B-WET National Reporting and Evaluation

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NOAA Office of Education
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PURPOSE:
Review how grantees are asked to report on their grant activities

1. Progress Reports
2. National Evaluation System
Focus on MWEEs
1. PROGRESS REPORTS
<table>
<thead>
<tr>
<th>PROGRESS REPORTS</th>
<th>NATIONAL EVALUATION</th>
</tr>
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<tbody>
<tr>
<td><strong>Platform</strong></td>
<td>Grants Online</td>
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<tr>
<td><strong>What does the PI do?</strong></td>
<td>Uploads Word document (see progress report guidance) to Grants Online</td>
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<tr>
<td><strong>Purpose</strong></td>
<td>Tracks progress toward specific tasks in a grant</td>
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<td><strong>Scale</strong></td>
<td>Project/local level evaluation, data reviewed by grant</td>
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<tr>
<td><strong>Timing</strong></td>
<td>Every 6 months from the start of your grant (or as established in your award)</td>
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<td>Qualtrics web-based surveys</td>
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<td>1) completes the grantee survey; 2) provides teacher contact info for teacher survey</td>
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<td>Tracks satisfaction with, and outcomes of, the B-WET and MWEE approach</td>
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<td>National/regional level evaluation of B-WET approach, data reviewed in aggregate</td>
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<td>At the end of each grant year, and periodically during grant for PD projects</td>
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<td>Example</td>
<td>PROGRESS REPORTS</td>
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<td>Your progress report will indicate progress toward your project goals as measured by your project evaluation. For example, a PI in Alabama may want to know if &quot;teachers understand how oyster reef restoration can benefit coastal Alabama and specifically the communities in the Mobile Bay watershed?&quot;</td>
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NOAA B-WET Progress Report Guidance

The following guidance includes suggested information to include in progress reports. Please contact your B-WET Program Manager if you have any questions.

- **Semi-annual Progress Reports** that detail the work being done during the award are due every six months, according to the schedule set out by your Federal Program Officer at the beginning of the award. You have 30 days after the end of the reporting period to submit the semi-annual report in Grants Online.

- **A Final and Comprehensive Progress Report** that details the work that was done over the entire award is due 90 days after end of the award period. This report should also be submitted via Grants Online.

**NOTE:** Failure to submit reports in a timely manner can result in severe consequences, including suspension of payment, and even suspension or termination of the award. Contact your B-WET Program Manager as soon as possible if you will not be able to submit your report by the deadline.

**General Guidelines:**

- Be concise (no need to report on every detailed activity; focus on the larger outcomes/deliverables).
- Report on progress made in relation to the timeline, milestones, and tasks that were described in your proposal.
- Be sure to include any concerns, delays, challenges, complications or other unexpected changes that you’ve encountered.
- There is not a recommended page number or limit. The only rule is to include the items suggested below in a concise manner.
- Please also include links or select attachments that illustrate your progress (newspaper articles, photos of students’ work, survey results, lessons developed, etc).
STEWARDSHIP ACTIONS

Students participate in an age appropriate project during which they take action to address environmental issues at the personal or societal level.
2. B-WET NATIONAL EVALUATION SYSTEM
The B-WET National Evaluation System

Designed to evaluate Meaningful Watershed Educational Experiences (MWEEs)

“Best Practices”
Designed to answer these evaluation questions:

- To what extent do regional B-WET programs support grantees in implementing Meaningful Watershed Educational Experiences (MWEEs)?
- **How are MWEEs implemented** by grantees and teachers?
- To what extent do B-WET funded projects increase teachers’ knowledge of watershed concepts, their confidence in their ability to integrate MWEEs into their teaching practices, and the likelihood that they will implement high quality MWEEs?
- To what extent do B-WET funded projects increase students’ knowledge of watershed concepts, attitudes toward watersheds, inquiry and stewardship skills, and aspirations towards protecting watersheds?
Components of the National Evaluation System:

- For Grantees:
  - Teacher Contact Information Survey
  - Annual Grantee Survey

- For Teachers:
  - Professional Development Survey following the completion of all PD
  - Follow-up MWEE Survey at the end of the following school year
What will we do with the data?

- Ensure anonymity – **intention is not to evaluate an individual teacher or grantee**
- B-WET and NOAA will review data in aggregate at the regional and national levels
- **Grantees may view their post-PD Survey and follow-up MWEE implementation survey results in aggregate through password protected private reports**
- Hope to be able to provide the aggregate data set to researchers to inform the field
Evaluation Results Highlights

1. Teacher Professional Development (PD)
2. Student Meaningful Watershed Educational Experiences (MWEEs)
Teacher PD Implementation

- Almost all teachers experienced outdoor contact time, including a field trip/work, with the majority spending 1-10 hours outdoors
Teacher PD Implementation

- 72% of teachers participated in at least one stewardship behavior
- All grantees reported using NOAA resources
Teacher PD Outcomes

- 75% of teachers implemented MWEEs with their students within 12 months
- PD increases teachers’ watershed literacy, confidence, and intention to implement MWEEs
- There are specific PD practices that predict teacher confidence and teacher perceptions of student outcomes
Teacher PD Best Practices

- Incorporate place-based and scientific inquiry learning
- Provide hands-on support:
  - Assistance with field trips/work, use of equipment/technologies, and conducting stewardship projects
  - Share information about how to obtain funding for MWEEs
- Focus on how teachers can use scientific data to support student MWEE outcomes
- Align PD with district, state, and national education standards
- Deliver PD through institutes and multi-day workshops
  - Aim for > 30 hours of total PD contact time including >10 hours outdoor.
- Include environmental stewardship behaviors
What component(s) of the MWEE professional development best prepared you to teach your students about local watersheds?

- “We had the opportunity to look over materials provided to us, talk about how to teach the concepts best, and received support to get the materials ready for each lesson.”

- “The knowledge of the presenters. Had they not been so well prepared and knowledgeable, the entire experience would not have been as useful.”

- “I think field activities gave me ideas on how I can get my students actively involved in learning about preserving our water resources.”

- “Going out and using the equipment and talking to educators about what we saw and did.”

- “The process of community involvement in raising awareness of importance of watersheds and the human impact.”
MWEE Implementation

- Outdoor contact time varied, with most teachers and grantees incorporating 1-5 hours.
- Many teachers engaged their students in 3 or more outdoor learning experiences.
MWEE Implementation

- 82% of teachers engaged their students in stewardship behaviors
- 74% of grantees & 68% of teachers used NOAA resources
MWEE Implementation

- Teachers & grantees used diverse instructional methods
- MWEEs were conducted in a range of locations/settings, with the majority implemented off school grounds
- Almost all teachers (98%) engaged their students in collecting data or making observations
MWEE Outcomes

- Students’ watershed literacy increased
- Students improved environmental stewardship and science literacy outcomes
MWEE Implementation Best Practices

- Integrate outdoor and in-classroom learning (i.e., prepare students for outdoor learning, link outdoor and in-classroom learning, ask students to apply what they learned outdoors)
- Conduct outdoor field trips/work to enhance students’ ability to conduct scientific investigations
- Engage students in stewardship behaviors
MWEE Survey

In the past 12 months, did you implement a Meaningful Watershed Educational Experience (MWEE) with your students?

<table>
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<tr>
<th>#</th>
<th>Answer</th>
<th>Bar</th>
<th>Response</th>
<th>%</th>
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<tbody>
<tr>
<td>0</td>
<td>No</td>
<td></td>
<td>62</td>
<td>21%</td>
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<tr>
<td>1</td>
<td>Yes</td>
<td></td>
<td>231</td>
<td>79%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>294</td>
<td>100%</td>
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How the Data is Collected
How the Data is Collected:

- **For Grantees:**
  - Provide teacher contact info via “Teacher Contact Information Survey” (email addresses)
  - Complete an online survey at the end of the grant period (annually, “Grantee Survey”)

- **For Teachers:**
  - Complete an online survey following their professional development (“PD Survey”)
  - Also receive a follow-up survey at the end of the following school year (“MWEE Survey”)
Grantee Survey

- All grantees (regardless of project type) will be asked to complete an online survey at the end of your grant period (or once per year if your grant is multiple years).

- What is asked on the annual grantee survey:
  - Grantee satisfaction with B-WET program
  - Student MWEE goals and implementation
  - PD goals and implementation
  - Project descriptive information
Teacher Contact Information Survey

- If you have a Teacher PD or Exemplary grant, we will ask you to complete an online form to provide contact info for the teachers who participate in your professional development (PD). If you have multiple cohorts of teachers, you may complete this form, emailed monthly, as many times as needed over the course of your grant. You will be asked for your contact information, a list of teachers' email addresses, and the dates of the professional development you plan to provide. No other teacher contact information is requested.
Tips for Teacher Contacts!

- It is very important to provide an accurate anticipated end date for the entire professional development (PD) activity when all of your interactions with that group of teachers will be complete.
- Please submit contacts once you know who has participated, ideally at least one month prior to PD end date.
- It is Ok (even better!) to wait until later in PD so you will know for sure.
- Please contact me if you need to make changes to contacts you have already submitted.
Preview of Teacher Contacts Form

Q1. Please enter your NOAA B-WET award number. Your NOAA B-WET award number has 14 letters and numbers, such as NA12NMF4638049. The award number will be used to identify the region, not your organization, and 2) allow us to link information provided by your project’s teachers.

First Name
Last Name

Q2. In case teachers have questions about the B-WET survey, your contact information for NOAA B-WET will be included in the email that is sent.

Organization Name
Your Email Address
Your Phone Number

Q4. Please provide the dates when your professional development interaction began and end. The end date is for all of the professional development training provided to this cohort of teachers, so depending on your type of program, date or 7 months.

Use the format MM/DD/YYYY, such as for June 9, 2013, enter 06/09/2013.

Start Date (MM/DD/YYYY)
End Date (MM/DD/YYYY)

Q3.

Q5. Please provide the email addresses of the teachers who participated in your professional development. These email addresses will be used for distributing a NOAA B-WET questionnaire link. The teachers’ data will be anonymous.

Please list up to 30 teachers’ names and email addresses. If more than 30 participated in your professional development, please complete this survey again to add the additional teachers.

PLEASE CLICK ON THE SUBMIT BUTTON AT THE BOTTOM OF THE PAGE WHEN YOU ARE FINISHED ENTERING EMAIL ADDRESSES. THANK YOU!
What we’ll ask your teacher participants to do:

- The teachers for whom you have provided email contacts will be asked to complete two online surveys at different times:
- Following their professional development experience as part of your grant they will receive the Teacher PD Survey, which asks them to provide information about their experience in the professional development, their intentions for instruction as a result, and their anticipated student outcomes.
- At the end of the following school year they will receive the follow-up Teacher MWEE Survey which asks for information about how they actually implemented MWEEs with their students and student outcomes.
Student Item Bank

- Student data collection is not part of the formal evaluation system.
- Item bank is a evaluator-developed resource for grantees and covers:
  - Science Learning Outcomes e.g., science inquiry skills, science engagement
  - Environmental Stewardship Outcomes e.g., connection with nature, water conservation behaviors, locus of control
  - Watershed Literacy Outcomes, e.g., Define the term “watershed”, Identify local watershed(s), Identify the functions that occur in a watershed (transport, store, and cycle water), Recognize that both natural processes and human activities affect water flow and water quality in watersheds etc.
Please participate in this data collection!

- Encourage your teachers to respond!
  - Response rate is a major challenge
  - Wherever possible please try to incorporate participation in this project into your existing requirements for PD program completion
- This system is not designed to replace your project level evaluation
- Your participation helps us troubleshoot and improve the system!
What’s Next?

- In the coming weeks the PI/point of contact for your grant will receive:
  1. A Qualtrics-generated “pre-notification” message
  2. A confirmation directly from me to ensure you are able to receive the system-generated emails

- Let me know if you have trouble receiving Qualtrics messages or if there is a different point of contact that you prefer receives the evaluation emails
Evaluation Resources

- Survey instruments
- Grantee instructions
- Overview presentation
- Student item bank and guidance

Resources for Evaluation System

As part of this evaluation system, recipients participate in grantees’ professional development individually from each grantees organization. Each individual will complete questionnaires once per year of the award. All teacher-participants will be asked (using each organization) to complete one questionnaire development and one after implementing the NCEP Experiences with their students (at the end of the year). The nature of their program and teachers, the teachers who respond to the questionnaire.

Grantee Instructions (PDF)
Start here to learn about the mechanics of how to participate.
FOR MORE INFORMATION ON B-WET EVALUATION:

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http://www.noaa.gov/office-education/bwet

http://www.noaa.gov/office-education/bwet/grantee-resources/national-evaluation

http://www.facebook.com/noaabwet
THANKS!

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