

## 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: Environmental Literacy Grants for Building Capacity of Informal and Formal Educators

Announcement Type: Initial

Funding Opportunity Number: NOAA-SEC-OED-2013-2003614

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

Dates: The deadline for full applications is 11:59:59 pm EST on March 12, 2013 (note that Office of Education staff will only be available to answer questions until 5 PM EST). Applications must be submitted online through Grants.gov; no hard copy or email applications will be accepted. Grants.gov requires applicants to register with the system prior to submitting an application. This registration process can take several weeks and involves multiple steps. In order to allow sufficient time for this process, applicants should register as soon as they decide they intend to apply, even if they are not yet ready to submit their applications. 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 2 emails. An initial email will be sent to confirm your attempt to submit an application. This is NOT a confirmation of acceptance of your application. It may take Grants.gov up to two business days to validate or reject the application and send you a second email. Please keep this in mind in developing your submission timeline.

PLEASE ALSO NOTE: As of December 2012, applicants using the newest version of Adobe Reader XI may encounter an error that could prevent them from submitting their application through Grants.gov. To check whether you have a compatible version of Adobe Reader installed, visit <http://www.grants.gov/applicants/AdobeVersioningTestOnly.jsp>. To download a version of Adobe Reader that is compatible with Grants.gov, visit [http://www.grants.gov/help/download\\_software.jsp](http://www.grants.gov/help/download_software.jsp).

Two informational webinars with the program officers will occur on February 5, 2013 from 3:00 to 5:00 pm EST and February 6, 2013, from 3:00 to 5:00 pm EST. By noon EST on February 1, 2013, interested applicants should register by contacting [oed.grants@noaa.gov](mailto:oed.grants@noaa.gov) and including in the Subject line of the email: "Register for Educator Capacity Building FFO Webinar" and providing the interested party's name, institution, telephone number, email address and preferred webinar date in the body of the email. You will receive an email response from

oed.grants@noaa.gov with the log-in information and date for the webinar. Whenever possible, individuals from the same institution should try to join the webinar from the same computer/phone line.

**Funding Opportunity Description:** The goal of this NOAA Environmental Literacy Grants (ELG) Federal Funding Opportunity (FFO) is to build the capacity of informal educators (including interpreters and docents) and/or formal educators (pre- or in-service) to use NOAA data and data access tools to help K-12 students and/or the public understand and respond to global change. Successful projects will enhance educators' ability to use the wealth of scientific data, data visualizations, data access technologies, information products, and other assets available through NOAA (plus additional sources, if desired) to engage K-12 students and/or other members of the public in a minimum of two U.S. states or territories. Partnerships with NOAA entities and/or involvement of NOAA scientists to facilitate the use of such assets by educators are strongly encouraged. As an ultimate outcome, successful projects should aim to increase educators' effectiveness in promoting stewardship and increasing informed decision making by a diverse pool of K-12 students and/or other members of the public. The impact of the proposed project on the target educators must be measurable during the award period. Projects are also encouraged to track outcomes among the public and/or K-12 audiences served by these educators.

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 (<http://www.ppi.noaa.gov/goals/>) healthy oceans; weather-ready nation; climate adaptation and mitigation; and resilient coastal communities and economies. Projects must specifically emphasize the theme of global environmental change, including (but not limited to) such topics as drought, severe weather, ocean acidification, sea level rise, and climate change. Where applicable, project design should be informed by projects previously funded by NOAA's Environmental Literacy Grants Program (See "Awards" tab under [www.oesd.noaa.gov/grants/elg.html](http://www.oesd.noaa.gov/grants/elg.html)). Projects that specifically build capacity of educators to engage teens are of interest. Similarly, NOAA has an interest in projects that reach groups traditionally underserved and/or underrepresented in Earth System science.

This funding opportunity identifies two priority categories of eligible applicants, both of equal importance. Both priorities have the same goal: to build the capacity of informal and/or formal educators to use NOAA data and data access tools to help K-12 students and/or the public understand and respond to global change. Eligible applicants for Priority 1 are collaborative teams of two or more U.S. institutions. Eligible applicants for Priority 2 are collaborative teams of two or more non-profit U.S. aquariums, of which at least one must be accredited by the Association of Zoos and Aquariums (AZA). Collaborative applicant teams in both Priority 1 and Priority 2 are strongly encouraged to include at least one applicant that has not previously received a grant from NOAA's Environmental Literacy Grants program. Proposed projects in

each priority must be between two and five years in duration and have combined federal requests of \$500,000 - \$1,000,000 for all years of the project.

It is anticipated that awards under this announcement will be made by September 30, 2013 and that the projects funded under this announcement will have a start date no earlier than October 1, 2013. Note: Links to this announcement and other helpful information for applying are available at [www.oesd.noaa.gov/grants/elg.html](http://www.oesd.noaa.gov/grants/elg.html) under the "Funding" tab.

## FULL ANNOUNCEMENT TEXT

### I. Funding Opportunity Description

#### A. Program Objective

##### 1. Overview:

NOAA's Environmental Literacy Grants (ELG) Program provides support to improve environmental literacy among our Nation's citizens and to promote a diverse future workforce in ocean, coastal, Great Lakes, weather, and climate sciences, with the goal of increasing stewardship and informed decision making by and for the Nation. The program supports Science, Technology, Engineering and Mathematics (STEM) education through a focus on Earth System Science and Environmental Education. Improving the public's environmental literacy, its understanding of how our Nation's natural resources are managed, and its understanding of the importance of these resources is critical to meeting the Agency's stewardship mission. To address this mission and to create a pipeline to meet future workforce needs, NOAA engages in and supports formal and informal education activities at local, state, regional, and national levels.

This solicitation of the Environmental Literacy Grants program supports Goal 1 of NOAA's Education Strategic Plan ([www.education.noaa.gov/plan](http://www.education.noaa.gov/plan)), with a specific focus on:

\*Outcome 1.2: Educators understand and use environmental literacy principles

\*Outcome 1.3: Educators, students, and/or the public collect and use ocean, coastal, Great Lakes, weather, and climate data in inquiry and evidence-based activities

\*Outcome 1.4: Lifelong learners are provided with informal science education opportunities focused on ocean, coastal, Great Lakes, weather, and climate topics

The goal of this funding opportunity is to build the capacity of informal educators (including interpreters and docents) and/or formal educators (pre- or in-service) to use NOAA data and data access tools to help K-12 students and/or other public audiences understand and respond to global change. Successful projects will enhance educators' ability to use the wealth of scientific data, data visualizations, data access technologies, and other assets available through NOAA (plus additional sources, if desired) to engage K-12 students and/or other members of the public in a minimum of two U.S. states or territories.

The use of scientific data in informal and formal science education activities is useful in structuring meaningful learning experiences for K-12 students and other public audiences. Analysis and interpretation of data are core scientific and engineering practices for science education in grades K-12, which facilitates a deep understanding of the nature of science and scientific inquiry (National Research Council 2009, 2012). The visual representation of data

is also a foundational resource for informal learning activities (National Research Council, 2009). The use of data in educational settings helps learners to understand real-world, complex problems and to integrate scientific reasoning into their decision-making processes (Manduca and Mogk, 2002). Furthermore, describing the relevance of data through stories assists with engaging the affective domain of the audience, which has been shown to be critical to learning taking place (Falk and Dierking, 2000).

Formal and informal science educators play a critical role in facilitating the successful interpretation and use of scientific data by K-12 students and other members of the public. Evaluation reports from informal science education institutions indicate the public learns more or perceives that they learned more following experiences with facilitators (Haley Goldman et al., 2010; Price, 2012). According to Manduca and Mogk (2002), "Exploration and interpretation of data in its richest form is a highly sophisticated activity requiring much expertise. Thus, considerable skill is needed on the part of the instructor." Educators' level of knowledge, pedagogical skills, and interpretative skills all have a strong impact on the quality of learning experiences in informal and formal settings (Evans et al., 2011; National Research Council, 2011). Unfortunately, educators' training and professional development can be fragmented and inconsistent (Evans et al., 2011; Tran and King, 2007; National Research Council, 2011; Buhr, 2011), hampering their ability to use scientific data and findings effectively in their teaching and interpretation activities. Building the capacity of educators to integrate data more effectively into formal and informal education activities is a priority both for NOAA and for the broader education community.

NOAA's core mission includes sharing NOAA's data, information, and research broadly to promote an engaged and educated public with an improved capacity to make scientifically informed environmental decisions ([www.ppi.noaa.gov/ngsp/](http://www.ppi.noaa.gov/ngsp/)). NOAA possesses a wealth of data in ocean, coastal, Great Lakes, weather, and climate sciences. NOAA has also developed data access tools, such as Science On a Sphere® ([www.sos.noaa.gov/What\\_is\\_SOS/index.html](http://www.sos.noaa.gov/What_is_SOS/index.html)), the NODE project ([www.dataintheclassroom.org/node](http://www.dataintheclassroom.org/node)), and [www.climate.gov](http://www.climate.gov), that facilitate visualization and understanding of complex global and local datasets. These NOAA resources present an excellent opportunity for educators to integrate cutting-edge scientific data, data visualizations, and data access tools into informal and formal education activities and programs with the goal of improved stewardship and informed decision making in response to global environmental change.

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 ([www.ppi.noaa.gov/ngsp/goals](http://www.ppi.noaa.gov/ngsp/goals)): healthy oceans; weather-ready nation; climate adaptation and mitigation; and resilient coastal communities and economies. Projects must specifically emphasize the theme of global environmental change (referred to hereafter as global change), including (but not limited to) such topics as

drought, severe weather, ocean acidification, sea level rise, and climate change. NOAA's education website ([www.education.noaa.gov](http://www.education.noaa.gov)) and an additional list of relevant assets ([http://www.oesd.noaa.gov/grants/NOAA\\_assets.html](http://www.oesd.noaa.gov/grants/NOAA_assets.html)) provide links to NOAA datasets, potential NOAA partners, and other resources connected with many of these topics. Projects may consider integrating existing products/services related to climate change education (see the Climate Literacy and Energy Awareness Network [<http://cleanet.org/index.html>] and the Tri-Agency Climate Education Catalog [[https://nice.larc.nasa.gov/trace/trace\\_catalog.php](https://nice.larc.nasa.gov/trace/trace_catalog.php)]). Projects may also consider integrating practices, crosscutting concepts, and/or core ideas from NRC's Framework for K-12 Science Education ([www7.nationalacademies.org/bose/Standards\\_Framework\\_homepage.html](http://www7.nationalacademies.org/bose/Standards_Framework_homepage.html)), which will form the basis for the Next Generation Science Standards.

The target audiences for this funding opportunity are informal educators (including interpreters and docents) and/or formal educators (pre- or in-service) in the United States. Recent evidence suggests that teens are a critical audience for engaging in global change issues (The Ocean Project, 2009, 2010 and 2011; Cone Communications, 2006), thus there is an interest in projects that build the capacity of informal and/or formal educators who serve teenage audiences. There is also an interest in projects that address reaching groups traditionally underserved and/or underrepresented in Earth System science (see Section I.A.2).

Successful projects will be based on established best practices and will fill an identified need to build the capacity of educators to use NOAA data and data access tools to help K-12 students and/or the public understand and respond to global change. Projects should include robust evaluation plans designed to measure their effectiveness in meeting the proposed project goals and objectives as well as the goal of this funding program. The impact of the proposed project on the target educators must be measurable during the award period. Projects are also encouraged to track outcomes among the public and/or K-12 audiences served by the target educators.

## 2. Description of Required Activities:

All projects must focus on building the capacity of informal educators (including interpreters and docents) and/or formal educators (pre- or in-service) to use NOAA data and data access tools to help K-12 students and/or other public audiences understand and respond to global change. Capacity-building activities may include, but are not limited to, professional development focused on the understanding, use, or interpretation of data; training in approaches for incorporating data into relevant stories related to global change; training in the use of new technologies or data access tools; and/or the fostering of professional learning communities/communities of practice to enhance

educators'/interpreters' scientific knowledge, pedagogy, interpretive, and/or communication skills. Applicants and project partners should demonstrate a commitment on the part of their institutional leadership to implement and sustain the proposed capacity-building activities past the lifetime of the award. Letters of commitment may be included as supplementary documents (see Section IV.B.1).

Project activities should be based on established best practices tailored to the activity type and to the specific target audience(s) reached by the educators. Activities involving professional development or training of informal or formal educators should be guided by the professional development standards contained within the National Science Education Standards (National Research Council, 1996), particularly the emphasis on the educator as an active participant in the process (Falk and Yager, 2008) and the incorporation of ongoing reflection and collaboration (Evans et al., 2011). Professional development should be sustained, deep, and relevant and should occur within a supportive professional network of communities (Buhr, 2011). It should also enhance educators' ability to involve their audiences in genuine science and engineering practices that help learners apply scientific knowledge to real-world settings (Moon et al., 2012).

Capacity-building activities for educators should ultimately increase educators' effectiveness in using NOAA data and data access tools to promote stewardship and increase informed decision making by a diverse pool of K-12 students and/or other members of the public. Proposed activities should build the capacity of educators not to improve STEM learning in isolation, but to address knowledge, skills, attitudes, and behaviors that support responding to environmental change issues relevant to NOAA's mission. **Special care should be given to incorporating current scientific findings and to correcting and preventing scientific inaccuracies and misinterpretations.** Partnerships with NOAA entities, including the involvement of NOAA scientists as a resource for capacity-building activities, are strongly encouraged for all projects.

Successful projects will fill an identified gap in capacity among informal or formal educators, as demonstrated through an existing needs assessment. Applications that propose the expansion or enhancement of a previously funded project that meets the requirements of this funding opportunity are eligible. However, the applicants must explicitly demonstrate the significant accomplishments of the previous award and how the project will significantly improve, and build off of, the previous award. Applicants are also encouraged to leverage the work of projects previously funded by NOAA's Environmental Literacy Grants. A list of previously funded projects is available at [www.oesd.noaa.gov/grants/elg.html](http://www.oesd.noaa.gov/grants/elg.html), under the "Awards" tab.

Applications primarily seeking to develop new instructional materials or curricula are not sought in this solicitation. However, projects that include the development of instructional materials/curricula (involving the use of NOAA data connected to the theme of

global change) as part of a capacity-building project will be considered. Similarly, the development or installation of data access tools or other hardware/software should not be the primary focus of any application, but may be included as a component of a capacity-building project.

### 3. Characteristics of a Successful Project

Successful projects under this funding opportunity will exhibit all the following characteristics:

- Enhance educators' ability to use scientific data, data visualizations, data access technologies, and other assets available through NOAA (plus additional sources, if desired) to engage K-12 students and/or other members of the public in understanding and responding to issues related to global change.

- Utilize the resources of a collaborative team of two or more U.S. institutions. Collaborative applicant teams are strongly encouraged to include at least one applicant that has not previously received a grant from NOAA's Environmental Literacy Grants program (see "Awards" tab under [www.oesd.noaa.gov/grants/elg.html](http://www.oesd.noaa.gov/grants/elg.html) for a list of previous awardees).

- Demonstrate the commitment of the institutional leadership of all collaborative applicants and project partners to implement and sustain the proposed capacity-building activities past the lifetime of the award. Letters of commitment may be included as supplementary documents (see Section IV.B.1).

- Have a project impact area involving a minimum of two U.S. states or territories.

- Relate to NOAA's mission and focus on one or more of the goals of NOAA's Next Generation Strategic Plan [www.ppi.noaa.gov/ngsp/goals/](http://www.ppi.noaa.gov/ngsp/goals/): healthy oceans; weather-ready nation; climate adaptation and mitigation; and resilient coastal communities and economies.

- Employ the relevant strategies and address one or more of the goals articulated in the NOAA Education Strategic Plan ([www.education.noaa.gov/plan](http://www.education.noaa.gov/plan)).

- Specifically emphasize the theme of global change, including (but not limited to) such topics as drought, severe weather, ocean acidification, sea level rise, and climate change.

- Utilize established best practices tailored to the specific audience(s) targeted by the educators (see Section I.A.2).

- Incorporate scientific research, data, and models from NOAA (plus additional sources, if desired) related to ocean, coastal, Great Lakes, weather, and climate sciences.

-Base the project on an existing needs assessment and have clearly stated outcomes and objectives that are measurable and appropriate to the target audience(s).

-Include a plan for robust project evaluation during the award period that will assess impacts on the target educators' ability to use NOAA data and data access tools to help K-12 students and/or the public understand and respond to global change (see section I.A.6, Project Evaluation, below for further guidance). Projects are also encouraged to track changes in attitudes, knowledge, skills, and/or behaviors among the public and/or K-12 audiences served by these educators. In addition, digital interactive media projects should involve user-interface testing.

-Share information on project impacts and design with NOAA and the appropriate broader science education communities.

-Increase awareness and use of NOAA resources among target audiences.

Additionally, successful projects under this funding opportunity may exhibit the following characteristics where appropriate:

- Align activities to the principles in:

--"Ocean Literacy: Essential Principles of Ocean Sciences"

([www.coexploration.org/oceanliteracy/documents/OceanLitConcepts\\_10.11.05.pdf](http://www.coexploration.org/oceanliteracy/documents/OceanLitConcepts_10.11.05.pdf))

--"Great Lakes Literacy: Essential Principles and Fundamental Concepts for Great

Lakes Learning" ([http://greatlakesliteracy.net/\\_downloads/gllp-brochure-web.pdf](http://greatlakesliteracy.net/_downloads/gllp-brochure-web.pdf))

--"Essential Principles and Fundamental Concepts for Atmospheric Science Literacy"

(<http://eo.ucar.edu/asl/pdfs/ASLbrochureFINAL.pdf>)

--"Climate Literacy: The Essential Principles of Climate Science"

([http://www.climate.noaa.gov/education/pdfs/climate\\_literacy\\_poster-final.pdf](http://www.climate.noaa.gov/education/pdfs/climate_literacy_poster-final.pdf)).

--"Estuary Principles & Concepts"

(<http://estuaries.noaa.gov/Teachers/Default.aspx?ID=79>)

--"Energy Literacy: Essential Principles and Fundamental Concepts for Energy Education"

([http://downloads.globalchange.gov/Literacy/Energy\\_Literacy\\_1.0\\_High\\_Res.pdf](http://downloads.globalchange.gov/Literacy/Energy_Literacy_1.0_High_Res.pdf))

-Reach educators who serve teen audiences and/or groups traditionally underserved and/or underrepresented in Earth System science (see Target Audience section below for further guidance).

-Be informed by activities previously funded by NOAA's Environmental Literacy Grants Program (See "Awards" tab under [www.oesd.noaa.gov/grants/elg.html](http://www.oesd.noaa.gov/grants/elg.html)).

- Be informed by guidelines for digital product design and usability developed by a NOAA ELG grantee, if applicable (Romano, 2012).

-Be designed for sustainability beyond the project period.

-Partner with NOAA entities and/or involve NOAA scientists as a resource for capacity-building activities.

#### 4. Target Audiences:

The target audiences for this funding opportunity are informal educators (including interpreters and docents) and/or formal educators (pre- or in-service) in the United States. There is an interest in projects that build the capacity of informal and/or formal educators who serve teenage audiences. There is also an interest in projects that address reaching groups traditionally underserved and/or underrepresented in Earth System science. To engage these groups, projects should incorporate what is known about best practices for working with teenage audiences and for broadening participation in STEM fields (e.g., BEST 2004; Levine, et al. 2009, The Ocean Project, 2009, 2010 and 2011; Cone Communications, 2006). A listing of groups traditionally underrepresented in STEM fields can be found in the 2012 NSF Science and Engineering Indicators Report at <http://www.nsf.gov/statistics/seind12/start.htm>.

#### 5. Project Management:

Projects should have a clear management structure and decision-making process that specifies the roles of each collaborative applicant and key personnel. Applicants may choose their preferred method for managing their collaborative team and should explain the management structure in their project narrative. One applicant from a collaborative team must be designated as the lead institution for the purpose of submitting applications (see Section IV.B. below). A collaborative team may also assign this institution a leadership role in coordinating the project. Alternatively, collaborative teams may form a leadership committee that is responsible for overall coordination of project activities. Projects involving the development of new or modification of existing digital interactive media should include a digital architect in the project's management.

Once funded, documentation showing approval from all collaborating institutions must be provided with a request for any major project changes, including but not limited to changes in key personnel, project scope, or budget.

#### 6. Project Evaluation:

Project activities should be evaluated for their effectiveness in meeting the proposed project goals and objectives as well as the goal of this funding program. Projects should be based on an existing front-end evaluation/needs assessment and there should be reference to that needs assessment in the project description. Plans for formative and summative project evaluations should be well constructed and should use best practices for evaluating these types of projects. Projects involving the design of new or modification of existing digital interactive media should evaluate the usability of the interface design as well as the educational impacts of the proposed project. Discussion of formative and summative evaluations should be included in the project description and should also be reflected in the budget section. Lastly, potential impacts of the project beyond the award period should be described.

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. 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 educators must be measurable during the award period. Projects are also encouraged to track outcomes among the public and/or K-12 audiences served by these educators.

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. These strategies should utilize a variety of mechanisms to engage relevant community members and to inform future efforts. 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. Project teams must provide summative evaluation reports to NOAA. If applicable, applicants may also post evaluation reports to [www.informalscience.org](http://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](http://www.howtosmile.org)).

#### 7. Award Dates and Mission Goal:

NOAA anticipates that awards under this announcement will be made by September 30, 2013 and that the projects funded under this announcement will have a start date no earlier than October 1, 2013. Note: Links to this announcement and other helpful information for applying is available at [www.oesd.noaa.gov/grants/elg.html](http://www.oesd.noaa.gov/grants/elg.html), under the "Funding" tab.

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

#### 8. Definitions:

**Earth System Science:** an integrated approach to the study of Earth that stresses investigations of the interactions among Earth's components in order to explain Earth dynamics, evolution, and global change. (Source: NASA's Earth Observatory Glossary, <http://earthobservatory.nasa.gov/Glossary/index.php?mode=alpha&seg=e>).

**Environmental literacy:** a fundamental understanding of the systems of the natural world, the relationships and interactions between the living and non-living environment, and the ability to understand and utilize scientific evidence to make informed decisions regarding environmental problems (Source: NOAA Education Strategic Plan, available at: [www.education.noaa.gov/plan](http://www.education.noaa.gov/plan)).

**Global change:** changes in the global environment (including alterations in climate, land productivity, oceans or other water resources, atmospheric chemistry, and ecological systems) that may alter the capacity of the Earth to sustain life. (Source: Global Change Research Act of 1990, <http://uscode.house.gov/download/pls/15C56A.txt>)

**Informal educators:** Professional staff and/or volunteers affiliated with institutions or programs that offer and support science learning experiences outside of the formal K-12 curriculum. For the purposes of this funding opportunity, non-formal educators are included under this definition (Source: National Research Council, 2009 [modified]).

**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, data sets and visualizations, subject matter experts, facilities, and managed natural resource areas. A partial listing of NOAA assets can be found at [www.oesd.noaa.gov/grants/elg.html](http://www.oesd.noaa.gov/grants/elg.html), under the "Resources" tab. 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/](http://www.legislative.noaa.gov/NIYS/). A summary of NOAA resources in various regions of the country is available at:

[www.education.noaa.gov/Special\\_Topics/NOAA\\_in\\_Your\\_Backyard.html](http://www.education.noaa.gov/Special_Topics/NOAA_in_Your_Backyard.html). NOAA assets incorporated into education materials can be found at [www.education.noaa.gov](http://www.education.noaa.gov).

**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). (Source: adapted from the Framework for Evaluating Impacts of Informal Science Education Projects (p.35, [http://inisci.org/resources/Eval\\_Framework.pdf](http://inisci.org/resources/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. (Source: adapted from the Framework for Evaluating Impacts of Informal Science Education Projects (p.35, [http://inisci.org/resources/Eval\\_Framework.pdf](http://inisci.org/resources/Eval_Framework.pdf).)

**Stewardship:** an ethic whereby citizens value and participate in the careful and responsible management of air, land, water, and biodiversity to ensure healthy ecosystems for present and future generations of all life on Earth. Stewardship of the environment can include conservation, protection, regeneration, and restoration of natural ecosystems and incorporates the use of sustainable practices for human actions that impact these resources. (Source: NOAA Education Strategic Plan, [www.education.noaa.gov/plan](http://www.education.noaa.gov/plan))

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## B. Program Priorities

This funding opportunity has two priority categories of eligible applicants, both of equal importance. The goal of both priorities is to build the capacity of informal and/or formal educators to use NOAA data and data access tools to help K-12 students and/or other public audiences understand and respond to global change. Eligible applicants for Priority 1 are collaborative teams of two or more institutions in the United States. Eligible applicants for Priority 2 are collaborative teams that are exclusively composed of two or more 501(c)(3) non-profit aquariums in the United States. For Priority 2, at least one applicant in each collaborative team must be accredited by the Association of Zoos and Aquariums (AZA). Collaborative applicant teams in both Priority 1 and Priority 2 are strongly encouraged to include at least one applicant that has not previously received a grant from NOAA's Environmental Literacy Grants program. More details on eligibility information can be found in section III. A.

## C. Program Authority

Authority for this program is provided by the following: 33 USC 893a, as amended by the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science Reauthorization Act of 2010 ("America COMPETES Reauthorization Act of 2010"), Pub. L. 111-358, § 302.

## II. Award Information

### A. Funding Availability

NOAA anticipates the availability of approximately \$3,000,000 of total Federal financial assistance in FY 2013 for this solicitation. Approximately 3-5 collaborative projects, each comprising 2 or more individual awards in the form of cooperative agreements, will be awarded in FY 2013. Funding will be provided separately by NOAA to each collaborative applicant. NOAA reserves the right to hold over a subset of applications that do not receive funding in FY 2013 for consideration in FY 2014.

The total Federal amount requested from NOAA by all collaborative applicants combined must be no less than \$500,000 and no more than \$1,000,000 for all years of the project, including direct and indirect costs. No single institution may request more than 70% of the total combined federal request for the collaborative project. Collaborative teams of applicants requesting Federal support from NOAA of less than \$500,000 or more than \$1,000,000 total for all years, or collaborative teams of applicants in which an individual applicant requests more than 70% of the total combined federal request for the project, will not be considered for funding.

The combined total budget request for a collaborative project should not include any funding that would support NOAA partners in the project, including the personnel involved and the activities and tasks that they will undertake. Any costs associated with these activities that go beyond in-kind support will be handled internally by the Office of Education; these costs may not exceed 10% of the total federal request for the proposed project. See Section IV.B.1(f) for details regarding how to document potential NOAA costs.

The amount of funding available through this announcement will be dependent upon final FY 2013 and FY 2014 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. The exact amount of funds that may be awarded will be determined in pre-award negotiations between the applicant and NOAA representatives.

Applications to renew or supplement existing awards will not be accepted. 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

Applications must cover a project period of two to five years to be eligible for merit review. Start dates can be October 1, 2013 or later. Applicants selected to receive funding may be asked to modify the project start date.

#### C. Type of Funding Instrument

Applications selected for funding will be funded through cooperative agreements under the terms of this notice. Applications funded through cooperative agreements will include substantial involvement of the Federal government which 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 Priority 1 are collaborative teams of two or more institutions in the United States. The following types of institutions may serve as applicants on a collaborative team for Priority 1: institutions of higher education; other nonprofits, including informal science-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. For-profit organizations, foreign institutions, and individuals are not eligible to apply. Each individual applicant must submit an application to NOAA as part of the collaborative team. Applications to Priority 1 that do not meet these eligibility criteria will not be merit reviewed.

Eligible applicants for Priority 2 are collaborative teams that are exclusively composed of two or more 501(c)(3) non-profit aquariums in the United States. At least one applicant in each collaborative team must be accredited by the Association of Zoos and Aquariums (AZA). Each individual applicant must submit an application to NOAA as part of the collaborative team. Applications to Priority 2 that do not meet these eligibility criteria will not be merit reviewed.

For both Priority 1 and Priority 2, there are no eligibility restrictions on institutions that are serving as project partners but are not submitting an application. These partners can

receive a portion of the funding through sub-awards or, for NOAA partners, through direct support from the Office of Education (see Section II.A. and Section IV.B.1(f)). Note: Although NOAA programs and offices can receive a small amount of support from the Office of Education to facilitate their involvement with the project, the principal benefit of the project cannot be to support NOAA.

An individual may apply only once as a Principal Investigator (PI) through this funding opportunity, and the same application may not be submitted to more than one priority. However, institutions may submit more than one distinct 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. However, applications that leverage additional funds or in-kind resources are considered under evaluation criterion (4), "Project Costs".

#### C. Other Criteria that Affect Eligibility

See sections IV. B. and C. below.

### IV. Application and Submission Information

#### A. Address to Request Application Package

Application packages are available through Grants.gov (<http://www.grants.gov>). Grants.gov requires applicants to register with the system prior to submitting an application. This registration process can take several weeks and involves multiple steps. In order to allow sufficient time for this process, applicants should register as soon as they decide they intend to apply, even if they are not yet ready to submit their 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 late submissions. For further information please visit the SAM web portal (<https://www.sam.gov/portal/public/SAM/>).

Each applicant in the collaborative team must be registered separately in Grants.gov. If any applicant has problems downloading the application forms from Grants.gov or uploading

the application into the Grants.gov system, they should contact Grants.gov Customer Support at 1-800-518-4726 or support@grants.gov.

PLEASE NOTE: As of December 2012, applicants using the newest version of Adobe Reader XI may encounter an error that could prevent them from submitting their application through Grants.gov. To check whether you have a compatible version of Adobe Reader installed, visit <http://www.grants.gov/applicants/AdobeVersioningTestOnly.jsp>. To download a version of Adobe Reader that is compatible with Grants.gov, visit [http://www.grants.gov/help/download\\_software.jsp](http://www.grants.gov/help/download_software.jsp).

## B. Content and Form of Application

Each individual institution that is part of the collaborative team of applicants must submit a separate application through Grants.gov. Failure of any applicant team member to submit an application before the deadline will result in the entire collaborative project not being merit reviewed. One applicant from the collaborative team must be designated as the lead institution and has different required elements for submission than the other collaborative team applicant(s) (see Section IV.B.1 below).

See the Office of Education's frequently asked questions site: [www.oesd.noaa.gov/grants/elg/faq\\_page.html](http://www.oesd.noaa.gov/grants/elg/faq_page.html) for additional guidance during the preparation of applications.

### 1. Required Elements for Applications

FORM: 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 full application should be single spaced and consist of the elements described in Section IV.B.1.

Every collaborative applicant must submit its own Standard Forms, title page, budget table, and budget narrative. Failure of any individual applicant to submit these items through Grants.gov before the deadline will result in the entire collaborative project not being merit reviewed. One collaborative applicant must be designated as the lead institution and is responsible for submitting the project description, references, work plan/milestone chart, data sharing plan, resumes, description of NOAA involvement, current and pending support, and (if applicable) letters of commitment on behalf of the entire team. These application elements should be written jointly by the applicants and will be used as the basis for merit review of the entire collaborative project. Failure of the lead institution to submit these items

through Grants.gov before the deadline will result in the entire collaborative project not being merit reviewed.

The identity of the lead institution should be agreed upon by all collaborative applicants and must be indicated on Page 1 of each title page. Please use the collaborative title page template from this URL: [www.oesd.noaa.gov/grants/elg/application\\_templates.html](http://www.oesd.noaa.gov/grants/elg/application_templates.html). The PI listed on each title page should be affiliated with the institution submitting the application; individuals from collaborating or other partner institutions may be listed as co-PIs.

**CONTENT:** Applications from the lead institution must include all elements (a) through (i) below; elements (j) and (k) are optional. Applications from other collaborating institutions must include elements (a), (b), and (h), and should not include any additional elements. 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 an application package will be removed from the application prior to merit review.

(a) **Required Forms.** At the time of full application submission, all applicants must 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.):

(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)

Only the versions of these forms available in Grants.gov are acceptable.

(b) **Title Page.** Please use the collaborative title page template available at [www.oesd.noaa.gov/grants/elg/application\\_templates.html](http://www.oesd.noaa.gov/grants/elg/application_templates.html). The title page should identify the funding opportunity to which you are applying, the project's title, the names of the lead and collaborating applicant(s), and the 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 application; individuals from collaborating or other partner institutions may be listed as co-PIs. The proposed start and end dates for the project and requested budget should also be included on the title page. The title page should also contain an executive summary of the project that

does not exceed 150 words; this summary should be written jointly by the collaborative applicants and 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. Project summaries of applications that receive funding may be posted on program-related websites and/or sent to members of Congress.

(c) 15-page Project Description. The project description section must not exceed 15 pages and must follow the requirements in IV.B.1, Content and Form of Applications. 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 [www.oesd.noaa.gov/grants/elg/application\\_templates.html](http://www.oesd.noaa.gov/grants/elg/application_templates.html).

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

(i) The objective(s), expected outcomes (see definition in Section I.A.8), and an explanation for how the activities and expected outcomes support the goal of this funding program, the outcomes of the NOAA Education Strategic Plan, and the goals of NOAA's Next Generation Strategic Plan, as described in section I.A;

(ii) Description of 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, implement, and evaluate 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;

(iii) A discussion of the project's geographic scale and target audience(s) that specifically identifies whether the audience(s) is (are) informal educators (including interpreters and docents), formal educators (pre- or in-service), or some combination of those audience types. If the proposed project will reach underserved or underrepresented groups, this should be indicated;

(iv) A discussion of how the proposed project incorporates ocean, coastal, Great Lakes, weather, and/or climate sciences and reflects or addresses the Ocean Literacy, Great Lakes Literacy, Climate Literacy, Atmospheric Science Literacy, Energy Literacy, and/or Estuary Principles & Concepts as applicable;

(v) A description of the management structure and decision-making process of the collaborative team, including the collaborative applicants' roles in the project, the

coordination between the applicant team members, and the involvement and roles of additional project partners (including NOAA partners). (NOTE: letters of commitment articulating project partners' roles should be submitted as a separate section of the application. Also, additional details of NOAA involvement will be provided in IV.B.1(f) below);

(vi) A discussion of the institutional profiles and capabilities of the collaborative applicants and other partner institutions;

(vii) A description of 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.oesd.noaa.gov/grants/NOAA\\_assets.html](http://www.oesd.noaa.gov/grants/NOAA_assets.html));

(viii) A description of 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. See Section I.A.6 for further guidance on project evaluation;

(ix) A description of the qualifications and capabilities of the personnel that will be involved in the project; and

(x) 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. In a chronological fashion, indicate the tasks to be completed by the collaborating applicants and other project partners, including specific project deliverables. Provide a timeline of major tasks and potential outcomes covering the duration of the proposed project, including project evaluation. The tasks should relate both to the budget and to the intended deliverables or activities. There is no page limit for this element.

(e) Brief Resumes. For all Principal Investigators (PIs) and Co-Principal Investigators (co-PIs) listed on the title pages of the collaborative applicants, provide resumes of no more than 3 pages per person that include a list of professional and academic credentials. Resumes of additional key personnel from applicant institutions and project partners are optional but recommended, as this will help reviewers to assess the applicants' qualifications.

(f) Description of NOAA Involvement in Project. Describe the involvement of any NOAA partners in the project, including the personnel involved and the activities and tasks that they will undertake. Include a description of any costs associated with those activities that go beyond in-kind support from their NOAA office and will require financial support

from the Office of Education. These costs cannot exceed 10% of the total federal request for the proposed project. The description of these costs should provide enough detail to allow the Office of Education staff and the review panel to evaluate the reasonableness and appropriateness of these costs. Cost details can include salaries, travel, equipment, contractual and/or any other costs directly supporting the NOAA project partner(s). These costs should not be included in the Title Page, SF-424, SF-424A, or the project budget table and narrative and do not count toward the budget minimum and maximum described in section II.A, (Funding Availability). If there is no NOAA partner, this must be clearly indicated on a separate page under a heading, "Description of NOAA Involvement in Project". There is no page limit for this element.

(g) Current and Pending Support. 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 pages of the collaborative applications. 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 [www.oesd.noaa.gov/grants/elg/application\\_templates.html](http://www.oesd.noaa.gov/grants/elg/application_templates.html).

(h) Budget. Applications from each collaborative applicant must include a budget for their particular institution that contains both a detailed table and a narrative, in addition to the required official budget form (SF-424A). Both the table and the narrative should use the same categories as shown on the SF-424A form.

The Budget Section 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 a specific project. The overall budget must include all applicant expenses anticipated in order to realistically describe for reviewers what resources will be necessary to carry out the project. When 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 per person and per trip costs for transportation, lodging, and meals. Applicants should request funding to allow the PI(s) to attend PI conferences every year during the life of the award.

- Equipment and supplies, if applicable.

-Contractual costs, such as anticipated sub-awards. If sub-contracts or sub-awards will be made to project partners or others, the same amount of budget detail provided for the applicant institution's activities (broken down by the categories shown on the SF-424A form) should be provided for each sub-award.

-Other costs, including printing, publications, evaluations, and communication expenses.

-Indirect costs, if applicable. If indirect costs are requested, indirect-cost-rate agreements should be included for the applicant organization. If an applicant does not have an indirect cost rate and wants to include indirect costs, the applicant has up to 90 days after the award start date to submit an indirect cost proposal or cost allocation plan. Indirect-cost-rate-agreement documentation is not required for sub-awardees.

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 as well as a description of any other funding sought or obtained that will be leveraged to complement this project.

See [www.oesd.noaa.gov/grants/elg/application\\_templates.html](http://www.oesd.noaa.gov/grants/elg/application_templates.html) for a budget narrative template and model and a budget table model.

There is no page limit for this element.

(i) Data Sharing Plan. Environmental data and information, collected and/or created under NOAA grants/cooperative agreements must be made visible, accessible, and independently understandable to general users, free of charge or at minimal cost, in a timely manner (typically no later than two (2) years after the data are collected or created), except where limited by law, regulation, policy or by security requirements. 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.

We anticipate that most proposed projects under this funding announcement will not involve the collection of environmental data. If no 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 Sharing Plan") indicating that no data will be collected/created as part of this project. If an applicant's project does involve the collection of environmental data, the PI should contact one of the Federal Program Officers to discuss

the content and form of an appropriate data sharing plan. There is no page limit for this element.

(j) 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.

(k) 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. Partner institutions that will be participating in capacity-building activities are strongly encouraged to submit letters of commitment indicating their interest in the topic and format of the proposed program, their willingness to participate, and how the program complements their strategic priorities. Letters of commitment from applicants and project partners that demonstrate a commitment on the part of their institutional leadership to implement and sustain the proposed capacity-building activities should also be included.

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

### C. Submission Dates and Times

The deadline for applications is 11:59:59 pm EST on March 12, 2013 (note that Office of Education staff will only be available to answer questions until 5 PM EDT). 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. Full applications submitted through Grants.gov will be accompanied by an automated receipt of the date and time of submission. For applications submitted through Grants.gov, there will be two automated email receipts sent to the application submitter with the date and time of submission (the first email confirms receipt, the second email confirms that there are no errors with your application submission and that it has been forwarded to NOAA for further processing). If both email confirmation receipts are not provided within two (2) days of application submission, contact the Grants.gov Help Desk and [oed.grants@noaa.gov](mailto:oed.grants@noaa.gov). PLEASE NOTE: 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. Applicants are responsible for ensuring that all required elements have been appropriately submitted and that all collaborative applicants have submitted their applications before the deadline.

Additional instructions for Grants.gov can be found at [www.oesd.noaa.gov/grants/elg/faq\\_page.html](http://www.oesd.noaa.gov/grants/elg/faq_page.html).

#### D. Intergovernmental Review

Applications submitted to this funding opportunity are not subject to Executive Order 12372, Intergovernmental Review of Federal Programs.

#### E. Funding Restrictions

There are no funding restrictions.

#### F. Other Submission Requirements

Please refer to important information in Submission Dates and Times above to help ensure your application is received on time.

Applications must be submitted through Grants.gov APPLY (<http://www.grants.gov>). Hard copy and/or email application submissions will not be accepted.

PLEASE NOTE: As of December 2012, applicants using the newest version of Adobe Reader XI may encounter an error that could prevent them from submitting their application through Grants.gov. To check whether you have a compatible version of Adobe Reader installed, visit <http://www.grants.gov/applicants/AdobeVersioningTestOnly.jsp>. To download a version of Adobe Reader that is compatible with Grants.gov, visit [http://www.grants.gov/help/download\\_software.jsp](http://www.grants.gov/help/download_software.jsp).

### V. Application Review Information

#### A. Evaluation Criteria

##### A. Evaluation Criteria

(1) Importance and/or relevance and applicability of proposed project to the program goals (25%): This ascertains whether there is intrinsic value in the proposed work and/or relevance to NOAA's Federal, regional, 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 the goals and objectives of this funding program described in section I.A;

- How effectively the project will build the capacity of informal and/or formal educators to use NOAA data and data access tools to help K-12 students and/or other public audiences understand and respond to global change.

-How well the project is aligned with NOAA's Education Strategic Plan ([www.education.noaa.gov/plan](http://www.education.noaa.gov/plan)) and the goals of NOAA's Next Generation Strategic Plan ([www.ppi.noaa.gov/ngsp/goals/](http://www.ppi.noaa.gov/ngsp/goals/));

-The extent to which ocean, coastal, Great Lakes, weather and/or climate science topics are incorporated into the project activities and products;

-The extent to which the project utilizes NOAA data, data access tools, and other NOAA assets to accomplish its goals; and

-The extent to which the project will infuse the Ocean Literacy, Great Lakes Literacy, Climate Literacy, Atmospheric Science Literacy Essential Principles and Fundamental Concepts, and/or Estuary Principles & Concepts, if applicable.

(2) Technical/scientific merit (35%): This assesses whether the approach is technically sound and/or innovative, if the methods are appropriate, and whether there are clear project goals and objectives. Reviewers will evaluate:

-The completeness and adequacy of detail in the project description including clearly stated goals and measurable objectives;

-The extent to which the project is based on a needs assessment and has clearly stated outcomes and objectives that are measurable and appropriate to the target audience(s);

-The overall technical feasibility of the project, including whether the proposed approach is educationally and technically sound, is based on best practices, and (if applicable) is informed by previously funded NOAA's Environmental Literacy Grants;

-The extent to which the project incorporates current scientific research, data, and models related to ocean, coastal, Great Lakes, weather, and climate sciences;

-The likelihood that the project will be successfully implemented within the time proposed and on a scale that spans at least two U.S. states;

-The extent to which all collaborative applicants and partners are working together and contributing meaningfully to the project, including articulation of activities in letters of commitment;

-Whether there is a clear delineation of responsibilities of the project's key personnel and whether there are adequate communication and decision-making mechanisms in place for coordinating among all collaborating institutions and project partners;

-The likelihood the impacts of the project on the target audience will be long-lasting; and

-Whether there are appropriate mechanisms to evaluate the success of the project in meeting the anticipated outcomes.

(3) Overall Qualifications of Applicants (15%): This ascertains whether the applicant possesses the necessary education, experience, training, facilities, and administrative resources to accomplish the project. Reviewers will evaluate:

-How well the project utilizes the resources of the collaborative applicant and other partner institutions;

-The qualifications and demonstrated ability within their areas of expertise of the PIs, co-PIs, and key personnel;

-The applicants' previous experience in managing, designing, and implementing this type of educational program;

-The evaluators' previous experience in managing, designing and implementing evaluations appropriate for the target audiences, approaches, and proposed activities;

- How well the application demonstrates a commitment on the part of institutional leadership to implement and sustain the proposed capacity-building activities;

-The likelihood that the applicants and partners have the appropriate resources to carry out the proposed activities and have the ability to complete the proposed project successfully;

(4) Project Costs (15%): The budget is evaluated to determine if it is realistic and commensurate with the project needs and time-frame. Reviewers will evaluate:

-The adequacy of the proposed resources to accomplish the proposed work within the indicated time-frame;

-Whether the budget is sufficient for the scope of the evaluation planned;

-If there are additional funds or in-kind resources that provide additional leverage; 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.

(5) Outreach and Education (10%): This criterion ascertains whether this 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 outcomes and results of the proposed project will be disseminated to audiences beyond those participating directly in the project;

-The extent to which the project reaches teen audiences and groups traditionally underserved and/or underrepresented in STEM fields through a focus on Earth System science;

-The likelihood that the project will increase awareness and use of NOAA resources among target audiences.

## B. Review and Selection Process

Upon receipt of a completed application by NOAA, an initial administrative review is conducted to determine compliance with requirements and completeness of the application. Minimum requirements, among other elements, include all of the following:

-All collaborating applicants are eligible to apply;

-Applications from all collaborating institutions were received on time;

-All required elements of the applications are present and follow format requirements;

-The sum of the requested budgets of all collaborative applicants is no more than \$1,000,000 and no less than \$500,000 for all years of the project (not including any costs associated with NOAA partners, if applicable), with no single institution requesting more than 70% of the total federal request for the project; and

-Project duration is 2 to 5 years

Applications that do not meet all of these minimum requirements are neither reviewed nor considered for funding.

All applications that meet the eligibility and minimum requirements will be evaluated and scored by a panel of independent reviewers. Reviewers may be Federal or non-Federal experts, each having expertise in a separate area so that the reviewers as a whole cover the

spectrum of applications received. The reviewers will score each application using the evaluation criteria and relative weights provided above. A rank order of all applications will be established by averaging the individual review ratings for each application. The review panel will not provide a consensus opinion. The Federal Program Officers (FPOs) will neither vote nor score 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 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 select applications in the rank order established by each panel unless an application is 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:
  - a. Geographically
  - b. By type of institutions
  - c. By type of partners
  - d. By subject areas
  - e. By project types
3. Whether this project duplicates other projects funded or considered for funding by NOAA or other Federal agencies;
4. Program priorities and policy factors;
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 Grants Officer.

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 applications will occur from March-June, 2013. It is anticipated that recommendations for funding under this announcement will be made by September 30, 2013. Collaborative projects funded under this announcement will start no earlier than October 1, 2013.

### VI. Award Administration Information

#### A. Award Notices

Successful applicants will receive notification (either hard copy or electronically) from the Office of Education by September 30, 2013, that the application has been recommended for funding to the NOAA Grants Management Division. This notification is not an authorization to begin performance of the project. Official notification of funding, authorized by a NOAA Grants Officer, is the authorizing document that allows the project to begin. Notifications will be made by e-mail from Grants Online to the Authorized Representative of the project. To enable the use of a universal identifier and to enhance the quality of information available to the public as required by the Federal Funding Accountability and Transparency Act of 2006, to the extent applicable, any proposal awarded in response to this announcement will be required to use the System for Award Management Registration (formerly Central Contractor Registration) and Dun and Bradstreet Universal Numbering System and be subject to reporting requirements, as identified in OMB guidance published at 2 CFR Parts 25 and 170 (20120), (see <http://www.gpo.gov/fdsys/pkg/CFR-2012-title2-vol1/pdf/CFR-2012-title2-vol1-subtitleA.pdf>). Unsuccessful applicants will receive notification (either hard copy or electronically) from the Office of Education by September 30, 2013, that their reviewed 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.C.

#### B. Administrative and National Policy Requirements

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 CFR parts 14 and 24.

## 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 applications 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](http://www.nepa.noaa.gov/NAO216_6.pdf), and the Council on Environmental Quality implementation regulations, [http://ceq.hss.doe.gov/nepa/regs/ceq/toc\\_ceq.htm](http://ceq.hss.doe.gov/nepa/regs/ceq/toc_ceq.htm). 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.

Prior notice and an opportunity for public comment are not required by the Administrative Procedure Act or any other law for rules concerning public property, loans, grants, benefits, and contracts (5 U.S.C. 553(a)(2)). Because notice and opportunity for comments are not required pursuant to 5 U.S.C. 553 or any other law, the analytical requirements of the Regulatory Flexibility Act (5 U.S.C. 601 et seq.) are inapplicable. Therefore, a regulatory flexibility analysis has not been prepared.

Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements: Administrative and national policy requirements for all Department of Commerce awards are contained in the Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements contained in the Federal Register notice of December 17, 2012 (77 FR 74634). A copy of the notice may be obtained at: <http://www.gpo.gov/fdsys/>.

## Limitation of Liability

In no event will NOAA or the Department of Commerce be responsible for application preparation costs. Publication of this announcement does not oblige NOAA to award any specific project or to obligate any available funds. Recipients and sub-recipients are subject to all Federal laws and agency policies, regulations and procedures applicable to Federal financial assistance awards.

## Paperwork Reduction Act

This notification involves collection-of-information requirements subject to the Paperwork Reduction Act. The use of Standard Forms 424, 424A, 424B, and SF-LLL and CD-346 has been approved by the Office of Management and Budget (OMB) under control numbers 0348-0043, 0348-0044, 0348-0040 and 0348-0046 and 0605-0001. Notwithstanding any other provision of law, no person is required to respond to, nor shall

any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the PRA unless that collection of information displays a currently valid OMB control number.

Executive Order 12866 (Regulatory Planning and Review)

It has been determined that this notice is not significant for purposes of Executive Order 12866.

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

Progress reports 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. A final comprehensive report is due no later than 90 days after the expiration date of an award. Progress reports should detail the accomplishments that have occurred during the reporting period, correspond with the goals and objectives identified in the project narrative and provide specific, project-related information. A suggested template for progress reports will be provided to grantees.

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. Financial reports are due for all award recipients no later than 30 days after each 6-month period. 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.

The Federal Funding Accountability and Transparency Act of 2006 includes a requirement for awardees of applicable Federal grants to report information about first-tier subawards and executive compensation under Federal assistance awards issued in FY 2011 or later. All awardees of applicable grants and cooperative agreements are required to report to the Federal Subaward Reporting System (FSRS) available at [www.FSRS.gov](http://www.FSRS.gov) on all subawards over \$25,000.

#### D. Data Sharing Plan

Environmental data and information, collected and/or created under NOAA grants/cooperative agreements must be made visible, accessible, and independently understandable to general users, free of charge or at minimal cost, in a timely manner (typically no later than two (2) years after the data are collected or created), except where limited by law, regulation, policy or by security requirements.

1. Unless otherwise noted in this federal funding announcement, a Data/Information Sharing Plan of no more than two pages shall be required as part of the Project Narrative. A typical plan may include the types of environmental data and information to be created during the course of the project; the tentative date by which data will be shared; the standards to be used for data/metadata format and content; policies addressing data stewardship and preservation; procedures for providing access, data, and security; and prior experience in publishing such data. The Data/Information Sharing Plan will be reviewed as part of the NOAA Standard Evaluation Criteria, Item 1 -- Importance and/or Relevance and Applicability of Proposed Project to the Mission Goals.
2. The Data/Information Sharing Plan (and any subsequent revisions or updates) will be made publicly available at time of award and, thereafter, will be posted with the published data.
3. Failing to share environmental data and information in accordance with the submitted Data/Information Sharing Plan may lead to disallowed costs and be considered by NOAA when making future award decisions.

#### VII. Agency Contacts

You can contact the Federal Program Officers: Carrie McDougall, John McLaughlin, Stacey Rudolph, Sarah Schoedinger, or Sarah Yue at 202-482-0793 or [oed.grants@noaa.gov](mailto:oed.grants@noaa.gov). For further information about the NOAA Office of Education, please visit the office website at [www.oesd.noaa.gov](http://www.oesd.noaa.gov).

#### VIII. Other Information

Two informational webinars with the Federal Program Officers will occur on February 5, 2013 from 3:00 to 5:00 pm EST and February 6, 2013, from 3:00 to 5:00 pm EST. By noon EST on February 1, 2013, interested applicants should register by contacting [oed.grants@noaa.gov](mailto:oed.grants@noaa.gov) and including in the Subject line of the email: "Register for Educator Capacity Building FFO Webinar" and providing the interested party's name, institution, telephone number, email address and preferred webinar date in the body of the email. You

will receive an email response from oed.grants@noaa.gov with the log-in information and date for the webinar. Whenever possible, individuals from the same institution should try to join the webinar from the same computer/phone line.