

2023 NOAA Great Lakes Bay Watershed Education and Training (B-WET) program

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NOTICE OF FUNDING OPPORTUNITY

EXECUTIVE SUMMARY

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

Funding Opportunity Title: 2023 NOAA Great Lakes Bay Watershed Education and Training (B-WET) program

Announcement Type: Initial

Funding Opportunity Number: NOAA-NOS-ONMS-2023-2007351

Federal Assistance Listings Number: 11.429, Marine Sanctuary Program

Dates: Electronic applications must be received by 11:59 p.m. Eastern Time on Tuesday, September 20, 2022 to be considered for funding.

Applicants are required to apply online through www.grants.gov. Use of Grants.gov requires an advanced registration process that may take a few days or several weeks. In addition, when developing your submission timeline, keep in mind it may take Grants.gov up to two business days to validate or reject a submitted application.

Funding Opportunity Description: NOAA's Office of National Marine Sanctuaries (Thunder Bay National Marine Sanctuary office) is seeking proposals under the Great Lakes Bay Watershed Education and Training (B-WET) program (<https://sanctuaries.noaa.gov/bwet/greatlakes/>).

The Great Lakes B-WET program is an environmental education program that supports locally relevant, authentic experiential learning in the K-12 environment. Funded projects provide Meaningful Watershed Educational Experiences (MWEEs; defined below) for students, related professional development for teachers, and help to support regional education and environmental priorities in the Great Lakes. The primary delivery is through competitive grants. The Great Lakes B-WET program awards are funded through the Great Lakes Restoration Initiative.

The FY23 Great Lakes B-WET funding announcement focuses on projects combining long-term, classroom-integrated Meaningful Watershed Educational Experiences (MWEEs) for students with teacher professional development. For Great Lakes B-WET, applicants may be physically located in any U.S. state; however, education projects must target students and teachers in the Great Lakes region. For the purposes of this solicitation, the Great Lakes region includes counties in the Great Lakes watershed in the states of Illinois, Indiana, Michigan, Minnesota,

New York, Ohio, Pennsylvania, and Wisconsin.

FULL ANNOUNCEMENT TEXT

I. Funding Opportunity Description

A. Program Objective

a. OVERVIEW

The NOAA Bay Watershed Education and Training (B-WET) program is an environmental education program that promotes locally relevant, authentic experiential learning focused on K-12 audiences. The primary delivery of B-WET is through competitive funding that promotes Meaningful Watershed Educational Experiences (MWEs; defined in Section I.A.b.) for students, related professional development for teachers, and help to support regional education and environmental priorities in the Great Lakes.

B-WET was established in 2002 in the Chesapeake Bay watershed and currently exists in seven regions: California, Chesapeake Bay, Hawaii, Gulf of Mexico, New England, Pacific Northwest, and Great Lakes. The Office of National Marine Sanctuaries coordinates four of the seven B-WET regions. The Office of National Marine Sanctuaries serves as the trustee for a network of underwater areas encompassing more than 620,000 square miles of marine and Great Lakes waters from Washington State to Florida Keys, and from Lake Huron to American Samoa. The network includes a system of 15 national marine sanctuaries and Papahānaumokuākea and Rose Atoll marine national monuments. The Great Lakes B-WET region was established in 2011 with funding for awards provided by the Environmental Protection Agency through the Great Lakes Restoration Initiative (<https://www.glri.us/>).

The Great Lakes B-WET program supports grantee capacity building and connects grantees to local NOAA assets and relevant STEM (Science, Technology, Engineering, and Mathematics) expertise, while being responsive to local education and environmental priorities. For the purposes of this solicitation, the Great Lakes region is defined as counties in the Great Lakes watershed in the states of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin.

NOAA recognizes that knowledge and commitment built from firsthand experience, especially in the context of one's community and culture, is essential for achieving environmental stewardship. Carefully selected experiences driven by rigorous academic learning standards, stimulating discovery and wonder, and nurturing a sense of community will further connect students with their watershed, help reinforce an ethic of responsible citizenship, and promote academic achievement. Experiential learning techniques, such as those supported by the NOAA B-WET program, have been shown to increase interest in

STEM, thus contributing to NOAA's obligations under the America Competes Act (33 USC 893a(a)).

b. DEFINING THE MEANINGFUL WATERSHED EDUCATIONAL EXPERIENCE (MWEE)

The Meaningful Watershed Educational Experience (MWEE) is a learner-centered framework that focuses on investigations into local environmental issues and leads to informed action. MWEEs are made up of multiple components that include learning both outdoors and in the classroom and are designed to increase environmental literacy by actively engaging students in building knowledge and meaning through hands-on experiences. In these experiences, the core ideas and practices of multiple disciplines are applied to make sense of the relationships between the natural world and society. MWEEs help connect students with their local environment and equip them to make decisions and take actions that contribute to stronger, sustainable, and equitable communities.

The MWEE consists of four essential elements and four supporting practices that build upon each other to create a comprehensive, student-centered learning experience. Throughout the MWEE, teachers provide structure, support, and encouragement as students use their curiosity and creativity to investigate and take action to address a local environmental issue. To support teacher implementation of MWEEs, B-WET has also included five practices that are recommended to be in place for teacher professional development activities.

MWEEs are appropriate for all grade levels with content and practices growing in complexity and sophistication across the grades — starting with teacher-guided investigations and progressing to student-led inquiry. Using the MWEE framework helps educators create an engaging program to achieve their learning objectives (i.e., the knowledge, skills, and attitudes that students should be able to exhibit following instruction). Learning objectives should address academic standards, but might also include other objectives, such as teamwork, socio-emotional learning, and civic responsibility.

1. MWEE ESSENTIAL ELEMENTS

The MWEE consists of four essential elements that describe “what students do:” Issue Definition, Outdoor Field Experiences, Synthesis and Conclusions, and Environmental Action Projects. These elements, together with the supporting practices, create a learner-centered framework that emphasizes the role of the student in actively constructing meaning from the learning experiences. The essential elements are not meant to be linear. In fact,

some elements, such as Synthesis and Conclusions, occur repeatedly throughout the MWEE.

1.1 Issue Definition

During Issue Definition, students learn about an environmental issue by planning and conducting background research and investigations. An environmental issue is an environmental problem, often with observable phenomena, to which community members bring a variety of perspectives. To provide structure for their exploration of the issue, students focus on a driving question that is defined by the teacher. This question is the “big picture” question that sparks curiosity and organizes student inquiry and investigations, which ultimately informs environmental actions. It should be open-ended, relevant to students’ lived experiences, and meet learning objectives. To support youth voice and deepen the learning, students are actively involved in co-developing supporting questions with teachers to better understand the driving question and environmental issue.

To explore the driving and supporting questions, students gather information by making observations, finding and reading credible sources, talking to experts, and carrying out field investigations. Students also consider environmental policies and community practices and reflect on personal, stakeholder, and societal values and perspectives to develop a comprehensive picture of the root causes of the environmental issue.

1.2 Outdoor Field Experiences

Students participate in multiple Outdoor Field Experiences to explore the driving question and strengthen their connection to the natural world. Within appropriate safety guidelines, students are actively involved in planning and conducting the field investigations, including developing supporting questions to explore the driving question in the field. Field experiences allow students to interact with their local environment and contribute to learning in ways that traditional classroom or laboratory settings may not. During field experiences, students can use their senses, scientific equipment, and technology to make observations, collect data or measurements, and conduct experiments necessary to answer their supporting questions and inform environmental action. Students who have opportunities to learn in, thrive in, and appreciate the outdoors can become informed and engaged champions for our natural resources.

Outdoor Field Experiences can take place on school grounds or at locations close to schools, such as streams or local parks. They can also take place at off-site locations such as state or national parks, wildlife refuges, marine protected areas, or nature centers that are often

staffed by experts and may provide access to field equipment and facilities. A range of partners, including environmental educators, natural resource professionals, or trained volunteers, can help facilitate field experiences; however, they should be co-developed and co-taught with teachers so that field experiences support learning objectives. Teachers and partners should ensure an accessible outdoor learning environment for all participants, including students with a range of physical, cognitive, emotional, and social abilities. They should also prepare students by providing information and discussing what students can expect to see, feel, or experience during their time outdoors to ensure students feel safe and comfortable during their field experiences.

1.3 Synthesis and Conclusions

During Synthesis and Conclusions, students reflect on each experience and investigation in relation to the issue, and share their claims and conclusions with each other. Teachers should plan for this to occur regularly throughout the MWEE. This learning and frequent reflection provide the foundation for the development of claims and environmental action that address the driving question and connect to the environmental issue. Throughout this process, students should demonstrate understanding of their investigations and conclusions with their peers or the school community. This could involve multiple disciplines and a variety of formats including discussion, journaling, presentations, graphing, performing skits or songs, or creating art.

1.4 Environmental Action Projects

As a result of their investigations, students identify solutions and develop Environmental Action Projects that directly address the issue within their school, neighborhood, or community. Students are actively engaged in and, to the extent possible, drive the decision-making, planning, and implementation of the action project. Teachers facilitate this process by forming groups, moderating, and answering questions. Students reflect on the value of the action and determine the extent to which it successfully addressed the issue.

This essential element allows students to understand that they personally have the power to bring about change by taking action to address environmental issues at the personal, community, or societal level. Taking action instills confidence in students and can contribute to students becoming environmental stewards in their communities.

Environmental Action Projects can take many forms and may fall into the following types:

- 6 Restoration or Protection: actions that assist in the recovery or preservation of a

watershed or related ecosystem that has been degraded, damaged, or destroyed. Examples include: plant or restore protective vegetation/trees; restore a local habitat; remove invasive plants; clean up litter at local beaches, parks, or school grounds; develop a school garden, natural history area, community garden, or other sustainable green space; install rain gardens to help manage stormwater.

¿ Everyday Choices: actions that reduce human impacts on watersheds and related ecosystems and offer ways to live more sustainably. Examples include: refuse/reduce/reuse/recycle; monitor and save water in the face of potential drought or reduction in water availability; compost food or yard waste; research and implement energy efficient strategies or energy alternatives at school and/or at home.

¿ Community Engagement: actions that inform others about how to address community-level environmental issues. Examples include: give presentations to local organizations; organize community events; record or broadcast public service announcements; share information on social media; post flyers in community; share posters at community events/fairs/festivals; mentoring.

¿ Civic Engagement: actions that identify and address issues of public concern. Students acting alone or together to protect societal values or make a change or difference in a student's school, neighborhood, or community. Examples include: present to school principal or school board; attend, speak, or present at town meetings; write to local or state decision makers or elected officials.

2. MWEE SUPPORTING PRACTICES

The MWEE also includes four supporting practices that describe “what teachers do,” along with their partners, to ensure successful implementation with students. The supporting practices are Teacher Facilitation, Learning Integration, Sustained Experiences, and Local Context.

2.1 Teacher Facilitation

MWEEs require that teachers support student learning for the duration of the MWEE, both inside and outside the classroom. Teachers balance roles of facilitation, direct instruction, and coaching to create a student-centered learning experience where the essential elements of the MWEE come together to support goals for learning and create opportunities for students to take active roles in the learning process. Teachers provide space for student choice and voice by creating learning experiences that center on what students value. Even when activities or lessons occur at partner sites or are primarily led by partners at the school, teachers should be actively engaged. Teachers should connect these experiences to prior

learning, foster critical thinking, and lead reflection after the experience so, regardless of the facilitator, the entire MWEE experience feels cohesive to the students.

To support this level of engagement, teachers should have access to professional development opportunities that support their content knowledge, understanding of the MWEE framework, and confidence and intention to implement MWEEs independently (see Teacher MWEE Professional Development Practices for specifics).

2.2 Learning Integration

The MWEE is an educational framework that helps teachers meet their learning objectives in an engaging way. MWEEs are not meant to be something “extra”, but rather a means of enriching lessons for deeper student learning while meeting academic standards. To achieve this vision, MWEEs should be embedded into the school curriculum to support goals for learning and student achievement. They can also provide authentic, engaging interdisciplinary learning that crosses traditional boundaries between disciplines. Finally, the MWEE essential elements can also be used by educators in out-of-school settings (for example, after school programs, clubs, or summer camps) to enrich activities and complement school-based programming.

2.3 Sustained Experience

MWEEs rely on teachers to plan and implement a series of rich and connected learning opportunities where each essential element — from asking questions during Issue Definition through implementing Environmental Action Projects — builds upon and reinforces the others. To accomplish this, MWEEs are incorporated into a unit or multiple units, where learning happens both in and out of the classroom. This provides adequate time for students to not only reflect on the individual lessons and experiences, but also on how all of the elements cohesively come together. While an individual lesson may occur in one class period or field experience, that lesson or experience should be explicitly connected to the larger learning sequence of the MWEE.

2.4 Local Context

MWEEs have teachers use the local environment and community as a context for learning that is relevant to students’ lives. Situating the MWEE within local contexts promotes

learning that is rooted in the unique culture, history, environment, economy, literature, and art of a students' school, neighborhood, or community. To enrich MWEEs, local resources (e.g. partners, expertise, field sites) should be incorporated. Partnerships, such as those with local community-based organizations, create opportunities for students to engage with members of their community of diverse cultures, values, and expertise that can create a more equitable and inclusive experience.

Emphasizing the local context enables students and teachers to develop stronger connections to, and appreciation for, their local environments and communities. This also enables students and teachers to explore how their individual and collective decisions affect their immediate surroundings and in turn affect larger ecosystems and watersheds. .

3. TEACHER MWEE PROFESSIONAL DEVELOPMENT PRACTICES

Professional development should empower teachers to confidently and competently use the MWEE framework to support standards-based learning that aligns with local education agency initiatives. In order to gain and maintain environmental education competencies, teachers benefit from sustained, high-quality professional development that includes ongoing support and feedback. Teachers should gain confidence in the value of MWEEs and strategies for conducting them so that they will be able to implement MWEEs after the professional development has ended. Specifically, the following practices are recommended for professional development to support teachers implementing MWEEs.

3.1 Increases teachers' knowledge and awareness of environmental issues

Teachers must have an adequate level of content knowledge for their MWEE topic area specific to their grade level and discipline, including an understanding of the interactions between natural systems and social systems and human impacts on local watersheds and larger Earth systems. Recognizing that environmental issues often include different perspectives and opinions, teachers must also have a deep understanding of the facts related to environmental issues, along with an understanding of the various stakeholder values. In addition, teachers who demonstrate environmentally responsible attitudes and behaviors may be role models for their students and increase their ability to guide students in environmental actions to address complex environmental issues.

3.2 Models MWEE framework

Facilitators should utilize the same techniques and experiences in professional development that teachers are expected to use with their students, such as hands-on Outdoor Field

Experiences, critical thinking about environmental issues, and Environmental Action Projects. Professional development should also provide opportunities for teachers to understand the goals and rationale behind the MWEE as a framework to learning and environmental stewardship. Professional development should include ongoing support for teachers, and include time for teachers to reflect on modeled activities, and plan for how the student MWEEs will be implemented in their own classrooms.

3.3 Allows for adequate instructional time

Professional development should be multi-day, occurring consecutively or over the course of several weeks or months. Professional development should include ample opportunity for teachers to reflect on their own teaching practices and plan for how to use knowledge and skills gained from professional development in the classroom. Opportunities to share ideas and challenges with colleagues in a cohort creates space for dialogue that can provide teachers with additional support and inspiration.

3.4 Provides ongoing teacher support and appropriate incentives

Even in cases where teachers participate in robust multi-day workshops, such as summer or weekend courses, it is still essential that professional development providers have a structure in place for on-going teacher support and enrichment. This can take the form of follow up meetings, creating web-based forums for communication and feedback, establishing mentor teachers who can serve as points of contact, or including teams of teachers from one particular school. Continuing education credits and stipends can be used to encourage participation in on-going professional development opportunities. Outreach and training opportunities for school administrators help increase high level support for both environmental education and continuing teacher professional development for teachers.

3.5 Meets jurisdictional guidelines for effective teacher professional development

Each jurisdiction has established guidance and recommendations relevant to all forms of teacher professional development. When possible, professional development opportunities for MWEEs should adhere to these general guidelines set forth by local education agencies.

c. RESOURCES FOR IMPLEMENTING MWEEs

The following resources explain the Meaningful Watershed Education Experience (MWEE)

and provide guidance on implementing a MWEE. Though some of the following resources are Chesapeake Bay-focused, the information provided is highly applicable to MWEEs implemented in the Great Lakes.

> MWEE descriptive webpages: The full definition of the MWEE is provided online in an easy to use online format. (<https://www.noaa.gov/education/explainers/noaa-meaningful-watershed-educational-experience>)

> Bay Backpack MWEE webpages: Bay Backpack provides educators with the tools they need to support MWEEs for their students. (<http://baybackpack.com/mwee/what-is-a-mwee>)

> An Educator's Guide to the MWEE: This guide provides basic tools to help think, plan, and evaluate a MWEE. (https://d18lev1ok5leia.cloudfront.net/baybackpack/Documents/Educators_Guide_to_MWEE_508_Download.pdf)

B. Program Priorities

a. PRIORITIES

Proposals MUST address the following priority (described below in detail), as well as all universal elements that are described in Section I.B.b.

1. Projects combining long-term, classroom-integrated Meaningful Watershed Educational Experiences (MWEEs) for students with teacher professional development.

DESCRIPTION OF PROGRAM PRIORITIES

1. PRIORITY 1: Projects combining long-term, classroom-integrated Meaningful Watershed Educational Experiences (MWEEs) for students with teacher professional development.

The NOAA B-WET program seeks proposals that combine long-term, classroom-integrated Meaningful Watershed Educational Experiences (MWEEs) for students with teacher professional development. Teacher professional development and supported student activities under this priority area should incorporate science and stewardship activities focused on issues of Great Lakes and climate science as it relates to the local watershed, and address all aspects of the MWEE as defined in Section I.A.b.

The Great Lakes watershed provides excellent opportunities to engage students in the outdoors for all parts of the MWEE framework. Proposals should aim to include more than

five hours of student activity time spent outdoors. Outdoor activities should be situated in places where students live, grow, play, and they should rely extensively on hands-on, inquiry-based experiences that teach students to draw on multiple disciplines and ways of knowing as they take part in the essential elements of the MWEE.

Professional development should empower teachers to confidently and competently use the MWEE approach to support standards-based learning that aligns with local education agency initiatives. In order to gain and maintain environmental education competencies, teachers benefit from sustained, high quality professional development that includes ongoing support and feedback. Teachers should gain confidence in the value of MWEEs and strategies for conducting them so that they will be able to implement MWEEs after the professional development has ended. Projects should be designed so that teachers not only understand what a MWEE is, but why this type of pedagogy is important. The goal is to ensure that professional development experiences for the teacher ultimately benefit their students.

Teacher professional development should be offered for all teachers whose students will be engaged in MWEEs so they can support classroom integration. It should deliver training on both content and instruction in the outdoors, include yearlong support for teachers, and include a plan for how teachers will be involved in implementing watershed education with their students. This kind of in-depth professional development reinforces a teacher's ability to teach, inspire, and lead young people toward thoughtful stewardship of our natural resources.

Based on educational research findings and preliminary evidence from the B-WET national evaluation system, the B-WET program recommends that professional development include more than 30 hours of professional development time, of which more than 10 hours should be spent outdoors. These targets are expected to support teacher change, and increase the likelihood that teachers will successfully implement MWEEs. This may include any of the following types of B-WET professional development: workshops, college-level courses, professional development provider training (training for individuals who provide teacher professional development), individual teacher coaching and support (e.g., curriculum planning, shared teaching, demonstrations and/or other forms of in-school or in-field support), and/or online support (e.g., courses, webinars, discussion forums).

Professional development should include tools for teachers to implement MWEEs on their school grounds as an alternative to offsite outdoor field experiences. Resources exist to support the effective hands-on implementation of MWEEs and the development and continued use of integrated, sustainable indoor and outdoor environmental learning projects that provide substantial benefit to both students and the school environment. Please see the

School Grounds for Learning resources available at: <https://www.baybackpack.com/action-projects/outdoor-classrooms-labs-habitats>

Proposals should include a plan of action to show how teacher professional development will ultimately lead to MWEEs where students participate in all MWEE elements as defined in Section I.A.b (including issue definition, outdoor field experiences, synthesis and conclusions, and environmental action projects). Student MWEEs should be organized around a driving question that has students focus on a locally relevant environmental issue or phenomenon affecting the watershed, coastal, and / or Great Lakes ecosystems.

Proposals should include details about where the project fits in the scope and sequence of school district curriculum, and applicants should clearly understand and convey the primary learning objectives. Multi-disciplinary objectives are encouraged. Letters of support from curriculum supervisors and science, social studies, and other relevant subject coordinators at the district level can be effective in communicating such details.

b. UNIVERSAL ELEMENTS THAT SHOULD BE INCLUDED WITH EACH PROGRAM PRIORITY

All proposals submitted should address the following universal elements:

1. DEMONSTRATE A CONNECTION TO THE GREAT LAKES BASIN

Demonstrate a connection to the Great Lakes basin through the watershed system so that students understand how their actions can affect the Great Lakes ecosystem through their local watershed. Great Lakes B-WET awards are funded through the Great Lakes Restoration Initiative (GLRI), and proposals must demonstrate how students will gain understanding of the Great Lakes ecosystem, see: GLRI Action Plan III, Objective 5.1 to “Educate the next generation about the Great Lakes ecosystem.”

(<https://www.epa.gov/sites/production/files/2019-10/documents/glri-action-plan-3-201910-30pp.pdf>, pages 25-26)

2. INVOLVE EXTERNAL SHARING AND COMMUNICATION

Projects should promote peer-to-peer sharing and emphasize the need for external sharing and communication. Projects should include a mechanism that encourages the students to share their experiences with other students or with the community (e.g., through a mentoring program, newsletters, journals, or community presentations).

3. DEMONSTRATE PARTNERSHIPS

Partnerships are essential to implementing the Great Lakes B-WET program. Project proposals should include multiple partners. A partnership is a collaborative working relationship between two or more organizations. In most cases, partnerships with school divisions and/or the state department of education (if the applicant is not one of these entities) are highly encouraged and necessary. All partners should be actively involved in the project, not just supply equipment or curricula. Letters from each partner must be submitted with the application package to demonstrate the level of commitment and involvement.

4. ALIGN TO EDUCATIONAL LEARNING STANDARDS

Projects should be aligned to state and/or local learning standards and support local education agency initiatives. For an example, please see:

>Next Generation Science Standards (<https://www.nextgenscience.org/>)

5. ALIGN TO NOAA EDUCATION STRATEGIC PLAN AND INCORPORATE NOAA ASSETS

MWEEs should be aligned to the NOAA Education Strategic Plan (<https://www.noaa.gov/education/explainers/2021-2040-noaa-education-strategic-plan>) and use NOAA assets, such as data, resources, expertise, or places. NOAA has a wealth of applicable products, data, and services as well as a cadre of scientific and professional experts who can enhance student experiences both in the classroom and in the field. These resources complement the educator's strengths and augment the educational resources. Additionally, NOAA personnel can serve as important role models for career choices and stewardship. For more on NOAA assets for education please see:

> NOAA resource collections (<https://www.noaa.gov/education/resource-collections>)

>NOAA in your state (<https://www.legislative.noaa.gov/NIYS/>)

>NOAA in your backyard (<https://www.noaa.gov/education/noaa-in-your-backyard>)

>NOAA Great Lakes ecoregion (<https://www.noaa.gov/education/resource-collections/freshwater/great-lakes-ecoregion>)

6. INCORPORATE ELEMENTS OF CLIMATE SCIENCE AND RESILIENCE

The K-12 education system is a well-positioned venue for instilling comprehensive knowledge, skills, competencies, and resilience around the most pressing environmental issue of today: climate change. According to the Intergovernmental Panel on Climate Change (IPCC) report, communities in the U.S. are experiencing changes in climate that are

resulting in severe storms, flooding, hurricanes, extended drought, change in ocean chemistry and sea level rise, presenting growing challenges to human health and safety, quality of life, and the rate of economic growth. Currently, educational institutions, researchers and policy makers are calling for climate change education that goes beyond knowledge acquisition and formal classroom teaching to efforts that reach audiences of all demographics and incorporate the social, political, economic, and justice elements of climate change. Education has the power to help students develop meaningful personal connections to climate solutions, a sense of personal agency and empowerment, and ultimately impact their behaviors and decision-making in relation to climate change (Kwauk, 2021 <https://www.brookings.edu/research/unleashing-the-creativity-of-teachers-and-students-to-combat-climate-change-an-opportunity-for-global-leadership/>; K12 Climate Action Commission, 2021 <https://www.k12climateaction.org/blog/climate-action-plan-2021>). The MWEE educational framework can directly foster climate knowledge, skills, and competencies to address climate change, climate impacts, and the opportunities to contribute to climate solutions in their own communities. Therefore, the B-WET program strongly encourages the purposeful incorporation of education about climate change into programming. Many climate science resources exist that can support teachers and students including but not limited to:

>Teaching Climate: The Teaching Climate section will support the Next Generation Science Standards (NGSS) Implementation through an integrated Earth system science approach in K-12 education. (<https://www.climate.gov/teaching/climate>)

>US Climate Resilience Toolkit: Learn about potential climate hazards so you can protect vulnerable assets. (<https://toolkit.climate.gov/>)

>Resilience Assets: Tools to better understand your community's environmental threats and what you can do to prepare for them. A list of resilience resources from NOAA, NOAA partners, and other related organizations. (<https://www.noaa.gov/office-education/elp/resilience-assets>)

>CLEAN: The Climate Literacy and Energy Awareness Network includes scientifically and pedagogically reviewed digital resources for teaching about climate's influence on you and society and your influence on climate. (<https://cleanet.org/index.html>)

7. ALIGN TO ENVIRONMENTAL LITERACY PRINCIPLES

Projects should be aligned to environmental literacy principles, as appropriate. For example, please see:

>Great Lakes Literacy Principles: an understanding of the Great Lakes' influences on you and your influence on the Great Lakes (<https://www.cgll.org/for-educators/great-lakes-literacy-principles/>)

c. SPECIAL INTEREST AREAS

Any proposal to this announcement must meet the single Priority Area and Universal Elements as described in the previous section. NOAA also has an additional Special Interest Area that applicants may wish to address if they choose, which is: Community partnerships that lead with equity.

COMMUNITY PARTNERSHIPS THAT LEAD WITH EQUITY

Applicants are encouraged to work with community-organizations that lead with equity (if the applicant is not one of these entities). In order to be effective, sustainable, and equitable, environmental education must be integrated within organizations that understand and support the needs of their community. In addition, challenges like the COVID-19 pandemic and climate change will be felt disproportionately by historically underserved communities, particularly students of color and students from low-income families, who are more likely to lose environmental education within their local school districts. Therefore, the NOAA B-WET program is interested in projects that partner specifically with organizations and institutions that assist underserved communities. Projects are strongly encouraged to develop meaningful and mutually-beneficial partnerships that honor the strengths of community organizations. In successful partnerships, organizations have shared goals and work together to share resources, communicate effectively, collaborate on decision-making, and competently engage members of diverse cultures and expertise. Adequate compensation should be provided for community-based organization partners and community members for the effort they are contributing to the project. Applicants are encouraged to apply NAAEE's Community Engagement Guidelines for Excellence (<https://nnaaee.org/eeepro/publication/community-engagement-guidelines>) in developing their project plans for engagement of target audiences.

Community partnerships may look different across proposals but may include:

>Historically black colleges and universities, Hispanic serving institutions, Tribal colleges and universities, and institutions that work in underserved areas;

>Organizations and institutions that serve marginalized groups, particularly minority communities;

>Partnerships that help to address a watershed challenge, problem, or phenomenon by bringing in local expertise on existing environmental issues and creating innovative solutions;

>Partnerships that enhance the local context, cultural relevance, and cultural competence in

professional development for all teachers.

C. Program Authority

Under 33 U.S.C. § 893a(a), the America Competes Act, the Administrator of the National Oceanic and Atmospheric Administration is authorized to conduct, develop, support, promote, and coordinate formal and informal educational activities at all levels to enhance public awareness and understanding of ocean, coastal, Great Lakes, and atmospheric science and stewardship by the general public and other coastal stakeholders, including underrepresented groups in ocean and atmospheric science and policy careers. In conducting those activities, the Administrator shall build upon the educational programs and activities of the agency.

II. Award Information

A. Funding Availability

The Great Lakes B-WET program awards are funded through the Great Lakes Restoration Initiative. Under this announcement, we anticipate approximately \$900,000 will be available in FY 2023 in award amounts to be determined by the proposals and available funds. NOAA Office of National Marine Sanctuaries anticipates that approximately 8-11 grants will be awarded with these funds. Projects may be one or two years in duration. For single year projects, total federal funding requested must be a minimum of \$50,000 up to a maximum of \$80,000. For two year projects, total federal funding requested must be a minimum of \$50,000 up to a maximum of \$160,000, with a maximum of \$80,000 requested for any one year of the project.

There is no guarantee that sufficient funds will be available to make awards for all qualified projects. The exact amount of funds that may be awarded will be determined in pre-award negotiations between the applicant and NOAA representatives. Publication of this notice does not oblige NOAA to award any specific project or to obligate any available funds. If applicants incur any costs prior to an award being made, they do so at their own risk of not being reimbursed by the government. Notwithstanding verbal or written assurance that may have been received, there is no obligation on the part of NOAA to cover pre-award costs unless approved by the Grants Officer as part of the terms when the award is made.

Applicants are hereby given notice that funds have not yet been appropriated for this program. Future opportunities for submitting proposals to the Great Lakes B-WET competitive process are anticipated, but will depend on funding levels and resources available to support new projects.

Top ranked applications not funded in the current fiscal year may be considered for funding in the next fiscal year without NOAA repeating the competitive process outlined in this announcement.

B. Project/Award Period

The requested award start date must begin on the first day of a month, and project end date is always on the last day of a month. The earliest start date for projects will be April 1, 2023, and the latest start date for projects will be July 1, 2023. Applicants selected to receive funding may be asked to modify the project start date. It is recommended to include the flexibility of the requested start date in your project description.

The period of awards may be up to 24 months. Projects that request two-year funding must include in their submission a full description of the activities and estimated budget by line item (e.g. personnel, equipment, supplies) for all proposed work for each year. Include in your project description discrete deliverables that can be completed by the end of each year.

C. Type of Funding Instrument

Proposals selected for funding will be funded through a grant or cooperative agreement depending upon the amount of collaboration, participation, or involvement of NOAA in the management of the project. A cooperative agreement will be used if the NOAA B-WET program shares responsibility for management, control, direction, or performance of the project with the recipient. Specific terms regarding substantial involvement will be contained in special award conditions.

III. Eligibility Information

A. Eligible Applicants

Eligible applicants are: K-12 public and independent schools and school systems; institutions of higher education; community-based and nonprofit organizations; regional, state, or local government agencies; interstate agencies; and Indian tribal governments. For-profit organizations, foreign organizations, and foreign public entities are not eligible to apply; however, for-profit and foreign organizations and foreign public entities may participate as a project partner with an eligible applicant. Federal agencies are not allowed to receive funds under this announcement, but may serve as collaborative project partners and may contribute services in kind. Individuals are not eligible to apply. While applicants do not need to be located in the targeted geographical regions specified in the program objectives, the primary participants of the projects must be located in the geographical regions specified

in the program objectives. For the purposes of this solicitation, the Great Lakes region is defined as counties in the Great Lakes watershed in the states of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin.

The Department of Commerce/NOAA is strongly committed to broadening the participation of historically black colleges and universities, Hispanic serving institutions, Tribal colleges and universities, and institutions that work in underserved areas. The NOAA B-WET program encourages proposals involving any of the above institutions as well as other organizations that work with underserved or underrepresented audiences.

B. Cost Sharing or Matching Requirement

No cost sharing is required under this program. Applicants may demonstrate cost sharing (including third party in-kind match) and program leveraging to support their projects, but this is not included in the eligibility or evaluation criteria. All cost sharing or matching must be consistent with the requirements of 2 CFR section 200.306.

C. Other Criteria that Affect Eligibility

No other criteria.

IV. Application and Submission Information

A. Address to Request Application Package

Applicants are required to apply online through Grants.gov. You may access the electronic grant application for the Great Lakes Bay Watershed Education and Training Program at <http://www.grants.gov>.

Please note that applicants must locate the downloadable application package for this program by the Notice of Funding Opportunity number (found on the first page of this announcement) or CFDA number (11.429). Users of Grants.gov are now required to use a new application process called Workspace. For more information regarding this platform please visit: <https://www.grants.gov/web/grants/applicants/workspace-overview.html>

After electronic submission of the application, applicants will receive an automatic acknowledgment from Grants.gov that contains a Grants.gov tracking number. NOAA may request that you provide original signatures on forms at a later date. We strongly recommend that you do not wait until the application deadline date to begin the application process through Grants.gov.

If an applicant has problems downloading, please contact 1-800-518-4726 or support@grants.gov

Applicants unable to effectively access application materials electronically should refer to a NOAA official listed in Section VI. of this Announcement to obtain the application materials.

B. Content and Form of Application

Proposals should follow the content and format described below. Applicants should not assume prior knowledge on the part of the Great Lakes B-WET, Thunder Bay National Marine Sanctuary, Office of National Marine Sanctuaries, or the reviewers as to the relative merits of the project described in the application. Some helpful resources for applicants can be found here: <https://www.noaa.gov/office-education/bwet/apply#APP>

a. FORMAT REQUIREMENTS

All pages should be single-spaced and should be composed in at least 11-point font with one-inch margins on 8 1/2 x 11 inch paper. The project description should not exceed 15 pages, exclusive of project summary, literature cited, budget information (including indirect cost rate), resumes of investigator(s), letters of commitment, National Environmental Policy Act (NEPA) questionnaire, and federal forms. Any attachment included in an electronic application should meet the above format requirement when printed out.

All documents submitted as electronic application elements should be PDF (rather than MS Word, Excel, MOV, or other file types).

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. One-page Project Summary
2. Project Description (not to exceed 15 pages total)
3. Budget table, budget narrative (including sub-award details), and the negotiated indirect cost rate agreement (if applicable)
4. Supplemental information - all other attachments combined into one indexed file, such as resumes, logic model, letters of commitment, literature cited, and NEPA questionnaire (if applicable)

b. CONTENT REQUIREMENTS

1.REQUIRED FORMS

The following Federal Forms are required and must be submitted with applications:

- >Standard Form 424 - Application for Federal Assistance
- >Standard Form 424A - Budget Information - Non-Construction Programs
- >Standard Form 424B - Assurances - Non-Construction Programs
- >Standard Form LLL - Disclosure of Lobbying Activities (if applicable)
- >Form CD-511 - Certification Regarding Lobbying

2.APPLICATION PACKAGE

The following information should be included in your application package:

2.1 PROJECT SUMMARY (1-page limit)

It is critical that the project summary accurately describes the project being proposed and conveys all essential elements and objectives of the activities. A person unfamiliar with your project should be able to read the summary and grasp your plan.

The project summary should include:

- >Organization title
- >Principal Investigator(s) (PI)
- >Address, telephone number, and email address of applicant and PI(s)
- >Partner(s)
- >Project title
- >Project duration
- >Brief overview of work to be performed during the entire project period including audience description information (i.e. areas served, demographics and school districts, grade levels, number of teachers/students to be reached) and delivery method to be used (e.g. workshops, field experiences, interactive programs)
- >Total Federal funds requested
- >Total project cost

2.2 PROJECT DESCRIPTION (15-page limit)

The project description should describe and justify the project being proposed and address each of the evaluation criteria as described below in Section V. A.

>Need: Provide a statement that describes the need for this type of project. Why are you proposing this project? Cite studies or sources, where appropriate, that validate the need for your project.

>Target audience(s): Provide a discussion of the target audience(s) that will be served, whether the project will reach marginalized communities and/or children/youth; describe the demographics and vulnerabilities of the target audience(s) and use data to support these assertions; identify specifically how many students and teachers are involved in your project and their demographics.

>Area(s) served: Give a precise location of the project and the area(s) that will be served, including schools, school districts, and counties.

>Objectives: Explain your objectives and your plan to accomplish these objectives. Include specific approaches to achieving those objectives, including methods, timelines, and expected outcomes. Objectives should be simple and understandable; as specific and quantitative as possible. Clearly explain how you will achieve your expected outputs and outcomes. Include a table that outlines how the project objectives are aligned to local learning standards, the NOAA Education Strategic Plan, and environmental literacy principles (as appropriate). Include information about how the project contributes to a greater understanding and stewardship of the Great Lakes ecosystem.

>Proposed activities: Provide a clear statement of the work to be undertaken. Demonstrate how your project meets the criteria defined in the Program Priorities. Outline how the project proposes to ultimately support each element and supporting practice of the MWEE framework. Applicants should clearly show total anticipated contact time with project participants (teachers and students), and indicate how much of this time will be spent outdoors. Describe how you will incorporate climate science into your programming. Include a description of activities involving external sharing and communications plan.

>Project Partners: Describe the project partners' roles and the coordination among project partners; Highlight partnerships with schools and school districts; Highlight any partnerships involving NOAA entities to facilitate use of NOAA assets; Describe how partnerships have been formed to engage marginalized community's residents and/or organizations; Highlight any partnerships with community-based organizations that will lead with equity. Reaching out to partners early in the planning process will be most beneficial for consultation and

collaboration. (Note: letters of commitment articulating project partners' roles should be submitted as a separate section of the application.)

>NOAA Assets: Describe what NOAA products, services, or staff will be used in program delivery.

>Participant recruitment: Provide a plan of action that outlines how you will recruit your target audience and identify incentives to be used such as teacher stipends or continuing education credits.

>Evaluation: Project descriptions should identify and document the results or benefits to be derived from the proposed activities.

Project-level evaluation

Project descriptions should include a plan for project-level evaluation. For this funding opportunity, project-level evaluation is defined as the systematic collection and documentation of information about your project's short-term outcomes in order to improve the project's effectiveness, document successes towards meeting project objectives, and inform decisions about future programming. It informs those who design, manage, and implement the project to make refinements and introduce improvements into future efforts.

Project-level evaluations should be rigorous and well planned, with a clear articulation of how the evaluation results will be used (e.g. what questions will they answer). They should be appropriate for the kind of project proposed, the capacity of the applicant, and the size of project (e.g. new startup project vs. long standing program, new applicant vs. repeat applicant). They may be quantitative and/or qualitative and may include, for example, evaluation tools and surveys, observation, or outside consultation. They should result in not only data, but interpretations of the data

Proposals should provide a project-level evaluation plan for short-term outcomes. If your medium- and long-term outcomes can also be measured within the project period, explain your plans for that evaluation as well. The evaluation plan should include:

- > How will the evaluation be used and what do you hope to gain (e.g. information to determine the success of the project; information on how to improve the project's effectiveness.)
- > What will be evaluated (e.g. changes in participants' knowledge or attitudes related to watersheds)
- > The type(s) of evaluation that is planned (e.g. needs assessment, formative evaluation, process evaluation, outcome evaluation, etc.)

> The methods for implementing the evaluation (e.g. what will be measured, how it will be measured, when will evaluation data be gathered, and how will results be analyzed and delivered?)

Resources for Project evaluation:

- > The MWEE Audit Tool in the Bay Backpack MWEE Planning Toolbox: Use the Audit Tool to determine if your project meets the full definition of the MWEE and to identify areas that could be strengthened. (<https://www.baybackpack.com/mwee/step-3-evaluate>)
- > National Marine Sanctuaries Education Project Evaluation Guidance: Use this guide for tools and techniques helpful in making informed decisions about B-WET programming. (<http://sanctuaries.noaa.gov/education/evaluation/welcome.html>)
- > Additional MWEE and evaluation resources are available at the B-WET MWEE resources page: <https://www.noaa.gov/office-education/bwet/resources/mwee-resources>

Some aspects of project evaluation may require institutional review board (IRB) approval. It is the applicant's responsibility to determine if this is necessary and report back to NOAA. The U.S. Department of Health and Human Services' Office for Human Research Protections website has resources to help you determine the necessity of IRB approval. You can find those resources at: <https://www.hhs.gov/ohrp/regulations-and-policy/decisioncharts-2018/index.html>. As part of the project evaluation plan, applicants must provide, in writing, a description of whether or not IRB review will be sought and a justification if not. If the applicant determines IRB review is necessary, the applicant must include a timeline for IRB review, and no expenditures related to data collection may occur until IRB approval has been obtained.

Participation in B-WET National Evaluation

B-WET has previously implemented a national evaluation system to monitor program activities and outcomes, complementing project-level evaluation work conducted by grantees. We are currently analyzing existing evaluation data and planning to enhance our evaluation approach based upon that analysis. Grantees may be invited to participate in future data collection activities and will be given advance notice about these opportunities so they can be incorporated into project planning and implementation, as appropriate.

Additional information about B-WET national evaluation work is available here: (<https://www.noaa.gov/office-education/bwet/grantee-resources/national-evaluation>)

2.3 BUDGET AND BUDGET JUSTIFICATION

In addition to the SF-424A Budget Information form, applicants should include a detailed budget justification, or budget narrative. Provide justification for all budget items in sufficient detail to enable the reviewers to evaluate the appropriateness of the funding requested. All budget information submitted with the application should mirror the dollar amounts on required SF-424 and SF-424A forms. All budget items should be rounded to the nearest dollar - NO CENTS.

Please refer to the budget NOAA Budget Narrative Guidance found on NOAA's Grants Office found at

https://www.noaa.gov/sites/default/files/atoms/files/gmd_budget_narrative_guidance_-_05-24-2017_final.pdf

For any equipment, defined in 2 CFR §200.1 as “tangible personal property (including information technology systems) having a useful life of more than one year and a per-unit acquisition cost which equals or exceeds the lesser of the capitalization level established by the non-Federal entity for financial statement purposes, or \$5,000,” a description of the item and associated costs is required, including a description of how it will be used in the project. For more information on equipment, see 2 CFR §200.313.

Applicants must include budgets and budget justifications of sub-awards and information supporting the price or cost of contracts. Information must include, to the extent known, the name of the entity receiving funds, the location of the entity receiving the funds (e.g., city, state, and Congressional district), the location of the entity receiving funds (city, state, and Congressional district), and the location of the primary place of performance under the contract/sub-award. All sub-awards and contracts must be made consistent with the requirements of 2 CFR §§200.331-200.333 for sub-awards, and 200.317-200.327 for procurements.

If applicants proposing indirect costs have a current federally-approved rate, a copy should be included with the budget narrative. Refer to Sections IV.F. of this Announcement for additional information about indirect costs.

Grant recipients will be asked to attend a state or regional B-WET meeting. This will be an opportunity for former and current B-WET grant recipients to share about their B-WET projects and learn from each other. This meeting may be part of an existing state environmental conference or science education conference to minimize travel expenses. Budgets should include, in the travel category, estimated funds for this meeting (such as meals, lodging, and transportation including rental car, shuttle, or taxi). No more than \$2,000 should be budgeted for this expense. If the Great Lakes B-WET Coordinator cancels the

grantee meeting due to unforeseen circumstances, then funds set aside to attend the meeting may be used to attend an environmental education conference.

2.3 SUPPLEMENTAL INFORMATION

>Resumes (2 pages maximum for each major participant)

>Logic Model: An example of a logic model can be found at:
<https://sanctuaries.noaa.gov/media/docs/bwet/logic-model.pdf>

>Letters of commitment/partnerships: Letters of commitment from each partner that is making a significant contribution to the project should be included with the application package. This should include letters of commitment from school or school districts, NOAA partners, and community-based organizations that will lead with equity, as appropriate. Describe how partners possess community engagement expertise if the applying institution does not.

>Literature Cited: If references are cited, proposals should include a literature cited list.

>National Environmental Policy Act Questionnaire (if applicable): NOAA must analyze the potential environmental impacts, as required by the National Environmental Policy Act (NEPA), for applicant projects or proposals seeking NOAA federal funding opportunities. Consequently, if your project may trigger consideration under the National Environmental Policy Act (NEPA), identify any impact the proposed work will have on the quality of the environment by completing the NOAA NEPA Questionnaire at the following link (<https://www.nepa.noaa.gov/docs/NOAA-Grants-Questionnaire-final.pdf>) and include it as an appendix to your application. This NEPA appendix does not count against the 15-page Project Description page limit. Refer to Section VI.B.5. of this Announcement for additional information about NEPA.

>Data Management Plan: Proposals submitted in response to this announcement must include a Data Management Plan of up to two pages. The data management plan does not count against the 15-page Project Description page limit. Please see section VI.B.f. for information on the data sharing section of the application. **If environmental data collected/generated as part of the project are primarily for education and/or the practice of making observations using scientific techniques/methods (e.g. measuring salinity of water with a refractometer, measuring percent vegetative cover using a transect, etc.) and are not intended to be shared with scientists outside of the educational program, applicants may request permission not to make data publicly accessible and obtain approval from the Grant

Manager listed below, if funded. In this case, this element of the application should consist of a paragraph (under the heading "Data Management Plan") describing the intended use of the data and that an exemption from data sharing is requested.

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

To enable the use of a universal identifier and to enhance the quality of information available to the public as required by the Federal Funding Accountability and Transparency Act, 31 U.S.C. 6101 note, to the extent applicable, any proposal awarded in response to this announcement will be required to use the System for Award Management (SAM), which may be accessed online at <https://www.sam.gov/SAM/>. Applicants are required to use the Universal Identifier and System for Award Management as identified in Office of Management and Budget guidance published at 2 CFR Parts 25, found at <https://go.usa.gov/xX5CU>. Guidance on obtaining a Unique Entity ID at SAM.gov may be found at <https://www.sam.gov/SAM/>.

Each applicant (unless the applicant is an individual or Federal awarding agency that is excepted from those requirements under 2 CFR 25.110(b) or (c), or has an exception approved by the Federal awarding agency under 2 CFR 25.110(d)) is required to: (i) Be registered in SAM before submitting its application; (ii) Provide a valid unique entity identifier (UEI) in its application; and (iii) Continue to maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by a Federal awarding agency. NOAA may not make a Federal award to an applicant until the applicant has complied with all applicable UEI and SAM requirements and, if an applicant has not fully complied with the requirements by the time NOAA is ready to make a Federal award, NOAA may determine that the applicant is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another applicant.

D. Submission Dates and Times

Electronic applications must be received by 11:59 p.m. Eastern Time on September 20, 2022 to be considered for funding. Applications received after the deadline will be rejected without further consideration.

Applicants are required to apply online through Grants.gov. For applications submitted through Grants.gov, a date and time receipt indication is included and will be the basis of determining timeliness.

Additional information about Grants.gov submissions:

Applicants are strongly encouraged not to wait until the application deadline date to begin the application process through Grants.gov. Validation or rejection of your application by Grants.gov involves receipt of multiple email messages and may take up to 2 business days after submission. Because first-time registration with Grants.gov can take up to three weeks or more, it is strongly recommended that this registration process be completed as soon as possible. Also, even if an applicant has registered with Grants.gov previously, the applicant's password may have expired or their registration may need to be renewed prior to submitting to Grants.gov. 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 consider these notes in developing your submission timeline.

If you experience a Grants.gov “systems issue” (technical problems or glitches with the Grants.gov website) that you believe threatens your ability to complete a submission before an applicable funding cycle deadline, please (i) print any error message received; and (ii) call the Grants.gov Contact Center at 1-800-518-4726 for immediate assistance. Ensure that you obtain a case number regarding your communications with Grants.gov. Please note: problems with an applicant organization’s computer system or equipment are not considered “systems issues.” Similarly, an applicant’s failure to: (i) complete the required registration, (ii) ensure that a registered Authorized Organization Representative submits the application, or (iii) receive an email message from Grants.gov are not considered systems issues. A Grants.gov “systems issue” is an issue occurring in connection with the operations of Grants.gov system, such as the temporary loss of service by Grants.gov due to unexpected volume of traffic or failure of information technology systems, both of which are highly unlikely. In the event of a confirmed “systems issue,” NOAA may allow more time for applicant submission due to system problems at Grants.gov at the time of application submission that are beyond the control of the applicant.

E. Intergovernmental Review

Applications submitted by state and local governments are subject to the provisions of Executive Order (E.O.) 12372, Intergovernmental Review of Federal Programs. Any applicant submitting an application for funding is required to complete item 16 on SF-424 regarding clearance by the State Single Point of Contact (SPOC) established as a result of E.O. 12372. To find out about and comply with a State's process under E.O. 12372, the names, addresses and phone numbers of participating SPOCs are listed in the Office of Management and Budget's home page at: <https://www.whitehouse.gov/wp-content/uploads/2020/04/SPOC-4-13-20.pdf>

F. Funding Restrictions

Indirect Costs - The budget may include an amount for indirect costs if your organization has an established indirect cost rate with the Federal government. If indirect costs are requested, indirect-cost-rate agreements must be included for the applicant organization and the negotiated rate must be requested. 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. Under 2 C.F.R. §200.414 “Indirect (F&A) Costs,” any applicant that does not have a current negotiated indirect cost rate may elect to charge a de minimis rate of 10% of modified total direct costs which may be used indefinitely. Costs must be consistently charged as either indirect or direct costs, but may not be double charged or inconsistently charged as both pursuant to 2 C.F.R. § 200.403 “Factors affecting allowability of costs.” If chosen, this methodology once elected must be used consistently for all Federal awards until such time as a cooperator chooses to negotiate for a rate, which the non-Federal entity may apply to do at any time. The negotiation and approval of a rate is subject to the procedures required by NOAA and the Department of Commerce Standard Terms and Conditions (see Section VI.B. of this announcement). The NOAA contact for indirect or facilities and administrative costs is: Lamar Revis, Grants Officer, NOAA Grants Management Division, lamar.revis@noaa.gov.

Construction is not an allowable activity under this program. Therefore, applications will not be accepted for construction projects. This includes the construction of new buildings, completion of shell space in existing buildings, renovation or rehabilitation of existing buildings, and construction or development of real property infrastructure improvements (e.g., site preparation, utilities, streets, curbs, sidewalks, parking lots, other streetscaping improvements, etc.). Alteration activities in support of an education project, such as the renovation of an educational exhibit or installation of a schoolyard garden space, would likely not be considered construction.

All costs must be reasonable, allowable, and allocable. Details about allowable costs can be found in 2 CFR part 200, Subpart E “Cost Principles.”

G. Other Submission Requirements

Not applicable.

Not applicable.

V. Application Review Information

A. Evaluation Criteria

Reviewers will assign scores to applications ranging from 0 to 100 points, based on the following evaluation criteria and their values.

1. Importance and/or relevance and applicability of proposal to the program goals (25 points)
2. Technical merit (40 points)
3. Overall qualifications of applicants (15 points)
4. Project costs (10 points)
5. Outreach and education (10 points)

The maximum score for each criterion is indicated in parentheses. Each criterion includes factors reviewers will consider to determine how well an application meets that criterion. Applications that best address these criteria will be the most competitive. Guidance about each evaluation criterion follows:

1. Importance and/or relevance and applicability of proposal to the program goals (25 points)

This criterion ascertains whether there is intrinsic value in the proposed work and/or relevance to NOAA, federal, regional, state, or local activities. The projects importance and/or relevance and applicability of the proposal to the program goals will be scored using the following measures:

>Connection to the watershed (6 points): Does the project make a direct connection to the watershed through locally relevant science and stewardship activities? Does it address how actions within that system can affect the environment? Does the experience use the local context for learning and focus around a watershed issue or phenomenon pertaining to the Great Lakes region, including its local population, geography, culture, and natural, financial, and human resources? Does the project address the Great Lakes Restoration Initiative Action Plan III, Objective 5.1 to “Educate the next generation about the Great Lakes ecosystem,” making a direct and clear connection to the Great Lakes environment and watershed system?

>Project need (5 points): How well does the applicant demonstrate a need for the project?

>Alignment to educational learning standards (4 points): Does the applicant demonstrate how the project is aligned to state and/or local learning standards? Does the proposal include details about where the project fits in the scope and sequence of school district curriculum?

>Alignment to NOAA and environmental literacy resources (4 points): Does the applicant

demonstrate how their project is aligned and supports the goals and strategies of the NOAA Education Strategic Plan? Does the proposal provide detail on how they will incorporate NOAA assets? Is the project aligned with environmental literacy principles, such as the Great Lakes and Climate Literacy Principles, where appropriate?

>Program Priority (6 points): Did the applicant clearly show how a combination of MWEEs for students and teacher professional development will provide opportunities for place-based environmental education and stewardship in the Great Lakes watershed? Does the proposal demonstrate strategies for providing students with more than five hours of time spent outdoors? Does the proposal demonstrate strategies for providing teachers with more than 30 hours of professional development support, of which more than 10 hours are spent outdoors? Does the applicant demonstrate how they will incorporate age-appropriate elements of climate science into programming? Is the project aligned with environmental literacy principles, as appropriate?

2. Technical/scientific merit (40 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. Technical merit will be scored using the following measures:

>Objectives (10 points): Are the objectives defined in the proposal focused on the stated outcome(s)? How well does the applicant demonstrate that the objectives can be achieved within the proposed project period? Does the Logic Model show a realistic understanding of desired outputs and project outcomes (if applicable).

>Target audience (5 points): Does the applicant define the audience(s) that will be reached, is the audience well described? Does the applicant include data to justify and support their description of the targeted communities? Are the targeted communities historically marginalized groups, students of color, student from low-income families, or those that are more likely to lose environmental education within their local school districts?

>Adherence to MWEE principles (20 points): How well does the proposal align with the definition of a MWEE (as described in Section I.A.b.)? Will the students focus on an environmental question, problem, or issue requiring background research and investigation? Do they learn about Great Lakes issues through classroom instruction, the collection of data, conducting experiments, talking to experts, and reviewing credible publications? Do students participate in multiple outdoor field activities sufficient to collect data or make observations required to inform student actions. Do students participate in grade-level appropriate

stewardship project(s) during which they take action to address environmental issues? Is there adequate teacher involvement to support the student MWEEs? Is there adequate support for teachers to integrate the project with classroom curriculum? Does the project include a set of activities over time? How well does the project support the teacher's abilities to implement all essential elements of the MWEE? Does the proposal include a practical plan for how teachers will be involved in implementing watershed education with their students? Does the proposal include ongoing support for teachers and appropriate incentives to participate? Does the project provide guidance and resources for teachers to prepare them to support student's stewardship activities that directly address the defined Great Lakes issue or phenomenon they are investigating?

> Evaluation (5 points): Does the applicant provide an effective project-level evaluation plan, appropriate to the maturity and scale of the project, to determine the project's effectiveness, document successes towards meeting the objectives, and inform decisions about future programming? Does the plan describe how the evaluation will be used? Does the plan define what will be evaluated and the types of evaluation planned? Are the methods for implementing the evaluation appropriate? Does the applicant discuss how the B-WET National Evaluation system will be incorporated into their plans for the project evaluation?

3. Overall qualifications of applicants (15 points)

This criterion ascertains whether the applicant possesses the necessary education, experience, training, facilities, and administrative resources to accomplish the project. Overall qualifications of applicants will be scored using the following measures:

>Experience (5 points): Does the proposal include resumes of the staff members involved in the project? Does the applicant demonstrate capability and experience in successfully completing similar K-12 environmental education projects in the Great Lakes? Does the applicant demonstrate knowledge of the target audience?

>Partners (5 points): Does the applicant describe the roles and responsibilities of the proposed partners? Are there letters of commitment from each listed partner? Does the applicant document collaborations with schools or school systems (if they are not one such organization)? If a NOAA partner is listed in the proposal, is there a letter of commitment from that NOAA partner?

>Community-based organizations (5 points): Is the applicant or any of their partners a community-based organization that serves marginalized groups, particularly minority communities? Does the application describe how the applicant or their partners' expertise

and membership position them to ensure equity and inclusion in environmental literacy planning activities? Does the applicant describe the qualifications and experience of staff and/or partners related to competently engaging members of diverse cultures, providing expertise on existing environmental issues, creating innovative solutions to the challenges, and/or enhancing the local context/cultural relevance throughout the proposed programming?

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. Project costs will be scored using the following measures:

>Reasonable (5 points): Does the applicant adequately justify the proposed budget request and is the budget request reasonable for the number of students, teachers, and/or participants being reached and represent a good return on investment?

>Direct programming (5 points): Is there a significant percentage of the budget directly related to bringing students and teachers in contact with the environment? Are requested funds for salaries and fringe benefits only for those personnel who are directly involved in implementing the project?

5. Outreach and education (10 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. Outreach and education will be scored using the following measures:

>Outreach and education (10 points): Does the project involve mechanisms for significant external sharing and communication about the project by students, teachers, or project staff? Does the project propose community events that engage parents, other community members, etc.? Does the project propose peer-to-peer sharing for teacher and/or students (e.g., in-service days, school assemblies)? Will the project be publicized at conferences and to the media/social media, etc.?

B. Review and Selection Process

If an application is received sufficiently in advance of the deadline, NOAA in its sole discretion may be able to inform an applicant of any missing documentation, if time and resources permit. This review is allowed but not assured, given limited resources.

After the application period has closed, received applications will be screened to ensure that they were received by the deadline date (see IV.D. Submission Dates and Times); were submitted by an eligible applicant (see III.A. Eligibility Information); include SF 424 authenticated by an authorized representative; address the priority (see I.B. Program Priorities); include required content (see IV.B. Content and Form of Application); and meet the federal funding requirements (II.A. Funding Availability). If the application does not conform to the requirements and the deadline for submission has passed, the application will be rejected without further consideration. NOAA, in its sole discretion, may continue the review process for applicants with non-substantive issues that may be easily rectified or cured.

Applications responsive to this solicitation will be evaluated by a two-part review process; a preliminary technical review and a panel review. Both phases are conducted by the same set of private and/or public sector expert reviewers. Each review phase is described in detail below.

Technical Review:

The purpose of the technical review is to evaluate each proposal's technical merit via individual evaluations of the proposals. Each application will be reviewed by a minimum of 3 reviewers. Reviewers provide comments (which may be shared with applicants after the competition has concluded) and assign scores to the applications based on the evaluation criteria in Section V.A. of this federal funding opportunity.

The Federal Program Officer will establish a preliminary rank order based on the individual reviewers' ratings. This preliminary rank order will be used in the subsequent panel meeting where final funding recommendations are made.

Panel Review:

A review panel will convene to evaluate the ranking and comments from the Technical Review and discuss the proposals as a group. Discussions are based on the evaluation criteria in Section V.A. During the panel meeting, reviewers can revise their scores and comments. Reviewers must individually submit a final ranking to the B-WET Program Manager by the end of the panel meeting. If one or more non-Federal reviewers is used, no consensus advice will be given by the review panel members. The reviewers' final rankings will be averaged for each application to produce a final rank order of the proposals. This establishes a final recommendation of rank order for funding.

In the event that there are two or more projects tied in the final rank order that are competing for the final available funds, the technical review scores will determine the rank order. If a tie persists beyond this, all tied projects will be given equal consideration by the Selecting Official. The Selecting Official will resolve any ties by selecting projects based on the selection factors listed in Section V.C. of this federal funding opportunity.

NOAA may select all, some, or none of the applications, or part of any application, ask applicants to work together or combine projects, defer applications to the future, or reallocate funds to different funding categories, to the extent authorized. Applicants may be asked to modify objectives, work plans or budgets, and provide supplemental information required by the agency prior to the award. 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 Office, and NOAA program staff.

The NOAA Grants Officer will review financial and grants administration aspects of a proposed award, including conducting an assessment of the risk posed by the applicant in accordance with 2 C.F.R. 200.206. Refer to Section VI.B.10., Review of Risk, for further information. In addition to reviewing repositories of government-wide eligibility, qualifications or financial integrity information, the risk assessment conducted by NOAA may consider items such as the financial stability of an applicant, quality of the applicant's management systems, an applicant's history of performance, previous audit reports and audit findings concerning the applicant and the applicant's ability to effectively implement statutory, regulatory, or other requirements imposed on non-federal entities.

Upon review of these factors, if appropriate, specific award conditions that respond to the degree of risk may be applied by the NOAA Grants Officer pursuant to 2 C.F.R. 200.208. In addition, NOAA reserves the right to reject an application in its entirety where information is uncovered that raises a significant risk with respect to the responsibility or suitability of an applicant. The final approval of selected applications and issuance of awards will be by the NOAA Grants Officer. The award decision of the Grants Officer is final.

C. Selection Factors

The Great Lakes B-WET panel ratings will be provided in rank order to the Selecting Official for final funding recommendations. The Selecting Official shall recommend awarding in the rank order unless the proposal is justified to be selected out of rank order based on 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 research areas
- e. by project types
3. Duplication of other projects funded or considered for funding by NOAA/federal agencies;
4. Program priorities and policy factors as set out in Section I.A. and I.B.;
5. Applicant's prior award performance;
6. Partnerships with/Participation of targeted groups;
7. Adequacy of information necessary for NOAA staff to make a NEPA determination and draft necessary documentation before recommendation for funding are made to the Grants Officer.

The Selecting Official may negotiate the funding level of the proposal. The Selecting Official makes final recommendations for awards to NOAA's Grants Management Division who is authorized to obligate funds.

D. Anticipated Announcement and Award Dates

Subject to the availability of funds, review of proposals will occur during fall 2022. Applicants may receive communications to negotiate a potential award in winter 2023. Funding is expected to begin spring 2023. The project start date should not begin before April 1, 2023.

VI. Award Administration Information

A. Award Notices

Successful applicants will receive electronic notification that the application has been funded from the NOAA Grants Management Division. This notification will be sent by email from NOAA's online grants management system, Grants Online, to the institution's Authorizing Official. The official notification of funding, signed 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 the NOAA Grants Officer electronically through NOAA's online grants management system, Grants Online. The CD-450 award cover page is viewable at https://connection.commerce.gov/sites/connection.commerce.gov/files/media/files/2016/cd-450_april_2017.pdf. The Internet Explorer browser should be used with Grants Online. Also,

each recipient will need to have a U.S. Treasury Automated Standard Application for Payment (ASAP) account in order to draw funds electronically.

The Department of Commerce Financial Assistance Standard Terms and Conditions will apply to awards in this program. A current version of this document is available at <https://www.commerce.gov/oam/files/2020-doc-standard-terms-and-conditions-0>. These terms will be provided in the award package in Grants Online at <https://grantsonline.rdc.noaa.gov/>. In addition, award documents provided by NOAA in the Grants Online award package may contain special award conditions unique to this program and the applicant's project, including conditions that may limit the use of funds for activities due to outstanding environmental compliance requirements and may lead to modification of the project's scope of work. These special award conditions may also include other compliance requirements for the award, such as due diligence documentation, and will be applied on a case-by-case basis. Applicants are strongly encouraged to review award documents carefully before accepting a Federal award to ensure they are fully aware of the relevant terms that have been placed on the award.

Successful applicants may be asked to modify objectives, work plans, or budgets prior to final approval of an award. The exact amount of funds to be awarded, the final scope of activities, the collaboration duration, and specific NOAA cooperative involvement in the activities of each partnership will be determined in pre-award negotiations among the applicant, the NOAA Grants Office and the Office of National Marine Sanctuaries. Project activities should not be initiated in the expectation of Federal funding until a notice of award document is received from the NOAA Grants Office.

Unsuccessful applicants will be notified that their proposal was not recommended for funding (declined) or was not reviewed because it did not meet the minimum requirements prescribed in IV.B (Content and Form of Applications).

Per 2 CFR 200.458, NOAA authorizes award recipients to expend pre-award costs up to 90 days before the period of performance start date at the applicant's own risk without approval from NOAA and in accordance with the applicant's internal policies and procedures. Such costs are allowable only to the extent that they would have been allowable if incurred after the date of the Federal award. This does not include direct proposal costs (as defined at 2 CFR 200.460). In no event will NOAA or the Department of Commerce be responsible for direct proposal preparation costs. Pre-award costs will be a portion of, not in addition to, the approved total budget of the award. Pre-award costs expended more than 90 days prior to the period of performance start date require approval from the Grants Officer. This does not change the

period of performance start date.

GRANTS OFFICER SIGNATURE. Proposals submitted in response to this solicitation are not considered awards until the Grants Officer has signed the grant or cooperative agreement. Only Grants Officers can bind the Government to the expenditure of funds. The Grants Officer's digital signature constitutes an obligation of funds by the federal government and formal approval of the award.

LIMITATION OF LIABILITY. Funding for programs listed in this notice is contingent upon the availability of funds. Applicants are hereby given notice that funds may not have been appropriated yet for the programs listed in this notice. Publication of this announcement does not oblige NOAA to award any specific project or to obligate any available funds.

B. Administrative and National Policy Requirements

a. PRE-AWARD NOTIFICATION

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 <https://www.gpo.gov/fdsys/pkg/FR-2014-12-30/pdf/2014-30297.pdf>.

b. 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 <https://www.grants.gov/learn-grants/grant-policies/omb-uniform-guidance-2014.html>

c. THE DEPARTMENT OF COMMERCE STANDARD TERMS

Successful applicants who accept a NOAA award under this solicitation will be bound by Department of Commerce Financial Assistance Standard Terms and Conditions. This document will be provided in the award package in NOAA's Grants Online system at <https://grantsonline.rdc.noaa.gov/> and a current version may be viewed at <https://www.commerce.gov/oam/files/2020-doc-standard-terms-and-conditions-0>. In addition, NOAA Administrative Terms will be incorporated into an award. Information is available at: <https://www.noaa.gov/acquisition-grants>. These terms are subject to updating prior to award.

d. LIMITATION OF LIABILITY

Funding for programs listed in this notice is contingent upon the availability of appropriations. Applicants are hereby given notice that funds may not have been appropriated yet for the programs listed in this notice. NOAA or the Department of Commerce are not responsible for proposal preparation costs. Publication of this announcement does not oblige NOAA to award any specific project or to obligate any available funds.

e. 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 Web site at www.nepa.noaa.gov, including our NOAA Administrative Order 216-6 for NEPA at http://www.nepa.noaa.gov/NAO216_6.pdf and the Council on Environmental Quality implementation regulations website at <https://energy.gov/nepa/downloads/40-cfr-1500-1508-ceq-regulations-implementing-procedural-provisions-nepa>.

Consequently, applicants may be asked to provide detailed information on the activities to be conducted, locations, sites, number and species expected to be caught, species and habitat to be affected, possible construction activities, and any environmental concerns that may exist (e.g., the use and disposal of hazardous or toxic chemicals, introduction of non-indigenous species, impacts to endangered and threatened species, aquaculture projects, and impacts to coral reef systems). In addition to providing specific information that will serve as the basis for any required impact analyses, applicants may also be requested to assist NOAA in drafting of an environmental assessment, if NOAA determines an assessment is required.

Applicants will also be required to cooperate with NOAA in identifying feasible measures to reduce or avoid any identified adverse environmental impacts of their proposal. The failure to do so shall be grounds for not selecting an application. In some cases if additional information is required after an application is selected, funds can be withheld by the grants officer under a special award condition requiring the recipient to submit additional environmental compliance information sufficient to enable NOAA to make an assessment of any impacts that a project may have on the environment.

If your project may trigger consideration under the National Environmental Policy Act (NEPA), identify any impact the proposed work will have on the quality of the environment by completing the NOAA NEPA Questionnaire at the following link (<https://www.nepa.noaa.gov/docs/NOAA-Grants-Questionnaire-final.pdf>) and include it as an appendix to your application.

This NEPA appendix does not count against the 15-page Project Description page limit.

f. DATA MANAGEMENT PLAN

Proposals submitted in response to this announcement must include a Data Management Plan of up to two pages. This Data Management Plan does not count against the 15-page Project Description page limit. The Data Management Plan should be aligned with the NOAA B-WET Data Management Guidance provided below and will be considered as part of proposal review. NOAA may, at its own discretion, make publicly visible the Data Management Plan from funded proposals, or use information from the Data Management Plan to produce a formal metadata record and include that metadata in a Catalog to indicate the pending availability of new data. Proposal submitters are hereby advised that the final pre-publication manuscripts of scholarly articles produced entirely or primarily with NOAA funding will be required to be submitted to NOAA Institutional Repository after acceptance, and no later than upon publication. Such manuscripts shall be made publicly available by NOAA one year after publication by the journal.

Data Management Guidance to Applicants

The NOAA B-WET program has developed this guidance to help grant applicants plan to share quality environmental data collected as part of their B-WET funded projects, where applicable. Environmental Data are defined by NOAA Administrative Order (NAO) 212-15: Management of Environmental Data and Information 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. Digital audio or video recordings of environmental phenomena (such as animal sounds or undersea video) are included in this definition. Numerical model outputs are included in this definition, particularly if they are used to support the conclusion of a peer-reviewed publication. Data collected in a laboratory or other controlled environment, such as measurements of animals and chemical processes, are included in this definition.

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.

Proposals submitted in response to this announcement must include a Data Management Plan of up to two pages describing how these requirements apply to the proposed project and will be satisfied. The Data Management Plan will be considered as part of the proposal review. Note that the Federal Program Officer may require revisions to the applicant's Data Management Plan prior to recommending the application for funding.

Contents: A typical Data Management 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 plan should describe or reference the data quality control techniques that will be used or note that the data will not be quality controlled. Data that is not quality controlled should include a description on the limitations of the data or an indication of degree of uncertainty.

Applicant Data Management Plans should be aligned with the following Data Management Guidance.

Data Accessibility: The NOAA B-WET program recommends that public access to grant-produced data be enabled via an existing publicly accessible online data server at the funded institution is to be used to host these data (describe in application); or a public data repository appropriate to this scientific domain (describe in application). (Options could include: The GLOBE Program - <http://www.globe.gov/> , CoCoRaHS Community - <http://www.cocorahs.org/> ; Dryad - <http://datadryad.org/stash> , Figshare - <http://figshare.com/> , DataVerse - <http://dataverse.org/> , or Pangaea - <http://www.pangaea.de/>. Funding recipients will establish their own data hosting capability (describe in proposal).

****If environmental data collected/generated as part of the project are primarily for education and/or the practice of making observations using scientific techniques/methods (e.g. measuring salinity of water with a refractometer, measuring percent vegetative cover using a transect, etc.) and are not intended to be shared with scientists outside of the educational program, applicants may request permission not to make data publicly accessible and obtain approval from the Grant Manager listed below, if funded. In this case, this element of the application should consist of a paragraph (under the heading "Data Management Plan") describing the intended use of the data and that an exemption from data sharing is requested.**

If environmental data collected/generated as part of the project are for purposes beyond

education and/or the practice of making observations using scientific techniques/methods, applicants should describe (up to 2 pages, under the heading "Data Management Plan") how data will be shared, based on the following guidance:

Technical recommendations: The NOAA B-WET program does not offer specific technical guidance. Applicants should describe their proposed approach. Use of open-standard formats and methods is encouraged.

Resources: Proposals are permitted to include the costs of data preparation, accessibility, or archiving in their budgets.

Questions Regarding This Guidance

Responsible NOAA Official for questions regarding this guidance and for verifying accessibility of data produced by funding recipients:

Sarah Waters

NOAA Great Lakes B-WET Program Coordinator

NOAA Thunder Bay National Marine Sanctuary

sarah.a.waters@noaa.gov

989-312-3520

Bronwen Rice

NOAA B-WET National Coordinator

NOAA Office of Education

Bronwen.Rice@noaa.gov

202-604-1388

g. RESEARCH TERMS AND CONDITIONS. For awards designated on the CD-450 as Research, the Commerce Terms, and the Federal-wide Research Terms and Conditions (Research Terms) as implemented by the Department of Commerce, currently, at <https://www.nsf.gov/awards/managing/rtrc.jsp>, both apply to the award. The Commerce Terms and the Research Terms are generally intended to harmonize with each other; however, where the Commerce Terms and the Research Terms differ in a Research award, the Research Terms prevail, unless otherwise indicated in a specific award condition.

h. BUREAU TERMS AND CONDITIONS. Successful applicants who accept an award under this solicitation will be bound by bureau-specific standard terms and conditions. These terms and conditions will be provided in the award package in NOAA's Grants

Online system. For NOAA awards only, the Administrative Standard Award Conditions for National Oceanic and Atmospheric Administration (NOAA) Financial Assistance Awards U.S. Department of Commerce are applicable to this solicitation and may be

accessed online at <https://www.noaa.gov/organization/acquisition-grants/financial-assistance>.

i. HUMAN SUBJECTS RESEARCH. For research projects involving Human Subjects, an Institutional Review Board (IRB) approval or an exemption determination will be required in accordance with DOC Financial Assistance Standard Terms and Conditions “Research Involving Human Subjects” found at <https://www.commerce.gov/oam/policy/financial-assistance-policy>.

j. NOAA SEXUAL ASSAULT AND SEXUAL HARASSMENT PREVENTION AND RESPONSE POLICY.

NOAA requires organizations receiving federal assistance to report findings of sexual harassment, or any other kind of harassment, regarding a Principal Investigator (PI), co-PI, or any other key personnel in the award. NOAA expects all financial assistance recipients to establish and maintain clear and unambiguous standards of behavior to ensure harassment free workplaces

wherever NOAA grant or cooperative agreement work is conducted, including notification pathways for all personnel, including students, on the awards. This expectation includes activities at all on- and offsite facilities and during conferences and workshops. All such settings should have accessible and evident means for reporting violations and recipients should exercise due diligence with timely investigations of allegations and corrective actions.

For more information, please visit: <https://www.noaa.gov/organization/acquisition-grants/noaa-workplace-harassment-training-for-contractors-and-financial>.

k. SCIENCE INTEGRITY

1. Maintaining Integrity. The

non-Federal entity shall maintain the scientific integrity of research performed pursuant to this grant or financial assistance award including the prevention, detection, and remediation of any allegations regarding the violation of scientific integrity or scientific and research misconduct, and the conduct of inquiries, investigations, and adjudications of allegations of violations of scientific integrity or scientific and research misconduct. All the requirements of this provision flow down to subrecipients. 2. Peer Review. The peer review of the results of scientific activities under a NOAA grant, financial assistance

award or cooperative agreement shall be accomplished to ensure consistency with NOAA standards on quality, relevance, scientific integrity, reproducibility, transparency, and performance. NOAA will ensure that peer review of "influential scientific information" or "highly influential scientific assessments" is conducted in accordance with the Office of Management and Budget (OMB) Final Information Quality Bulletin for Peer Review and NOAA policies on peer review, such as the Information Quality Guidelines. 3. In performing or presenting the results of scientific activities under the NOAA grant, financial assistance award, or cooperative agreement and in responding to allegations regarding the violation of scientific integrity or scientific and research misconduct, the non-Federal entity and all subrecipients shall comply with the provisions herein and NOAA Administrative Order (NAO) 202-735D, Scientific Integrity, and its Procedural Handbook, including any amendments thereto. That Order can be found at <http://nrc.noaa.gov/ScientificIntegrityCommons.aspx>. 4. Primary Responsibility. The non-Federal entity shall have the primary responsibility to prevent, detect, and investigate allegations of a violation of scientific integrity or scientific and research misconduct. Unless otherwise instructed by the grants officer, the non-Federal entity shall promptly conduct an initial inquiry into any allegation of such misconduct and may rely on its internal policies and procedures, as appropriate, to do so. 5. By executing this grant, financial assistance award, or cooperative agreement the non-Federal entity provides its

assurance that it has established an administrative process for performing an inquiry, investigating, and reporting allegations of a violation of scientific integrity or scientific and research misconduct; and that it will comply with its own administrative process for

performing an inquiry, investigation, and reporting of such misconduct. 6. The non-Federal entity shall insert this provision in all subawards at all tiers under this grant,

financial assistance award, or cooperative agreement.

1. INDIRECT COST RATE. If an applicant has not previously established an indirect cost rate with a Federal agency they may choose to negotiate a rate with the Department of Commerce or use the de minimis indirect cost rate of 10% of MTDC (as allowable under 2 C.F.R. §200.414). The negotiation and approval of a rate is subject to the procedures required by NOAA and the Department of Commerce Standard Terms and Conditions. The NOAA contact for indirect or facilities and administrative costs is: Lamar Revis, Grants Officer, NOAA Grants Management Division, 1325 East West Highway, 9th Floor, Silver Spring, MD 20910, or lamar.revis@noaa.gov.

m. REVIEWS AND EVALUATION. The applicant acknowledges and understands that

information and data contained in applications for financial assistance, as well as information and data contained in financial, performance and other reports submitted by applicants, may be used by the Department of Commerce in conducting reviews and evaluations of its financial assistance programs. For this purpose, applicant information and data may be accessed, reviewed and evaluated by Department of Commerce employees, other Federal employees, and also by Federal agents and contractors, and/or by non-Federal personnel, all of whom enter into appropriate conflict of interest and confidentiality agreements covering the use of such information. As may be provided in the terms and conditions of a specific financial assistance award, applicants are expected to support program reviews and evaluations by submitting required financial and performance information and data in an accurate and timely manner, and by cooperating with the Department of Commerce and external program evaluators. In accordance with §200.303(e), applicants are reminded that they must take reasonable measures to safeguard protected personally identifiable information and other confidential or sensitive personal or business information created or obtained in connection with a Department of Commerce financial assistance award.

a. 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. In addition, the applicant acknowledges and understands that information and data contained in applications for financial assistance, as well as information and data contained in financial, performance and other reports submitted by applicants, may be used by the Department of Commerce in conducting reviews and evaluations of its financial assistance programs. For this purpose, applicant information and data may be accessed, reviewed and evaluated by Department of Commerce employees, other Federal employees, and also by Federal agents and contractors, and/or by non-Federal personnel, all of whom enter into appropriate conflict of interest and confidentiality agreements covering the use of such information. As may be provided in the terms and conditions of a specific financial assistance award, applicants are expected to support program reviews and evaluations by submitting required financial and performance

information and data in an accurate and timely manner, and by cooperating with Department of Commerce and external program evaluators. In accordance with 2 C.F.R. § 200.303(e), applicants are reminded that they must take reasonable measures to safeguard protected personally identifiable information and other confidential or sensitive personal or business information created or obtained in connection with a Department of Commerce financial assistance award.

b. Certification of Tax Liability

If required under 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.

c. 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. 200.206. 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.

d. Minority Serving Institutions

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

C. Reporting

Unless otherwise specified by terms of the award, performance and financial reports are to be submitted semi-annually in accordance with 2 C.F.R. 200.328-330 and the Department of Commerce Financial Assistance Standard Terms and Conditions (see Section VI.B. of this announcement), and must be submitted no later than 30 days following the end of each 6-

month period. Reports shall be submitted electronically via the NOAA Grants Online system (<https://grantsonline.rdc.noaa.gov>).

- a. Financial Reports - Information about federal financial reports is available at: https://www.corporateservices.noaa.gov/grantsonline/Documents/Grantees/Grant_Recipients_User_Manual.pdf
- b. Performance/Progress Reports - Suggested content and guidance related to Great Lakes B-WET performance/progress reports can be found here: <https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.noaa.gov%2Fsites%2Fdefault%2Ffiles%2F2022-04%2FFY22-B-WET-Progress-Report-Guidance.docx&wdOrigin=BROWSELINK>
- c. The Federal Funding Accountability and Transparency Act, 31 U.S.C. 6101 Note, includes a requirement for awardees of applicable federal grants to report information about first-tier subawards and executive compensation under federal assistance awards. All awardees of applicable grants and cooperative agreements are required to report to the Federal Subaward Reporting System (FSRS) available at www.FSRS.gov on all subawards of \$30,000 and over. See 2 C.F.R. Part 170.

In accordance with 2 CFR 200.328-9 and the terms and conditions of the award, financial reports are to be submitted semiannually and performance (technical) reports are to be submitted semiannually. Reports are submitted electronically through NOAA's Grants Online system.

The Federal Funding Accountability and Transparency Act, 31 U.S.C. 6101 note, includes a requirement for awardees of applicable Federal grants to report information about first-tier subawards and executive compensation under Federal assistance awards. All awardees of applicable grants and cooperative agreements are required to report to the FFATA Subaward Reporting System (FSRS) available at <https://www.fsr.gov/> on all subawards over \$30,000. Refer to 2 CFR Part 170.

VII. Agency Contacts

For questions regarding Great Lakes B-WET program or the application process, you may contact:

Sarah Waters

Great Lakes B-WET Program Coordinator Sarah.A.Waters@noaa.gov

989-312-3520

Bronwen Rice

NOAA B- WET National Coordinator NOAA Office of Education Bronwen.Rice@noaa.gov
202-604-1388

Or view <https://sanctuaries.noaa.gov/bwet/greatlakes/>

VIII. Other Information

None.