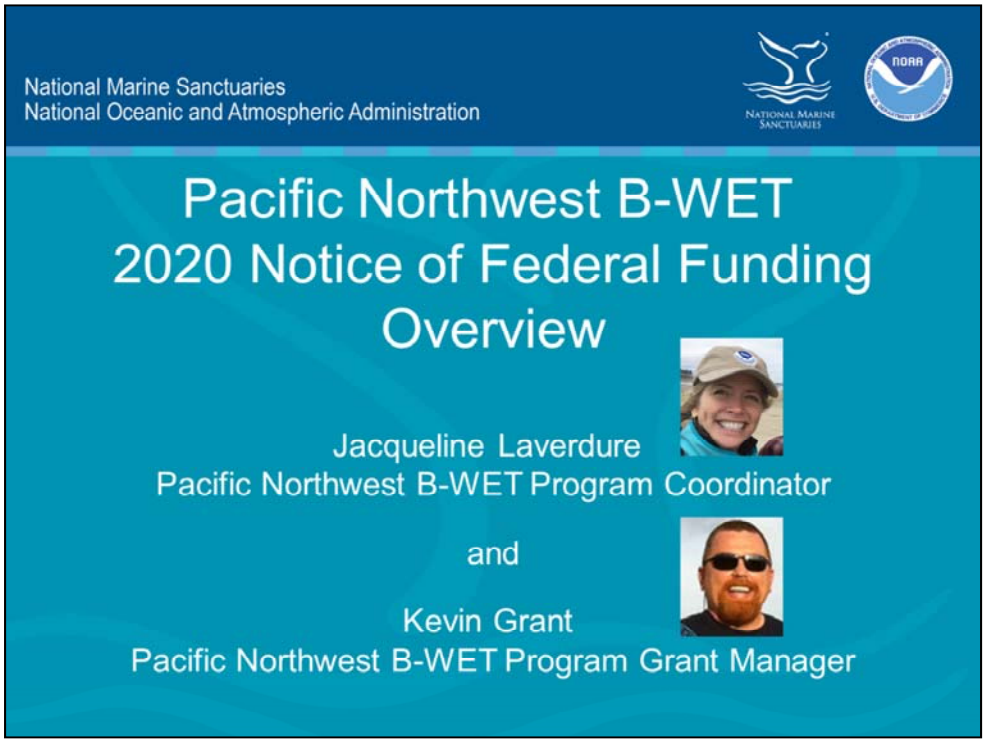
National Marine Sanctuaries
National Oceanic and Atmospheric Administration

NATIONAL MARINE SANCTUARIES

OLYMPIC COAST

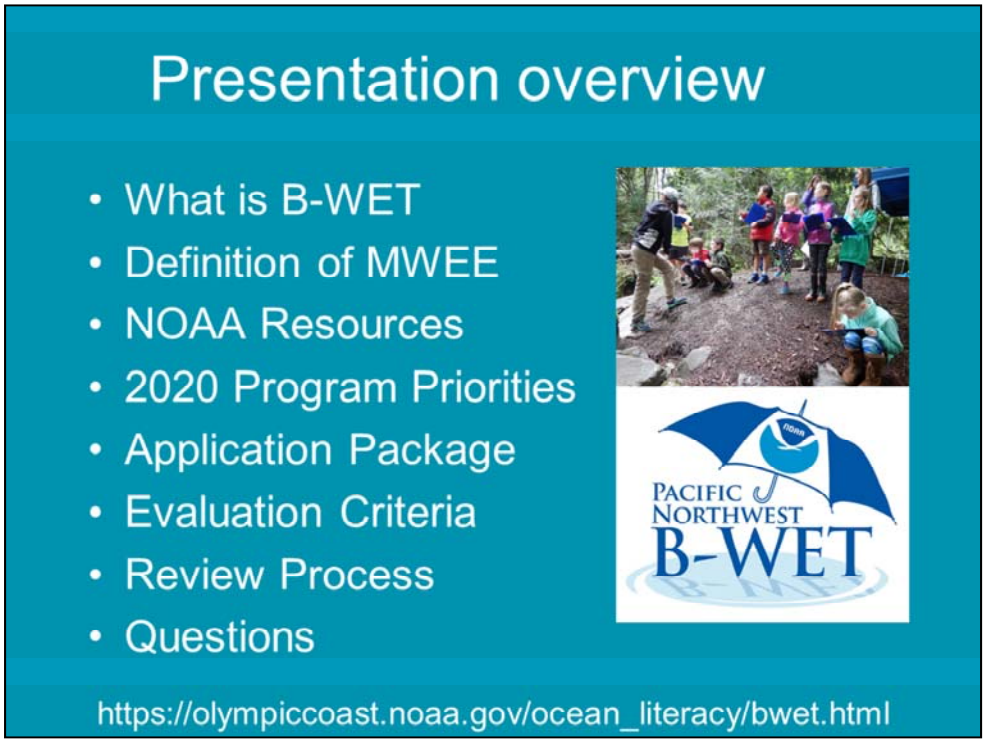


Welcome, and thank you for attending this informational webinar on Pacific Northwest B-WET 2020 Notice of Federal Funding Overview. My name is Jacqueline Laverdure. One of my roles as Education and Outreach Coordinator for NOAA's Olympic Coast National Marine Sanctuary is coordinating the Pacific Northwest B-WET program. I work with Olympic Coast National Marine Sanctuary Deputy Superintendent Kevin Grant who is the manager for Pacific Northwest B-WET grants.

This presentation will last approximately one hour, including time at the end for Q & A.

I will be available following the presentation for questions, and then Kevin and I will be available by phone or email throughout the application period, to answer any questions or concerns you may have about this funding opportunity.

– all information included in this webinar about the funding opportunity can also be found in the Notice of Federal Funding Opportunity announcement, and information regarding the resources can be found on NOAA websites.



Today, we will go over:

- What is B-WET
- the Definition of a MWEE
- Program Priorities
- the Application Package
- Evaluation Criteria
- the overall review process

NOAA's B-WET program is an environmental education program that promotes locally relevant, experiential learning in the K-12 environment.

B-WET currently serves seven areas of the country – California, Chesapeake Bay, Great Lakes, Gulf of Mexico, Hawaii, New England, and Pacific Northwest.

For the purposes of this federal grant opportunity, the Pacific Northwest region is defined as Oregon and Washington.

The primary delivery of B-WET is through competitive grants that promote Meaningful Watershed Educational Experiences (MWEEs).

Eligible applicants for the Pacific Northwest B-WET grant are K-12 schools and school systems, institutions of higher education, community-based and nonprofit organizations, state or local government agencies, interstate agencies, and Indian tribal governments.

For-profit and federal government agencies are not eligible for this grant, but they can act as project partners to the grant.

The total Federal amount that may be requested from NOAA for the 2020 Pacific Northwest B-WET grant should not exceed $60,000. The minimum Federal amount to request from NOAA is $30,000

Applicants and recipients are required to 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.

(See Section IV. C. Unique Entity Identifier and System for Award Management (SAM) p. 25)

Applicants and recipients are required to 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.

Registration may take some time, so if you haven't already registered, please be sure to do so as soon as possible. If you believe that you already have a SAM account, it's also a good time to check that it is still active and that the contact person is still appropriate for your organization.

Electronic applications must be received by 8:59 p.m. Pacific Time on December 13, 2019 to be considered for funding. Applicants are strongly encouraged to apply online through www.Grants.gov.

Use of Grants.gov requires an advance registration process that may take a few days or several weeks.

Keep in mind that it may take Grants.gov up to two business days to validate or reject a submitted application.

If Grants.gov has technical issues that prohibit submission or is otherwise impractical, hard copy applications will be accepted. Hard copies may be submitted by postal mail, commercial delivery service, or hand-delivery, but must be received (not postmarked) by 5:00 p.m. Pacific Time on December 13, 2019. Hard copy applications arriving after the deadline will be accepted for review only if the applicant can document that the application was provided to a delivery service that guaranteed delivery prior to the specified closing date and time.

NOAA adopted this definition of the MWEE in order to assist grantees in developing effective projects.

MWEEs for students should be learner centered -

1. RESEARCH: Students should focus on an environmental question, problem, or issue requiring research and investigation. This may be done through classroom instruction, data collection, experiments, talking with experts and reviewing credible publications.

2. FIELD ACTIVITIES - Students should participate in multiple outdoor field activities sufficient to collect data or make observations required for answering the research questions and informing student actions, or as part of the issue definition and background research. Pacific Northwest B-WET funded projects should aim to include more than 4 hours of student activity time spent outdoors.

3. ACTION PROJECTS: Students should participate in age appropriate projects during which they take action to address the environmental issues. These may be personal actions or actions that focus on the community or more global audiences.

1. Examples include watershed restoration or protection (creating a schoolyard habitat, planting trees, removing invasive species, a community cleanup, storm-water management) ;
2. Everyday choices (reduce /reuse / recycle, composting, energy or water conservation),
3. Community engagement (presentations, social media, event-organizing, messaging at community events, mentoring, Public Service Announcements, flyers or posters),
4. Civic Action (town meetings, letter writing, meeting with public officials to learn about policy aspects of watershed monitoring or habitat restoration)

1. CONCLUSIONS: Students should analyze and evaluate the results of projects and investigations. They should synthesize and communicate results to external audiences such as other classrooms, schools, parents, or the community.

In addition to the components identified in the previous slide, NOAA recommends that the following elements are in place to fully support successful MWEE implementation with students.

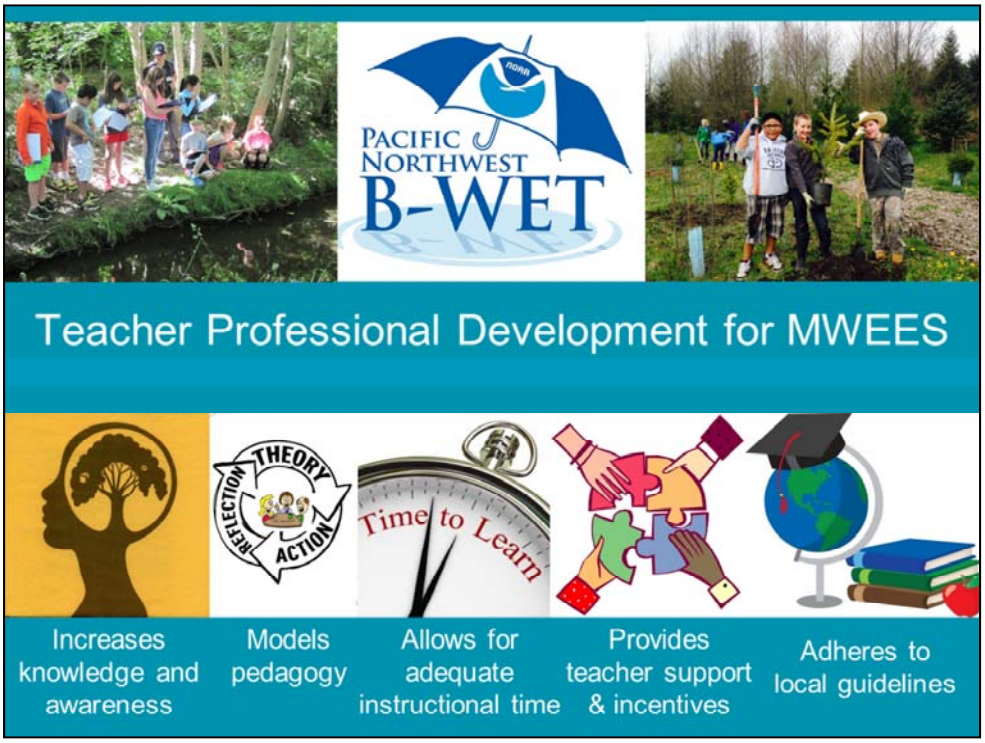
1. TEACHER PARTICIPATION & INTEGRATION WITH CLASSROOM CURRICULUM- Teachers should support the experience in the classroom and in the field. To support this role, teachers should have appropriate knowledge of environmental issues and watershed concepts, skill in connecting these issues to their curriculum, including confidence to teach outdoor lessons and to lead students in critical thinking about environmental issues. Experiences should also be integrated into what is occurring in the classroom.

2. LOCAL CONTEXT -The local community and environment should be viewed as the primary resource for the student MWEE.

3. A SET OF ACTIVITIES OVER TIME - The MWEE includes the full duration leading up to and following the outdoor field experiences. Each component should involve a significant investment of instructional time, incorporate time for reflections, and include all the

students. Experiences such as tours, simulations, demonstrations, or nature walks may be instructionally useful, but alone do not constitute an entire MWEE as defined here.

4. Includes NOAA assets, including NOAA data, personnel, facilities, curriculum and / or resources.



To prepare teachers to effectively support MWEEs, it is recommended that teacher professional development include these elements –

1. Trainings should provide sufficient level of content specific to their grade level and discipline, including an understanding of basic watershed concepts and the human connection to the watershed.

2. Trainers should use the same techniques and experiences in trainings that teachers are expected to use with their students. This includes hands-on, place-based, outdoor field experiences and issue investigation and action.

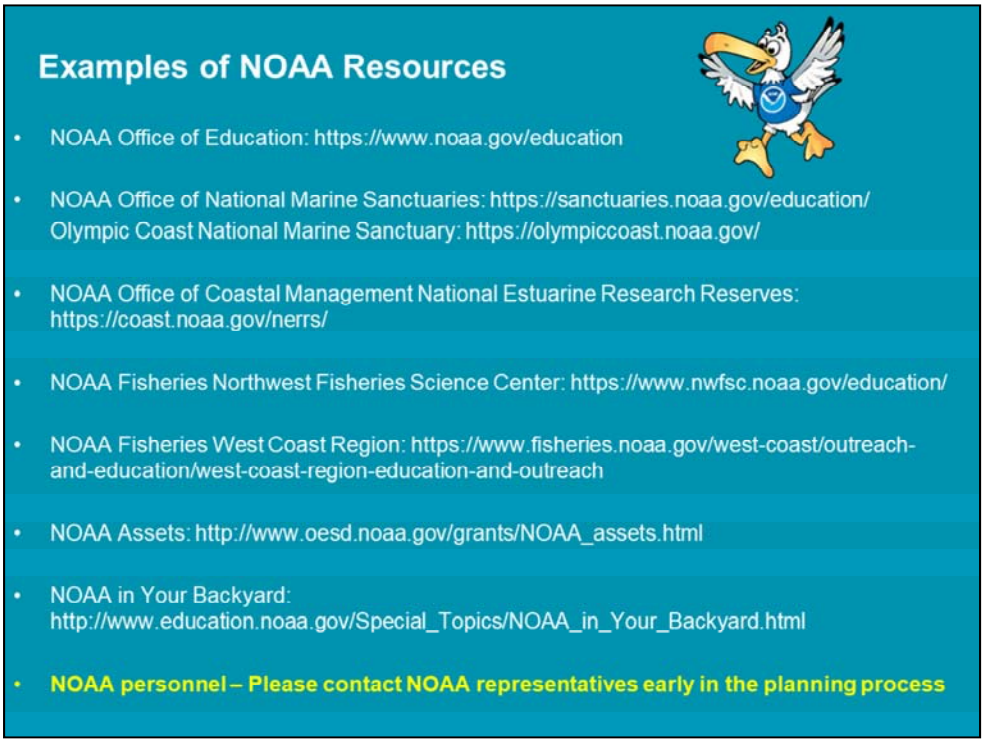
3. Professional development trainings should be multi-day, occurring consecutively or over the course of several months. Trainings should include plenty of time for teachers to reflect on their own teaching practices and include planning time / discussions on how to use the new knowledge and skills in the classroom with their students. 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.

4. Programs should provide ongoing teacher support and incentives. Ongoing support can be meetings, web-based forums for communication and feedback, mentor teachers, or teams of teachers. Continuing education credits and stipends can be used to encourage participation in on-going professional development opportunities.

5. When possible, professional development opportunities should support established guidance and recommendations set forth by local education agencies.

Where appropriate, professional development should include tools for teachers to implement MWEEs on their school grounds as an alternative to offsite field experiences.

Some of our national B-WET partners, the Chesapeake Bay Program, developed a resource to support MWEEs, called the School Grounds for Learning resources available at: http://baybackpack.com/schoolyard_projects/about. It was developed for Chesapeake Bay, but can be applied to MWEEs in any region. It has resources, including a guide and toolbox, for developing, promoting and funding your MWEE project.



Here are some examples of NOAA resources that are available to support your projects –

NOAA Office of Education – NOAA in Your Backyard, Data resources for educators, NOAA resource collection that help you integrate NOAA science into formal and informal education.

NOAA Office of National Marine Sanctuaries – Ocean and Climate Literacy resources featuring sanctuary science and technology, including curricula, hands-on activities, webinars, and other resources. There are also multiple resources to support education about ocean acidification

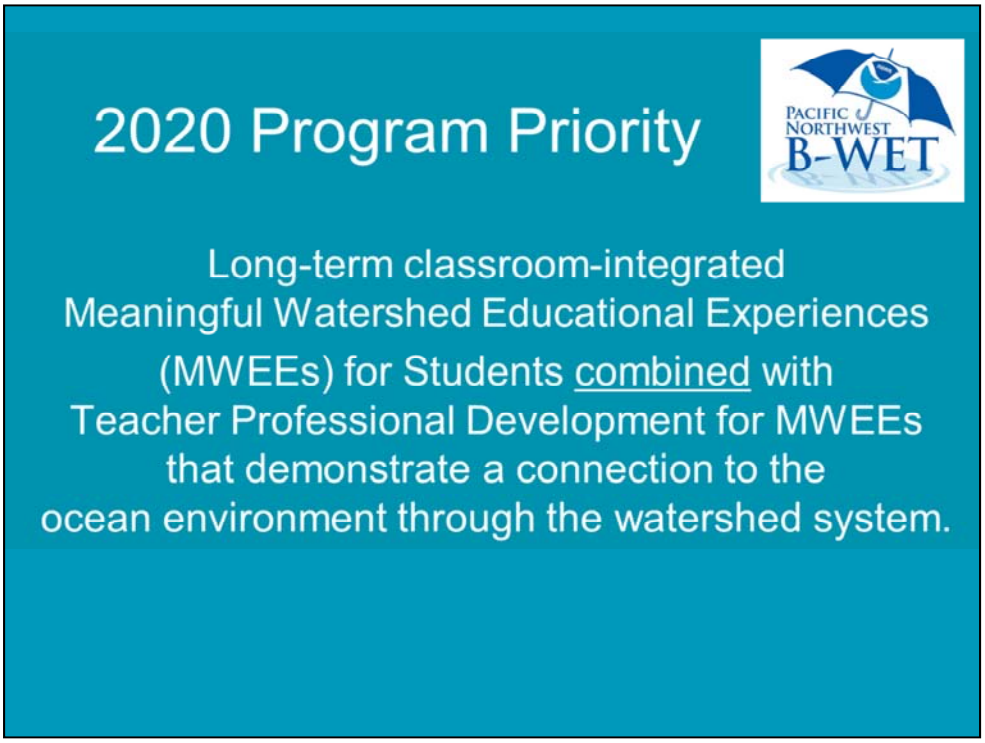
NOAA protects special places including Olympic Coast National Marine Sanctuary, located off the coast of WA, and National Estuarine Research Reserves including Padilla Bay in WA and South Slough in OR. These protected places offer natural classrooms for investigation, lessons and curricula, as well as staff who may be available to support your programs.

NOAA Fisheries has great regionally based resources, including experts,

educational materials and science tools.

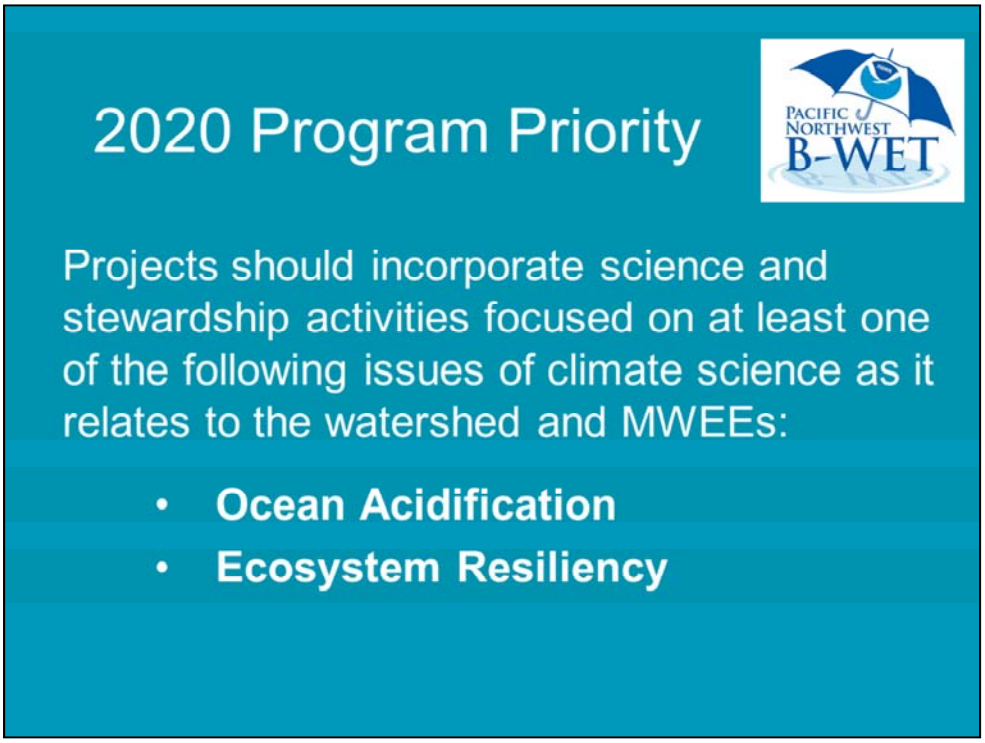
And be sure to review NOAA Assets and NOAA in Your Backyard for a broader list of resources available through NOAA.

Keep in mind that NOAA personnel may also be available, but be sure to contact them early in the planning process and consider having them involved in activities that will generate the greatest impact, like teacher workshops, student summits, or activity development.



The 2020 Pacific Northwest B-WET Program Priority is Long-term classroom-integrated Meaningful Watershed Educational Experiences (MWEEs) for Students combined with Teacher Professional Development for MWEEs that demonstrate a connection to the ocean environment through the watershed system.

The idea is that students understand how their actions can affect the coastal/ocean environment through the watershed system.

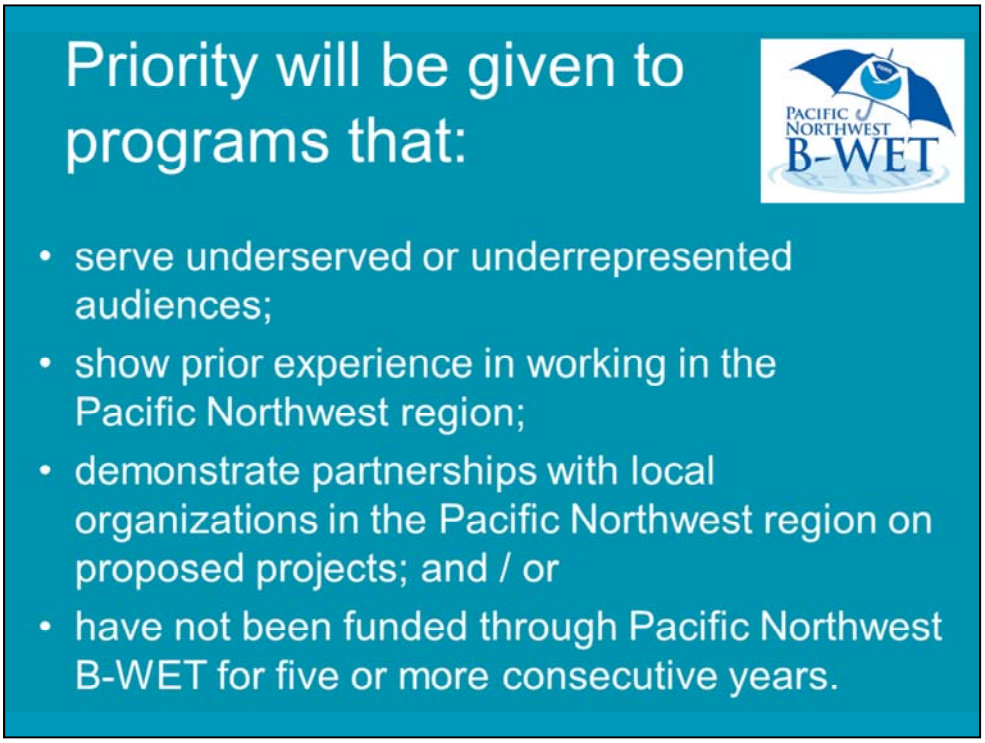


Projects should incorporate science and stewardship activities focused on at least one of the following issues of climate science as it relates to the watershed and MWEEs:

- Ocean Acidification
- Ecosystem Resiliency

And should integrate the following key messages:

a. Changes in climate will impact national marine sanctuaries and the overall health of the ocean that is vital to our quality of life, and ultimately, our survival.
b. One or more of the following key messages
    1. Human activities are impacting the climate system
    2. The choices and actions you make today do make a difference.
    3. Collectively we need to adapt our carbon footprint and lower our carbon emissions.
    4. Collective actions are needed to preserve as much biodiversity on the planet as possible.



Additionally, priority will be given to applicants who

1) serve underserved or underrepresented audiences,
2) show prior experience in working in the Pacific Northwest region,
3) demonstrate partnerships with local organizations in the Pacific Northwest region on proposed projects, and or

4) have not been funded through PNW B-WET for five or more consecutive years.

Applicants should clearly show total anticipated contact time with project participants, and indicate how much of this time will be spent outdoors.

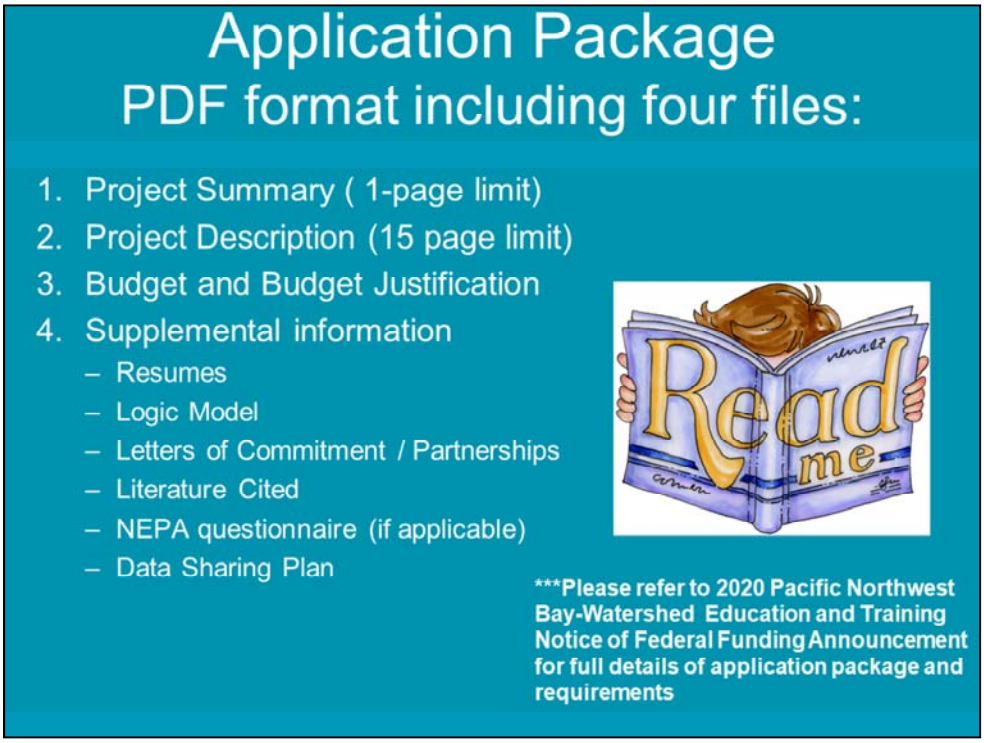
Based on national evaluation results, B-WET projects should include more than 30 hours of professional development, of which more than 10 hours should be spent outdoors. This includes any of the following types of B-WET professional development: workshops, college-level courses, individual teacher coaching 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).

And aim to include more than 4 hours of student activity time spent outdoors.

Application Content Requirements

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

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



All documents submitted as electronic application elements should be PDF; 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:

The application package will consist of:

Project Summary (1-page limit) - 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
- Description of work to be performed during the entire project period including audience description information (i.e. 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
- Cost per student and teacher
- A list of all PNW B-WET grants (include year and title) that your organization has been awarded in the past five years, if any

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 in the Notice of Federal Funding

- Accomplishments to date (this applies only to those applicants that have received BWET funding in prior years)
- Need
- Target Audience
- Area(s) served
- Objectives (including methods, timelines, and expected outcomes
- Proposed activities
- Project partners
- NOAA Assets
- Plan of action that outlines how you will recruit your target audience
- Evaluation (Project evaluation and National evaluation)

Budget and Budget Justification (please be sure to round to the nearest dollar)

Supplemental information including

- Resumes
- Logic Model
- 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. Wherever reasonable, proposals should include partnerships with school divisions and/or the state department of education (if the applicant is not one of these entities). Projects are also encouraged to collaborate with NOAA entities. As I

mentioned earlier, it is recommended that applicants interested in including NOAA personnel should contact NOAA representatives early in their planning process

- Literature cited
- National Environmental Policy Act (NEPA) questionnaire (if applicable)
- Data Sharing Plan (up to two pages) - 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 Kevin Grant, 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 guidance in the notice of federal funding announcement.

Evaluation Criteria

1. Importance and / or relevance and applicability of proposal to the program goals:
2. Technical Merit;
3. Overall qualifications of applicants:
4. Project costs;
5. Outreach and Education

***Please refer to 2020 Pacific Northwest Bay-Watershed Education and Training Notice of Federal Funding Announcement for full details of Evaluation Criteria

See Federal Funding announcement for full details

Evaluation Criterion #1 – 40 points
Importance / Relevance to Program Goals

- MWEEs for students are learner centered and focused on questions, problems, and issues to be investigated
- MWEE is an integral part of the instructional program
- Project includes Teacher Professional Development to support MWEEs
- Project incorporates science and stewardship activities focused on the issues of ocean acidification and hypoxia
- Project substantially serves underserved or underrepresented audiences
- Projects incorporate NOAA and environmental literacy resources

***Please refer to 2020 Pacific Northwest Bay-Watershed Education and Training Notice of Federal Funding Announcement for full details of Evaluation Criteria

1. Importance and/or relevance and applicability of proposal to the program goals and priorities (40 points)

- addresses the basics of a MWEE as defined in the announcement, including that projects aims to include more than 4 hours of student activity time spent outdoors, and include more than 30 hours of professional development, of which more than 10 hours should be spent outdoors.
- This criterion also includes program priorities that the project incorporates ocean and climate science and stewardship activities focused on
- ocean acidification and / or ecosystem resiliency as it relates to the watershed and MWEEs; the project substantially serves underserved or underrepresented audiences; and the applicant has not been funded through PNW B-WET for five or more consecutive years.
- This criterion also includes program requirements that project incorporate appropriate NOAA and environmental literacy resources

Evaluation Criterion #2– 30 points
Technical Merit

- Proposal meets all technical requirements and objectives
- Applicant demonstrates partnerships through letters of support and partner involvement
- Applicant demonstrates how the project outcomes will be evaluated and how they plan to support the national evaluation system.

***Please refer to 2020 Pacific Northwest Bay-Watershed Education and Training Notice of Federal Funding Announcement for full details of Evaluation Criteria

Evaluation Criterion #3 – 10 points
Overall qualifications of applicants

- Applicant shows capability and experience in successfully completing similar projects
- Proposal includes resumes of staff members included in project
- Applicant demonstrates experience working with underserved or underrepresented communities
- Applicant shows prior experience working in the Pacific Northwest

***Please refer to 2020 Pacific Northwest Bay-Watershed Education and Training Notice of Federal Funding Announcement for full details of Evaluation Criteria

Evaluation Criterion #4 – 10 points
Project costs

- Budget request is reasonable and justifiable
- Significant percentage of the budget is directly related to bringing students in contact with the environment
- Any administrative costs are consistent with Federal requirements and effectively support project implementation
- Funds for salaries and fringe benefits are only for those personnel who are directly involved in implementing the proposed project
- Applicant demonstrates sustainability beyond the project period and that the project will continue after NOAA funding has expired

***Pease refer to 2020 Pacific Northwest Bay-Watershed Education and Training Notice of Federal Funding Announcement for full details of Evaluation Criteria

Evaluation Criterion #5 – 10 points
Outreach and Education

- Project involves well-developed external sharing and communication
- Proposal describes how target audience will share their findings, experiences, or results with their peers or their community

***Please refer to 2020 Pacific Northwest Bay-Watershed Education and Training Notice of Federal Funding Announcement for full details of Evaluation Criteria

Applications 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 reviewers.

1. Technical Review - Each application will be reviewed by a minimum of 3 reviewers. Reviewers provide comments (which are shared with applicants after the competition has concluded) and assign scores to the applications based the evaluation criteria in the notice of federal funding announcement. From this, we will determine a preliminary rank order based on reviewers ratings.

2. Panel Review – An in-person review panel will come together to evaluate the rankings and comments from the Technical Review and discuss the proposals as a group. During the panel meeting, reviewers can revise their scores and comments. Reviewers must individually submit final ranking to the B-WET Program Manager by the end of the panel meeting.

3. The reviewers' final ranking will be averaged for each application to produce a rank order of the proposals for each of the panels.

4. Using the recommendation on each discussed proposal, the Program Manager will calculate a “percent recommended” for each discussed proposal. This establishes a final rank order for funding that is provided to the Selecting Official.

Here is the link for the 2020 PNW B-WET funding announcement.

https://www.grants.gov/web/grants/search-grants.html?keywords=NOAA-NOS-ONMS-2020-2006254

Also see the Pacific Northwest B-WET website at https://olympiccoast.noaa.gov/ocean_literacy/bwet.html

The priorities of Ocean Acidification and Ecosystem Resiliency are described in detail on pages 9-12 of the announcement. Be sure to review the full document for requirements , evaluation criteria, and resources.

For ecosystem resiliency, NOAA has some examples of resilience projects at https://www.noaa.gov/topic-tags/resilience and resources at https://www.noaa.gov/office-education/elp/grants/resilience

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