the public so they are knowledgeable of the ways in which their community can become more resilient to extreme weather events and/or other environmental hazards, and become involved in achieving that resilience;
- The extent to which the application clearly identifies the project’s geographic location(s) and the hazard(s) faced by that location(s);
- The extent to which the project is focused on increasing participants ability to reason about the ways that human and natural systems function and interact; to understand the scientific process and uncertainty; to reason about the ways that people and places are connected to each other across time and space; and to weigh the potential impacts of their decisions systematically;
- If the project is based on an existing front-end evaluation/needs assessment and the rationale for the project is sound;
- The extent to which the project will reach groups from under-served communities or involve children or youth;
- Whether relevant NOAA assets are identified for use in the project; and
- The extent to which the project leverages and incorporates relevant state and local hazard mitigation and/or adaptation plans and will coordinate with efforts underway to implement those plans.

(2) Technical/scientific merit (3 points): 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. Reviewers will evaluate:

- The extent to which the project has clearly stated outcomes and objectives that are measurable and are appropriate to the target audience;
- The overall technical feasibility of the project, including whether the proposed approach

is educationally and technically sound (i.e., based on best practices), and uses appropriate methods;
- The extent to which the project engages participants in active learning; and
- The extent to which the applicant and project partners possess the capacity to carry out the project.

b. Full Application Evaluation Criteria

(1) Importance/relevance and applicability of proposed project to the program goals (20 points): This criterion ascertains whether there is intrinsic value in the proposed work and/or relevance to NOAA's federal, regional, state, or local activities. The application should describe how well the proposed project addresses NOAA's stated objectives and priorities. Reviewers will evaluate:
- How well the project addresses NOAA’s mission and the extent to which the project is focused on increasing participants’ ability to reason about the ways that human and natural systems function and interact; to understand the scientific process and uncertainty; to reason about the ways that people and places are connected to each other across time and space; and to weigh the potential impacts of their decisions systematically (5 points);
- The extent to which the application clearly identifies the project’s geographic location(s) and the hazard(s) faced by that (those) location(s) (5 points);
- The extent to which the project will reach groups from under-served communities or involve children or youth (4 points);
- The extent to which the project leverages and incorporates relevant state and local hazard mitigation and/or adaptation plans and collaborates with institutions that are involved in efforts to develop or implement those plans (5 points); and
- If the project is based on an existing front-end evaluation/needs assessment and the rationale for the project is sound (1 point).

(2) Technical/scientific merit (50 points): 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. Reviewers will evaluate:
- The completeness and adequacy of detail in the project description (3 points);
- The extent to which the project has clearly stated outcomes and objectives that are measurable, will be measured, and are appropriate to the target audience(s) (5 points);
- The extent to which the logic model illustrates the relationships among the various project components and how they connect to the project objectives and goal of this funding opportunity (4 points);
- The overall technical feasibility of the project, including whether the proposed approach is educationally and technically sound (i.e., based on best practices) and uses appropriate

methods (8 points);
- The extent to which the project is based on the established scientific evidence about current and future natural hazards and stresses facing communities and considers relevant socio-economic and ecological factors in the targeted geographic area(s) (4 points);
- The extent to which the project engages participants in active learning (5 points);
- The extent to which the application explains how the project will utilize NOAA assets to accomplish its goals, and, where applicable, how they will involve NOAA employees or affiliates to facilitate the use of those assets (7 points);
- The extent to which the application describes the roles of project partners, provides a sound justification for these partners, and includes letters of commitment for substantive partnerships (5 points);
- Whether there is a clear delineation of responsibilities of the project's key personnel and whether there are adequate communication mechanisms in place for coordinating among all project partners (2 points);
- Whether there are appropriate mechanisms to evaluate the success of the project in meeting the anticipated outcomes, including impacts on the target audience(s) (5 points); and
- If the project gives consideration to the applicability of project components to other locations (2 points).

(3) Overall Qualifications of Applicant (15 points): This criterion ascertains whether the applicant possesses the necessary education, experience, training, facilities, and administrative resources to accomplish the project. Reviewers will evaluate applications based on the following (as demonstrated by resumes, past project experience, and accomplishments of key staff):
- The relevance of the qualifications of the PIs, co-PIs, and key personnel, including their previous experience in designing, implementing and managing the proposed activities (9 points);
- The evaluators' previous experience in designing, implementing, and managing evaluations appropriate for the target audiences and proposed activities. If the applicant was unable to select an evaluator prior to submission due to institutional policies, then the appropriateness of the criteria the project team will use to select an evaluator (3 points); and
- The likelihood that the applicant and project partners have the appropriate institutional resources to carry out the proposed activities and have the ability to complete the proposed project successfully (3 points).

(4) Project Costs (10 points): This criterion evaluates the budget to determine if it is realistic and commensurate with the project needs and time-frame. Reviewers will evaluate:
- The appropriateness of the requested resources to accomplish the proposed work within the indicated time-frame (5 points);

- Whether the budget is sufficient for the scope of the evaluation planned (3 points); and
- The adequacy of detail in the budget table and narrative to allow an informed determination of how well all costs associated with the project are justified (2 points).

(5) Outreach and Education (5 points): This criterion assesses whether the project provides a focused and effective education and outreach strategy regarding NOAA's mission to protect the Nation's natural resources. Reviewers will evaluate:
- How the information on the design and outcomes of the proposed project will be disseminated to relevant audiences beyond those participating directly in the project (5 points).

B. Review and Selection Process

Upon receipt of a pre-application and a full application by NOAA, an initial administrative review is conducted to determine compliance with minimum requirements.

Minimum requirements for pre-applications include all of the following:
- Applicant is eligible to apply;
- Pre-application was received on time; and
- Total federal request for all years of the project is no more than $500,000 and no less than $250,000;

Minimum requirements for full applications include all of the following:
- Applicant is eligible to apply;
- Applicant was authorized to submit a full application;
- Full application was received on time;
- Total federal request for all years of the project is no more than $500,000 and no less than $250,000; and
- Project duration is 2 to 5 years.

Pre-Applications

All pre-applications that meet the eligibility and minimum requirements will be evaluated and scored by a group of independent reviewers, who are federal or non-federal experts, each having expertise in a separate area so that the reviewers, as a whole, cover the spectrum of activities covered by the pre-applications received. The reviews will be conducted by mail review. The mail review will consist of each application being reviewed by at least 3 reviewers. Each reviewer will independently evaluate each application and provide an individual score and written comments using the evaluation criteria provided in section V.A. No consensus advice will be given. The Federal Program Officers (FPOs) will

neither vote nor score pre-applications as part of the review process.

A rank order of all pre-applications will be established by averaging the individual review ratings for each pre-application. The Program Office staff will look for a natural break in scores of the rank-ordered pre-applications to determine the top number of pre-applications closest to 40 that will be authorized to submit full applications. The FPOs will make their recommendations to the Selecting Official, the Director of NOAA Education, on whether to authorize or not authorize a full application based on rank order and the selection factors listed in the next section (V.C). Applicants will be notified of the status of their pre-application via an email to the authorized representative on or about February 19, 2018. Full applications from applicants who were not asked to submit them will not be reviewed or considered for funding.

Full Applications

All full applications that meet the eligibility and minimum requirements will be evaluated and scored by a panel of independent reviewers, who are federal or non-federal experts, each having expertise in a separate area so that the reviewers, as a whole, cover the spectrum of activities covered by the full applications received. A panel of reviewers will read, score, and provide comments on the full applications using the evaluation criteria provided in section V.A. The panel will then meet to discuss the full applications. After discussing a particular full application, the reviewers on the panel may re-score the full application and will provide a summary of their comments. The rank order of all full applications will be established by averaging the individual panel reviewers' final scores for each full application they reviewed. The panel will give no consensus advice. The Federal Program Officers (FPOs) will neither vote nor score full applications as part of the review process. The FPOs will make their recommendations for funding based on rank order and the selection factors listed in the next section (V.C) to the Selecting Official, the Director of NOAA Education, who is responsible for making final recommendations to the NOAA Grants Officer.

C. Selection Factors

The Selecting Official will recommend full applications for funding in the rank order unless an application is justified to be selected out of rank order based upon one or more of the following selection factors:

1. Availability of funding;
2. Balance/distribution of funds:
   a. By geographic area,
   b. By type of institutions,

c. By type of partners,
d. By subject areas, and
e. By project types;

3. Whether this project duplicates other projects funded or considered for funding by NOAA or other federal agencies;
4. Program priorities and policy factors;
5. Applicant's prior award performance;
6. Partnerships and/or participation of targeted groups; and
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 NOAA Grants Officer.

Hence, awards may not necessarily be made to the highest-scored applications.

Selected applicants may be asked to modify objectives, project plans, timelines, and/or budgets, and provide supplemental information required by the agency prior to the award. When a decision has been made (whether an award or declination), anonymous copies of reviews and summaries of review panel deliberations, if any, will be made available to the applicant.

D. Anticipated Announcement and Award Dates

Review of full applications will occur from April through June, 2018. It is anticipated that recommendations for funding under this announcement will be made by September 30, 2018. Projects funded under this announcement during this fiscal year will start no earlier than October 1, 2018.

VI. Award Administration Information

A. Award Notices

Successful applicants will receive notification electronically from the Office of Education by September 30, 2018, that the application has been recommended for funding to the NOAA Grants Management Division. This notification is not an authorization to begin performance of the project. The official notice of funding, authorized by a NOAA Grants Officer, is the authorizing document that allows the project to begin. The official notice of award is the Standard Form CD-450, Financial Assistance Award, issued by a NOAA Grants Officer electronically through NOAA’s Grants Online system to the project’s Authorized Representative. Unsuccessful applicants will receive notification electronically from the Office of Education by September 30, 2018, that their application was not recommended for

funding (declined) or was not reviewed because it did not meet the minimum requirements prescribed in Sections IV.B and IV.D.

NOAA may select all, some, or none of the applications, or part of any application, ask applicants to work together or combine projects, or defer applications to the future. The exact amount of funds to be awarded, the final scope of activities, the project duration, and specific NOAA cooperative involvement with the activities of each project, will be determined in pre-award negotiations among the applicant, the NOAA Grants Management Division, and NOAA program staff. Projects should not be initiated in expectation of federal funding until an official notice of award document is received from the NOAA Grants Officer.

B. Administrative and National Policy Requirements

1. 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 application preparation costs. Publication of this announcement does not oblige NOAA to award any specific project or to obligate any available funds.

2. PRE-AWARD NOTIFICATION: 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.

3. UNPAID OR DELINQUENT TAX LIABILITY. Certifications Regarding Federal Felony and Federal Criminal Tax Convictions, Unpaid Federal Tax Assessments and Delinquent Federal Tax Returns. 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.

4. 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.

5. 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.

6. 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.

7. 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.

8. GEOSPATIAL DATA COLLECTION: The recipients must comply with Executive Order 12906 regarding any and all geospatial data collected or produced under cooperative agreements. This includes documenting all geospatial data in accordance with the Federal Geographic Data Committee Content Standard for digital geospatial data. The Program uses only the existing NOAA Federal financial assistance awards package requirements per 15 C.F.R. parts 14 and 24.

9. DATA MANAGEMENT PLAN: 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.

Environmental data are defined as recorded and derived observations and measurements of the physical, chemical, biological, geological, and geophysical properties and conditions of the oceans, atmosphere, space environment, sun, and solid earth, as well as correlative data, such as socio-economic data, related documentation, and metadata. Data and information collected as part of the project evaluation are not considered environmental data and information. Furthermore, environmental data that are not collected as part of a research project or ongoing environmental monitoring program do not require a management plan.

Applications submitted in response to this Announcement that include the collection of environmental data as defined above must include a Data Management Plan of up to two pages describing how these requirements will be satisfied. 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.

NOAA may, at its own discretion, make publicly visible the Data Management Plan from funded applications, 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.

Applicants 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.

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. 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 (MSI), i.e., Historically Black Colleges and Universities, Hispanic-serving institutions, Tribal colleges and universities, Alaskans Native and Native Hawaiian institutions, and institutions that work in underserved communities.

12. EXECUTIVE ORDER 12866 (Regulatory Planning and Review): It has been determined that this notice is not significant for purposes of Executive Order 12866.

13. EXECUTIVE ORDER 13132 (Federalism): It has been determined that this notice does not contain policies with Federalism implications as that term is defined in Executive Order 13132.

C. Reporting

1) Grant recipients are required to provide semi-annual progress and financial reports.

Reports are to be submitted electronically through the NOAA Grants Online system at https://grantsonline.rdc.noaa.gov.

a. Progress Reports: Progress on each award is communicated to NOAA in the form of performance progress reports, the requirements of which are outlined in 2 C.F.R. § 200.301. Progress reports should provide specific, project-related information such as details on the accomplishments, outputs and outcomes that have occurred during the reporting period, corresponding with the goals and objectives identified in the project narrative. A suggested template for semi-annual and final progress reports will be provided to grant recipients. Progress reports are required every 6 months from the time an award starts until it is closed. A final comprehensive report is due no later than 90 days after the expiration date of an award, along with the final summative evaluation report. The final comprehensive report shall include an executive summary of the project's outcomes, including major findings of the project evaluation, that can be shared publicly online and in print as desired by NOAA's Office of Education. The summative evaluation report should be a separate document from the final comprehensive report on the project.

b. Financial Reports: Federal Cash Transaction reports, form SF-425) should be submitted electronically through the NOAA Grants Online system and are due semi-annually on October 30th and April 30th for the preceding 6-month period (April 1st to September 30th and October 1st to March 30th) or portion thereof if the project start or end-date falls in the middle of one of these intervals. The Final Financial Status report, form SF-425, is a comprehensive financial report that is due no later than 90 days after the expiration date of an award.

2) 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 sub-awards 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

You can contact the Environmental Literacy Program grants team at oed.grants@noaa.gov. For further information about the NOAA Office of Education, please visit the office website at http://www.noaa.gov/office-education.

VIII. Other Information

Two informational teleconferences with the program officers will occur on Tuesday, November 21, 2017 from 3:00 to 5:00 pm EST and Wednesday, November 29, 2017 from 2:00 to 4:00 pm EST. Interested applicants may obtain the phone number and related teleconference information by visiting http://www.noaa.gov/office-education/elp/grants/apply. Whenever possible, individuals from the same institution should try to join the teleconference from the same phone line.

Note: Links to related information for applying are available at http://www.noaa.gov/office-education/elp/grants/apply.