NOTICE OF OFFICE OF MANAGEMENT AND BUDGET ACTION

Date 02/05/2013

Department of Commerce
National Oceanic and Atmospheric Administration

FOR CERTIFYING OFFICIAL: Simon Szykman
FOR CLEARANCE OFFICER: Jennifer Jessup

In accordance with the Paperwork Reduction Act, OMB has taken action on your request received
10/26/2012

ACTION REQUESTED: New collection (Request for a new OMB Control Number)
TYPE OF REVIEW REQUESTED: Regular
ICR REFERENCE NUMBER: 201209-0648-011
AGENCY ICR TRACKING NUMBER:
TITLE: NOAA Bay Watershed Education and Training (B-WET) Program National Evaluation System
LIST OF INFORMATION COLLECTIONS: See next page

OMB ACTION: Approved with change
OMB CONTROL NUMBER: 0648-0658
The agency is required to display the OMB Control Number and inform respondents of its legal significance in accordance with 5 CFR 1320.5(b).

EXPIRATION DATE: 02/29/2016 DISCONTINUE DATE:

BURDEN:	RESPONSES	HOURS	COSTS
Previous	0	0	0
New	6,919	3,519	0
Difference			
Change due to New Statute	0	0	0
Change due to Agency Discretion	6,919	3,519	0
Change due to Agency Adjustment	0	0	0
Change due to PRA Violation	0	0	0

TERMS OF CLEARANCE:

OMB Authorizing Official: Dominic J. Mancini
Acting Deputy Administrator,
Office Of Information And Regulatory Affairs

List of ICs			
IC Title	Form No.	Form Name	CFR Citation
Grantee questionnare	NA	Grantee questionnaire	
Teacher PD questionnaire	NA, NA	Teacher PD questionnaire, Professional Development Teacher Non-response Survey	
Teacher MWEE Questionnaire	NA, NA	Teacher MWEE nonresponse survey, Teacher MWEE questionnaire	

PAPERWORK REDUCTION ACT SUBMISSION

Please read the instructions before completing this form. For additional forms or assistance in completing this form, contact your agency's Paperwork Clearance Officer. Send two copies of this form, the collection instrument to be reviewed, the supporting statement, and any additional documentation to: Office of Information and Regulatory Affairs, Office of Management and Budget, Docket Library, Room 10102, 725 17th Street NW, Washington, DC 20503.

1. Agency/Subagency originating request
NOAA/Office of Education

2. OMB control number b. [ ] None
a. 0648 -

3. Type of information collection (*check one*)
a. [✔] New Collection
b. [ ] Revision of a currently approved collection
c. [ ] Extension of a currently approved collection
d. [ ] Reinstatement, without change, of a previously approved collection for which approval has expired
e. [ ] Reinstatement, with change, of a previously approved collection for which approval has expired
f. [ ] Existing collection in use without an OMB control number
For b-f, note Item A2 of Supporting Statement instructions

4. Type of review requested (*check one*)
a. [✔] Regular submission
b. [ ] Emergency - Approval requested by / /
c. [ ] Delegated

5. Small entities
Will this information collection have a significant economic impact on a substantial number of small entities? [ ] Yes [✔] No

6. Requested expiration date
a. [✔] Three years from approval date b. [ ] Other Specify: /

7. Title NOAA Bay Watershed Education and Training (B-WET) Program National Evaluation System

8. Agency form number(s) (*if applicable*)

9. Keywords from the "Federal Resister Thesaurus of Indexing Terms"

10. Abstract

The NOAA Office of Education's Bay Watershed Education and Training (B-WET) program seeks to contribute to NOAA's mission by supporting education efforts to create an environmentally literate citizenry with the knowledge, attitudes, and skills needed to protect watersheds and related ocean, coastal, and Great Lakes ecosystems. B-WET currently funds projects in seven regions (California, Chesapeake Bay, Great Lakes, Gulf of Mexico, Hawaii, New England, and the Pacific Northwest). B-WET proposes to create an across-region, internal evaluation system to provide ongoing feedback on program implementation and outcomes to ensure maximum quality and efficiency of the B-WET program. The evaluation system will be sustained by B-WET staff with occasional assistance from an outside contractor. B-WET awardees and the awardees' professional development teacher-participants will be asked to voluntarily complete online survey forms to provide evaluation data. In addition, B-WET seeks approval of an item bank that awardees can choose to use to construct surveys for youth participants (ages 10-17) in B-WET-funded programs.

11. Affected public (*Mark primary with "P" and all others that apply with "x"*)
a. P Individuals or households d. ___ Farms
b. X Business or other for-profit e. ___ Federal Government
c. P Not-for-profit institutions f. X State, Local or Tribal Government

12. Obligation to respond (*check one*)
a. [✔] Voluntary
b. [ ] Required to obtain or retain benefits
c. [ ] Mandatory

13. Annual recordkeeping and reporting burden
a. Number of respondents 7,325
b. Total annual responses 7,313
1. Percentage of these responses collected electronically 100 %
c. Total annual hours requested 2,625
d. Current OMB inventory 0
e. Difference 2,625
f. Explanation of difference
1. Program change 2,625
2. Adjustment

14. Annual reporting and recordkeeping cost burden *(in thousands of dollars)*
a. Total annualized capital/startup costs 0
b. Total annual costs (O&M) 0
c. Total annualized cost requested 0
d. Current OMB inventory 0
e. Difference
f. Explanation of difference
1. Program change
2. Adjustment

15. Purpose of information collection (*Mark primary with "P" and all others that apply with "X"*)
a. ___ Application for benefits e. X Program planning or management
b. P Program evaluation f. ___ Research
c. ___ General purpose statistics g. ___ Regulatory or compliance
d. ___ Audit

16. Frequency of recordkeeping or reporting *(check all that apply)*
a. [ ] Recordkeeping b. [ ] Third party disclosure
c. [✔] Reporting
1. [ ] On occasion 2. [ ] Weekly 3. [ ] Monthly
4. [ ] Quarterly 5. [ ] Semi-annually 6. [✔] Annually
7. [ ] Biennially 8. [ ] Other (describe)

17. Statistical methods
Does this information collection employ statistical methods
[✔] Yes [ ] No

18. Agency Contact (person who can best answer questions regarding the content of this submission)
Name: Bronwen Rice
Phone: 202.482.6797

19. Certification for Paperwork Reduction Act Submissions

On behalf of this Federal Agency, I certify that the collection of information encompassed by this request complies with 5 CFR 1320.9

NOTE: The text of 5 CFR 1320.9, and the related provisions of 5 CFR 1320.8(b)(3), appear at the end of the instructions. *The certification is to be made with reference to those regulatory provisions as set forth in the instructions.*

The following is a summary of the topics, regarding the proposed collection of information, that the certification covers:

(a) It is necessary for the proper performance of agency functions;

(b) It avoids unnecessary duplication;

(c) It reduces burden on small entities;

(d) It used plain, coherent, and unambiguous terminology that is understandable to respondents;

(e) Its implementation will be consistent and compatible with current reporting and recordkeeping practices;

(f) It indicates the retention period for recordkeeping requirements;

(g) It informs respondents of the information called for under 5 CFR 1320.8(b)(3):

(i) Why the information is being collected;

(ii) Use of information;

(iii) Burden estimate;

(iv) Nature of response (voluntary, required for a benefit, mandatory);

(v) Nature and extent of confidentiality; and

(vi) Need to display currently valid OMB control number;

(h) It was developed by an office that has planned and allocated resources for the efficient and effective management and use of the information to be collected (see note in Item 19 of instructions);

(i) It uses effective and efficient statistical survey methodology; and

(j) It makes appropriate use of information technology.

If you are unable to certify compliance with any of the provisions, identify the item below and explain the reason in Item 18 of the Supporting Statement.

Signature of Senior Official or designee	Date

Agency Certification (signature of Assistant Administrator, Deputy Assistant Administrator, Line Office Chief Information Officer, head of MB staff for L.O.s, or of the Director of a Program or StaffOffice)	
Signature Louisa Koch	Date 9-19-12
Signature of NOAA Clearance Officer	
Signature signed by Sarah Brabson	Date 9-25-12

SUPPORTING STATEMENT
NOAA BAY WATERSHED EDUCATION AND TRAINING (B-WET) PROGRAM
NATIONAL EVALUATION SYSTEM
OMB CONTROL NO. 0648-xxxx

A. JUSTIFICATION

1. Explain the circumstances that make the collection of information necessary.

This request is for a new information collection.

The NOAA Office of Education's Bay Watershed Education and Training (B-WET) program seeks to contribute to NOAA's mission by immersing participants in Meaningful Watershed Education Experiences (MWEEs) in order to create an environmentally literate citizenry with the knowledge, attitudes, and skills needed to protect watersheds and related ocean, coastal, and Great Lakes ecosystems (http://www.oesd.noaa.gov/grants/bwet.html). B-WET currently funds projects in seven regions: California, Chesapeake Bay, Great Lakes, Gulf of Mexico, Hawaii, New England, and the Pacific Northwest.

In keeping with Executive Order 12862, Setting Customer Service Standards, B-WET proposes to create a cross-region, internal evaluation system to monitor program implementation and outcomes on an ongoing basis. An on-going collection is proposed because the intent of the evaluation system is to support on-going program improvement. Based on a review of annual evaluation system results, B-WET will make adjustments to its Federal Funding Opportunities (FFOs) and activities. On-going data collection is proposed to enable assessment of the benefits of continuous improvements and, thus, support adaptive management of the program. This effort is related to the NOAA Education Strategic Plan 2009-2029. See in particular Outcome 1.1 on page 16, "Evaluating Education."

To meet this need, B-WET seeks to answer the following questions as part of the proposed evaluation system:

1. To what extent do regional B-WET programs support grantees in implementing Meaningful Watershed Educational Experiences (MWEEs)?
2. How are MWEEs implemented by grantees and teachers?
3. To what extent do B-WET-funded projects increase teachers' knowledge of watershed science concepts, their confidence in their ability to integrate MWEEs into their teaching practices, and the likelihood that they will implement high quality MWEEs?
4. 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?

B-WET grantees and teacher-participants in the grantees' professional development will be asked to voluntarily complete online questionnaires to provide evaluation data. One individual from each grantee organization will be asked to complete a questionnaire once per year of the award, and the teacher-participants will be asked to complete one questionnaire at the close of their professional development (PD) and one after implementing MWEEs with their students (before the end of the following school year). A database will be used to collect and store these data, as well as to automatically generate results in the form of aggregate descriptive statistics.

The proposed evaluation system will be maintained by B-WET staff with occasional assistance from an external contractor.

2. Explain how, by whom, how frequently, and for what purpose the information will be used. If the information collected will be disseminated to the public or used to support information that will be disseminated to the public, then explain how the collection complies with all applicable Information Quality Guidelines.

Program Improvement
The proposed evaluation system, influenced by the principles underlying utilization-focused evaluation (Patton, 2008), was specifically designed by a team of researchers from the University of Michigan (UM) and the Institute of Learning Innovation (ILI) to meet users' information and decisions needs. The primary users of the proposed evaluation system will be the B-WET staff members who administer the B-WET grant program, and its national coordinator. These individuals will review the evaluation system's results annually to determine what changes may be necessary to the grant program to maximize benefits for K-12 teachers and students. The system will automatically generate results in the form of aggregate descriptive statistics (at the national and regional level) to inform decisions about the program at both of these tiers.

Secondary users will be staff in the NOAA Office of Education who will also annually review a synthesis of findings from B-WET's evaluation to determine what they may suggest for improving its other education programs. Evaluation findings will also be used at the national level to report on agency performance measures and respond to other Administration data collection activities, such as the annual Committee on Science, Technology, Engineering, and Math Education (CoSTEM) survey. Tertiary users will be grant recipients who will also be provided with access to a synthesis of findings so that they may identify ways to improve their respective environmental science and education programs.

Public Dissemination
It is also anticipated that a synthesis of findings will be disseminated to the public or used to support publicly disseminated information. The proposed data collection will therefore ensure that the Information Quality Guidelines of utility, objectivity, and integrity are met.

Utility:
The proposed evaluation system is designed to answer the questions described earlier in Question 1, to primarily meet B-WET's decision needs. To answer these evaluation questions, the ILI-UM team of researchers first identified relevant constructs (based on B-WET's logic model and MWEE characteristics). Next, they adapted and adopted items to measure these constructs from existing valid and reliable indices and scales or developed new ones (when existing ones were not available). As a result, only data which has a necessary purpose for answering the system's evaluation questions and, thus, meeting B-WET's information needs, will be collected. Please refer to the proposed evaluation system metrics matrix illustrating the connections between evaluation questions, constructs, and items included in the proposed instruments (*posted as a supplementary document*).

Objectivity:
Presentation: The descriptive statistics (e.g., frequencies) that will be automatically generated

based on the online data collected from respondents will be accurate, clear, complete, and unbiased. In addition, only aggregate statistics at the national and regional level will be reported. Thus, individual sources of data will not be disclosed and study participants will remain anonymous.

Substance: The items included in the questionnaire, as well as the questionnaires themselves, which respondents will be asked to voluntary complete, were developed by the ILI-UM team based on best social science research practices. The majority of items included in the questionnaire, for example, were adopted or adapted (with respective researchers' permission) from existing studies, including the "Evaluation of National Oceanic and Atmospheric Administration Chesapeake Bay Watershed Education and Training Program" and Executive Summary (data gathered under OMB Control Number: 0648-0530), a recent exploratory study of the benefits of Meaningful Watershed Education Experiences (Zint, In Process), and a range of other relevant science and environmental education studies published in peer-reviewed journals. New items were developed only when existing measures for a construct were not available. The face and content validity of all of the items in the proposed questionnaires were established through reviews by the nine internal NOAA B-WET Advisory Group (BWAG) members, three B-WET grantees, three evaluation specialists, and two watershed science researchers. Face validity is established by showing the questionnaire to a group of experts (e.g., researchers, practitioners) and asking them for feedback on whether the measures look like they'll measure the constructs. We established face validity with review by B-WET, evaluators, grantees, and teachers. For content validity, we consulted with these experts and also did an extensive literature review.

Based on exploratory factor analyses conducted with SPSS and M+ by Zint (In Process), the scales that will be used by the proposed evaluation system are expected to have good to excellent reliability (i.e., Cronbach Alpha range: .70 to .90) (Nunally & Bernstein 1994; Carmines & Zeller, 1979). Similarly, because the respective factors explained a substantial amount of variance (i.e., range: 40% to 90%) in the Zint (In Process) study, there exists additional support for the validity of the measures to be used by the proposed evaluation system.

Integrity:
NOAA's Office of Education will retain control over the information and safeguard it from improper access, modification, and destruction, consistent with NOAA standards for confidentiality, privacy, and electronic information. See response to Question 10 of this Supporting Statement for more information on confidentiality and privacy. The information collection is designed to yield data that meet all applicable information quality guidelines. Prior to dissemination, the information will be subjected to quality control measures and a pre-dissemination review pursuant to Section 515 of Public Law 106-554.

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology.

The proposed evaluation system will be electronic. Study participants (i.e., B-WET grantees and teachers who participate in their professional development) will receive email prompts to complete the online instruments accessed through a Web site data entry portal. The portal will be designed in a questionnaire format with built-in "logic" that will prompt respondents to complete

only items relevant to their experience. Data will be stored as part of an associated database that will also automatically generate descriptive statistics. The proposed data collection process will minimize costs, while also being sensitive to issues of respondent burden, accuracy, and efficiency. It is assumed that most respondents will have access to the Internet at work, home, on a smartphone, or at a public institution such as a local library. Individuals who do not have easy access to the Internet can contact their B-WET regional coordinator (name and contact information will be provided) to obtain a paper copy of the questionnaire and a return envelope.

4. Describe efforts to identify duplication.

No other NOAA programs are surveying B-WET grantees or the teachers that participate in their respective Meaningful Watershed Educational Experience professional development.

5. If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.

The proposed study will ask individuals working for small non-profit organizations and some small businesses, as well as teachers in schools, to participate by completing the proposed questionnaires. The study will minimize burden on respondents because completion of the proposed questionnaires is voluntary. In addition, an iterative item review process was used to eliminate any non-essential questions, thus keeping the questionnaires as streamlined as possible while ensuring that sufficient data will be collected to answer the evaluation questions. Should they choose to complete the proposed questionnaires, grantees should be able to complete their questionnaire within 30-60 minutes (depending on the nature of their program) and teachers, within 30 minutes.

6. Describe the consequences to the Federal program or policy activities if the collection is not conducted or is conducted less frequently.

The proposed evaluation system will contribute to ensuring that federal funding is used in an effective and efficient manner to educate teachers and students about watershed science and environmental issues. B-WET will have scientific data to assess the effectiveness of their grant funded programs (i.e., B-WET-funded teacher professional development and student MWEEs). The results of the proposed study will also provide insight into how to design improved watershed education programs.

If the study were not conducted, B-WET would not have access to scientifically assess the effectiveness of its program/MWEEs and/or to scientifically determine how best to improve its program/MWEEs.

Continuous data collection, as proposed through the evaluation system, will allow on-going monitoring of outcome results and thus, on-going program/MWEE improvements.

7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.

The collection will be conducted in a manner consistent with OMB guidelines.

8. Provide information on the PRA Federal Register Notice that solicited public comments on the information collection prior to this submission. Summarize the public comments received in response to that notice and describe the actions taken by the agency in response to those comments. Describe the efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.

A Federal Register Notice published on June 5, 2012 (77 FR 33194) solicited public comments. No comments were received.

During the development of the B-WET evaluation system, the ILI-UM team solicited input from a range of individuals including B-WET grantees, evaluation experts, watershed scientists, and statisticians on all aspects of the proposed evaluation system. Their suggestions informed the design of the proposed study (e.g., type of data collection, frequency and timing of data collection, reporting formats, etc.). Their feedback was also used to improve the questionnaire items and led to confirmation of their face and content validity.

In addition, the grantee and teacher questionnaires will include several measures at the end of the respective instruments to allow respondents to comment on the data collection process and content. This feedback can be used to improve both the data collection process and instruments over time.

9. Explain any decisions to provide payments or gifts to respondents, other than remuneration of contractors or grantees.

Incentives, in the form of financial compensation or material gifts, are known to increase response rates (Dillman et al., 2009; James & Bolstein, 1990). Because NOAA is a federal agency, however, it cannot offer such an incentive to grantees. Therefore, NOAA B-WET will encourage grantees to ask teachers to complete the surveys as part of their other professional development responsibilities. For example, if the grantees provide stipends to their professional development teachers, they could include a requirement that teachers complete the questionnaire to receive the payment.

10. Describe any assurance of confidentiality provided to respondents and the basis for assurance in statute, regulation, or agency policy.

An assurance of confidentiality will not be provided to respondents. B-WET grantees and teachers who respond to the questionnaires will remain anonymous to B-WET and NOAA.

Anonymity will be guaranteed in the following ways:

- Neither B-WET grantees nor teacher respondents will be asked to provide information that can identify them as individuals as part of the questionnaire.
- Information that is needed to link data, that is (1) award numbers to link data provided by grantees with teachers participating in their professional development and (2) teacher-generated codes to link responses to their initial and subsequent questionnaires, will not be associated with any of the other data they provide.

- Email addresses, used to (1) invite prospective participants to participate in the study with a link to the questionnaire and (2) track response rates and prompt non-respondents, will not be associated with any of the data provided by respondents.
- Results will only be presented in aggregate form (across all grantees and teacher respondents), not by individual or grant.

Finally, the database is also being designed to meet Federal Information Security Management Act (FISMA) security guidelines to ensure all the data provided by respondents will be secure.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.

No questions of a sensitive nature will be asked.

12. Provide an estimate in hours of the burden of the collection of information.

Table 1 provides estimates of the time and cost burden for the proposed information collection. The numbers of possible respondents indicated in the table are estimated from B-WET's FY2010 budget, which was the year of the maximum level of funding historically received by the program. Future numbers of respondents will vary based on annual program funding and the resources grantees are able to leverage.

Table 1: Estimate of Burden Hours for Information Collection

Informant	Number of possible respondents annually	Response frequency	Expected number of responses	Average time per response (hours)	Total respondent time (hours)	Estimated hourly wage (dollars)	Estimated labor cost burden to respondents (dollars)
Grantees	125	1	113[b]	1.0	113	45.75f	5,170
PD teachers	4,000	1	3,200[c]	0.5	1,600	38.83[g]	62,128
PD teachers nonresponse		1	800[d]	0.1	80	38.83[g]	3,106
MWEE teachers[a]	3,200	1	1,280[e]	0.5	640	38.83[g]	24,851
MWEE teachers nonresponse		1	1,920[d]	0.1	192	38.83[g]	7,455
TOTALS	**7,325**		**7,313**		**2,625**		**102,710**

[a] Some of the PD teachers may respond as MWEE teachers in the same year, but because that number is unknown, the highest possible number of respondents is used to calculate burden hours.
[b] Assumes 90% response rate.
[c] Assumes 80% response rate.
[d] Assumes 100% response rate for nonrespondents to calculate maximum possible burden hours
[e] Assumes 40% response rate.
[f] U. S. Department of Labor, Bureau of Labor Statistics. May 2011. *National Compensation Survey: Occupational Earnings in the United States, 2010. Table 5: Full-time State and local government workers: Mean and median hourly, weekly, and annual earnings and mean weekly and annual hours:* Education administrators. http://www.bls.gov/ncs/ocs/sp/nctb1479.pdf
g U. S. Department of Labor, Bureau of Labor Statistics. May 2011. *National Compensation Survey: Occupational Earnings in the United States, 2010. Table 5: Full-time State and local government workers: Mean and median hourly, weekly, and annual earnings and mean weekly and annual hours:* Secondary School Teachers. http://www.bls.gov/ncs/ocs/sp/nctb1479.pdf

13. Provide an estimate of the total annual cost burden to the respondents or record-keepers resulting from the collection (excluding the value of the burden hours in Question 12 above).

There are no direct costs to participants. The only costs are the opportunity costs of respondents' time required to provide information as explained in Question12 above. No capital equipment, start-up, or record maintenance requirements are placed on respondents.

14. Provide estimates of annualized cost to the Federal government.

The estimated cost to the federal government of implementing the NOAA B-WET National Evaluation System is based on the government's contracted cost for yearly maintenance of the data collection database, periodic study and analysis activities, and personnel cost of government employees involved in oversight and/or analysis. For the data collection activities for which OMB approval is currently being requested, the overall cost to the government is $267,000 over a three year period. This includes:

- $25,000 annualized(total over three years $75,000) for contracted activities including evaluation contractor oversight of initial data collection, ongoing database development, analysis of data, and report writing;
- $24,000 annually ($2,000/month, $72,000 over three years) for government personnel costs in hosting and maintaining the evaluation database; and
- $40,000 annually ($120,000 over three years) for government personnel costs in overseeing the evaluation activity.

Annualized cost: $25,000 + $24,000 + $40,000 = $89,000.

It is expected that the annual government personnel costs would need to be sustained over the duration of the use of the evaluation system, with periodic contracted work to analyze data and produce evaluation reports. These estimates are based on the evaluation contractor's previous experience managing other research and data collection activities of this type.

15. Explain the reasons for any program changes or adjustments.

This is a new program.

16. For collections whose results will be published, outline the plans for tabulation and publication.

For the primary stakeholders and users of the proposed evaluation system, i.e., the internal NOAA B-WET staff members who administer the B-WET grant program, the database will automatically share results as aggregate descriptive statistics (at the national and regional levels). For each question, the system will indicate how many individuals responded, the frequency with which a particular response option was selected. Should funding be available for more sophisticated analysis of the data (i.e., inferential statistics), a contractor will be hired who will produce a traditional research report and/or article for publication in a peer reviewed report consisting of introduction, methods, results, and discussion/recommendation sections.

Depending on the availability of the necessary funding, annual syntheses of the main findings as related to the questions the evaluation system was designed to answer (see #1 above) will be prepared to meet the needs of different stakeholder groups. These stakeholders include the NOAA Office of Education which seeks information to improve its other education grant programs and external stakeholders such as B-WET grantees and teacher participants seeking ways to improve their MWEE practices, as well as tertiary members of the public. B-WET (potentially with the help of a contractor) will prepare these syntheses, ensuring that they meet respective stakeholders' needs both in terms of content and presentation. These syntheses will be made available online.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons why display would be inappropriate.

NA.

18. Explain each exception to the certification statement.

NA.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g. establishments, State and local governmental units, households, or persons) in the universe and the corresponding sample are to be provided in tabular form. The tabulation must also include expected response rates for the collection as a whole. If the collection has been conducted before, provide the actual response rate achieved.

Censuses will be conducted in light of the relatively small sample sizes (Table 2) and the sophisticated analyses planned to be conducted by an external evaluator. More specifically, models will be tested with Mplus statistical modeling program using multilevel (i.e., to account for teachers nested in professional development programs and repeated measures from the same individuals) structural equation modeling (SEM) to explore the direct and indirect relationships between teachers' practices and perceived student outcomes based on their MWEE professional development experiences and background. Benefits of SEM include that it allows for exploring direct and indirect causal relationships between variables while also taking into account measurement error (Bollen 1989). SEM permits the combination of factor and path analysis into a single model. SEM models require large sample sizes because they estimate 1) regression coefficients, 2) variances and covariances of unobserved variables, and 3) variances and covariances of errors. Because of the number of direct and indirect paths that the models will estimate, they will have few degrees of freedom (df). Based on the expected df=4 and an approximate sample size of 1,280,[1] a power of 80% will be achieved for testing model fit (see Table 4 in MacCallum et al. 1996).

[1] This sample size is based on a 32% compound response rate, based on an 80% response rate to the first survey and a 40% response rate to the second survey.

A similar OMB-approved data collection has been conducted for the Chesapeake Bay area only ("*Evaluation of National Oceanic and Atmospheric Administration Chesapeake Bay Watershed Education and Training Program*" http://chesapeakebay.noaa.gov/images/stories/pdf/BWETevalsummary.pdf). The expected response rates below are informed by the response rates achieved by this previous data collection (see additional detail in Question 3).

Table 2: Potential respondent universe, sampling strategy, and expected response rates

Population	Sample	N[a]	Expected response rate %
B-WET Grantees	Census	125	90
B-WET PD teachers	Census	4,000	80
B-WET MWEE teachers[b]	Census	3,200	40

[a]Estimated populations based on FY2010 B-WET awards [124 active awards (grantees) and 4,489 teachers reached (proposed)]
[b]Some of the PD teachers may respond as MWEE teachers in the same year, but because that number is unknown, the highest possible number of respondents is used to calculate burden hours.

2. Describe the procedures for the collection, including: the statistical methodology for stratification and sample selection; the estimation procedure; the degree of accuracy needed for the purpose described in the justification; any unusual problems requiring specialized sampling procedures; and any use of periodic (less frequent than annual) data collection cycles to reduce burden.

As there will be censuses of the respective populations, there will be no sampling.

3. Describe the methods used to maximize response rates and to deal with nonresponse. The accuracy and reliability of the information collected must be shown to be adequate for the intended uses. For collections based on sampling, a special justification must be provided if they will not yield "reliable" data that can be generalized to the universe studied.

Grantee Questionnaire Response Rate
Grantee response rates will be maximized (1) by ensuring that the B-WET federal funding opportunity (FFO) and contract will include information about the questionnaires and (2) through an email request initiated by B-WET coordinators to complete the questionnaire at the end of the grant period (with up to two automatically-generated follow-up requests). Because B-WET grantees receive funds from NOAA to conduct their MWEE projects, they are highly invested in the B-WET program. It would be very unlikely that a grantee would not respond to a request from B-WET to complete an end-of-year questionnaire. In addition, grantees will receive a personalized request from their respective NOAA B-WET regional coordinator with whom they are all familiar, as well as a pre-notification and two follow up requests (one and two weeks later), all practices that increase response rates (Dillman et al., 2009. A 90% response rate is therefore expected from grantees.

Teacher Post-PD Questionnaire Response Rate
Teacher response rates will be maximized by encouraging B-WET grantees to provide information about the two questionnaires up front, asking teachers to complete the professional development questionnaire at the close of the professional development experience, and prompting teachers to complete the MWEE questionnaire before the end of the following school

year. Up to two automatically-generated follow-up requests will be made for all data response requests. Follow-up reminders, along with advance notice of an impending survey request, improve response rates (Yu and Cooper, 1983). We know from the "Evaluation of National Oceanic and Atmospheric Administration Chesapeake Bay Watershed Education and Training Program" (http://chesapeakebay.noaa.gov/images/stories/pdf/BWETevalsummary.pdf) that when teachers who participated in this program were contacted by email two months after the professional development and asked to complete an online questionnaire, a response rate of 70% was attained.

We anticipate a higher response rate of 80% to the post-professional development questionnaire because teachers will be asked to complete it at the close of the professional development (when response rates typically tend to be almost 100%) and these additional best practices (Dillman et al., 2009) will be used:

1) Grantees typically offer teacher stipends or credits for completing their professional development responsibilities and will be encouraged to ask their teachers to complete the survey as part of these responsibilities.
2) Time will be allowed for completing the questionnaire before teachers leave the professional development and/or they will be asked to complete the questionnaire immediately thereafter.
3) Teachers will be asked to complete the questionnaire by grantees with whom they have developed a relationship through their professional development experience.
4) Teachers will receive a pre-notification and up to two additional reminders to complete the questionnaire.

Teacher Post-MWEE Questionnaire Response Rate

We also anticipate a sufficient response rate for the post-MWEE questionnaire because the request to complete this instrument will come from the provider of the professional development rather than from unfamiliar researchers and, again, teachers will know in advance that they will be asked to complete this questionnaire as part of their professional development responsibilities. For this survey, we expect that the response rate will be 40%, lower than at the close of the professional development given the time that will have passed since the professional development (possibly 6-9 months). Similar evaluations (i.e., ones including Internet-based questionnaires administered within same time frames after teacher professional development by the providers of these programs) offered by environmental educators have resulted in 35-80% response rates (Zint, 2010, 2009, 2008).

In addition, and as alluded to above, multiple contacts will be incorporated into the evaluation system's design because they have been shown to be more effective than any other technique for increasing response to questionnaires distributed by email (Dillman et al., 2009). These contacts will be personalized and the questionnaire has been designed to be respondent-friendly (e.g., almost all questions are closed-ended, worded in a clear, easy to understand manner, and skip logic has been incorporated). These latter features have also been found to yield increased response rates (Dillman et al., 2009; Dillman, Sinclair, and Clark, 1993).

Finally, questionnaires that ask for little personal or sensitive information result in higher response rates (Dillman et al., 2009). Because this will be the case for the evaluation's questionnaires, this should also contribute to encouraging respondents to complete the questionnaire.

Nonresponse Surveys
Should response rates for the teacher PD and MWEE surveys fall below 80%, B-WET will engage an external contractor to conduct non-response surveys and analysis of those results.

As part of these surveys, all non-respondents will receive an email invitation with a Web link to an abbreviated version of the questionnaires (automatic reminders will again be sent twice). Results from these questionnaires will be compared with those from earlier respondents to determine if there are significant differences.

If the earlier respondent and non-respondent populations are determined not to be significantly different, no further analysis will occur. If it is determined that the non-respondent population is significantly different from the earlier respondent population, analysis with weighted adjustments for nonresponse, using a method such as those described in Part IV of *Survey Nonresponse* (Groves et. al. 2002), will be conducted.

4. Describe any tests of procedures or methods to be undertaken. Tests are encouraged as effective means to refine collections, but if ten or more test respondents are involved OMB must give prior approval.

The majority of measures and procedures that will be used as part of the proposed B-WET evaluation system have been tested and successfully implemented by previous studies (e.g., "Evaluation of National Oceanic and Atmospheric Administration Chesapeake Bay Watershed Education and Training Program"). Moreover, an exploratory study of the benefits of MWEEs found that the scales that will also be used as part of the proposed B-WET evaluation system (examined using exploratory factor analysis in SPSS and M+) are reliable and valid. Reliabilities, for example, ranged between good and excellent (i.e., Cronbach Alpha range: .70 to .90) and the amount of variance explained by the factors were substantial (i.e., range: 40% to 90) (Zint, In Process). Lastly, the measures that will be used as part of the evaluation system have been examined for face and content validity by stakeholders consisting of the nine members of NOAA's internal B-WET Advisory group, three evaluation experts with knowledge of B-WET, three B-WET grantees, and two watershed scientists. The proposed instruments have thus been sufficiently tested and no additional testing is planned.

5. Provide the name and telephone number of individuals consulted on the statistical aspects of the design, and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

Individuals Consulted on Statistical Design:
Dr. Michaela Zint, Associate Professor, School of Natural Resources & Environment, School of Education, and College of Literature, Science & the Arts at the University of Michigan developed the statistical design for the proposed evaluation system. She, in turn, consulted with:

- Dr. Heeringa & Statistical Design Group members, Institute for Social Research, University of Michigan
- Dr. Lee & Dr. Rowan, School of Education, University of Michigan
- Dr. Rutherford & Dr. West, Center for Statistical Consultation and Research, University of Michigan

If you have any questions about the statistics design of the study, please contact Dr. Michaela Zint: zintmich@umich.edu, 734.763.6961.

Individual Who Will Conduct Data Collection and Analysis:
The evaluation system is designed to collect data through an online portal and the database housing this portal will automatically generate descriptive statistics. Data may also be downloaded from the database for more sophisticated analysis by an external contractor.

Bronwen Rice, B-WET National Coordinator, NOAA Office of Education (Bronwen.Rice@noaa.gov, 202.482.6797) will be responsible for initiating the automated data collection process and for ensuring the functioning and maintenance of the evaluation system.

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Evaluation System Question 1: To what extent do regional B-WET programs support grantees in implementing Meaningful Watershed Educational Experiences (MWEEs)?		
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**
1	1Unique ID or Award Number	Please enter your NOAA B-WET award number. The award number will be used ONLY to 1) identify your B-WET region, not your organization, and 2) allow us to link information you provide with that of data that may be provided by your project's teachers.
2	Descriptives: funding NOAA	Did you operate a NOAA B-WET funded program this past grant year? -Yes -No [SKIP LOGIC OUT]
3	Descriptives: funding NOAA amount	What is the total amount of funding you <u>received</u> this past grant year from NOAA for your B-WET project? -None -$1-20,000 -$20,001-$50,000 -$50,001-$100,000 -$100,001-$200,000 -$200,001-$300,000 -$300,001 or greater
4	Descriptives: funding NOAA years	Including this past grant year, for how many years has your organization received funding from NOAA B-WET for the currently-funded project? -1 year -2 years -3 years -4 or more years
5	Descriptives: years in existence	For how many years total has this B-WET project been in existence, including years not funded by NOAA B-WET? -1 year -2 years -3 years -4 or more years
6	Descriptives: funding all sources amount	What is the total amount of funding for this project, from all sources, this past grant year? -None -$1-20,000 -$20,001-$50,000 -$50,001-$100,000 -$100,001-$200,000 -$200,001-$300,000 -$300,001 or greater
7	Descriptives: organization region	In which region were your organization's MWEEs offered this past grant year? (check one) -California -Chesapeake Bay -Great Lakes -Gulf of Mexico -Hawaii -New England -Pacific Northwest -Other (please describe) _____

Evaluation System Question 1: To what extent do regional B-WET programs support grantees in implementing Meaningful Watershed Educational Experiences (MWEEs)?		
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**
8	Descriptives: organization type of MWEE	Which of the following B-WET-funded programs did your organization provide? [SKIP LOGIC: 1, BUT NOT 2; 2, BUT NOT 1; BOTH 1 AND 2; NEITHER, SKIP OUT] MWEEs for students/youth who are between the ages of 4-18 (or grades PreK-12) MWEE professional development or support for teachers Other (please describe) [SKIP LOGIC OUT]
9	Descriptives: organization type	For what type of organization do you work? (choose one) -Academic institution (community college, college, university) -Business/Corporation -Local government -State education agency -State natural resource agency -Non-profit organization (including informal education institutions) -School/school district -Other (please describe) _____
10	Descriptives: person completing questionnaire	To what extent were you involved in: (Not at all = 1 to To a great extent = 5) -Developing your organization's most recent funded B-WET grant proposal (on your own or through collaborating with an external grant writer) -Implementing your organization's most recent B-WET-funded grant -Evaluating your organization's most recent B-WET-funded grant (on your own or through collaborating with an external evaluation consultant)
11	Descriptives: zip code	In what 5-digit zip code is your organization located?
12	Grantee needs	Overall, what grade would you give the support you received from your region's NOAA B-WET staff over the past grant year? -F -D -C -B -A Briefly describe why you selected this grade:

Evaluation System Question 1: To what extent do regional B-WET programs support grantees in implementing Meaningful Watershed Educational Experiences (MWEEs)?		
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**
13	Grantee needs	If offered, how likely is it that you will make use of each of the following to help you implement your B-WET-funded programs? -One-on-one time with B-WET program staff (i.e., regional or national coordinators) -Facilitated networking with other B-WET grantees in my region -Facilitated networking with other B-WET grantees from other regions -Email listserv, web forum, Facebook page, or other tools for virtual interaction with other grantees -Access to local NOAA subject-matter experts -Information about and access to current NOAA data sets -NOAA materials and lesson plans relevant to watersheds -Suggested "best" or "preferred" practices for MWEEs -Assistance with evaluating MWEEs -Assistance with grant management -Opportunities to learn about watershed science -Opportunities to learn about local or regional environmental issues -Opportunities to learn about local or regional policy efforts impacting environmental education -Opportunities to learn about national policy efforts impacting environmental education -Opportunities to learn about climate literacy principles -Opportunities to learn about ocean literacy principles

Evaluation System Question 2: How are MWEEs (PD) implemented by grantees?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher PD Questionnaire Items**	**On Teacher PD Nonresponse Questionnaire =X**
1	1Unique ID or Award Number	(see Grantee Support tab)	(Award number)	
2	Descriptive: MWEE PD?	Which of the following B-WET-funded programs did your organization provide? MWEE professional development or support for teachers -No -Yes	Did you recently complete a professional development opportunity focused on watersheds or water quality issues (also known as a Meaningful Watershed Education Experience {MWEE} professional development)? -Yes -Not sure -No	X
3	Descriptive: population		Which of these categories best describes your school's community (during the school year)? -Rural (population of less than 10,000) -Town/Suburban (population 10,000-99,999) -Small urban (population 100,000-250,000) -Urban (population greater than 250,000)	
4	Descriptive: region	(see Grantee Support tab)	In which region did you teach this past year? (check all that apply) -California -Chesapeake Bay -Great Lakes -Gulf of Mexico -Hawaii -New England -Pacific Northwest -Other (please describe) _____	X
5	Descriptive: student ESOL		What percent of your students speak English as a second language (aka English Language Learners)? -Don't know -Less than 20% -21-40% -41-60% -61-80% -81-100%	

Evaluation System Question 2: How are MWEEs (PD) implemented by grantees?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher PD Questionnaire Items**	**On Teacher PD Nonresponse Questionnaire =X**
6	Descriptive: teacher ethnicity/race		Do you identify yourself as (check all that apply): -Hispanic or Latino -American Indian or Alaska Native -Asian -Black or African American -Native Hawaiian or Other Pacific Islander -White -Other _____ -I prefer not to answer	
7	Descriptive: teacher grade level	What percent of the participating teachers taught the following grade levels? (total should equal 100%) -Pre-K -Elementary -Middle -High -I don't know	In which grade levels do you primarily teach? (select all that apply) -Pre-K -Elementary -Middle -High -Other -None	X
8	Descriptive: teacher past MWEEs	NA	Did you conduct MWEEs with your students before participating in the MWEE professional development? -No -Yes	
9	Descriptive: teacher reason to participate	NA	What was your PRIMARY reason for participating in the MWEE professional development? (check one) -To obtain information and resources for teaching -Personal interest in the topic of the professional development -To obtain continuing education, recertification, or graduate credit -I was required to attend -I was asked to attend -Other, please describe:	X
10	Descriptive: teacher setting		In what setting do you teach? -Public school -Private school -Non-formal education (e.g., environmental centers, zoos, museums, interpretive programs at local or state level parks, youth organizations) -Home-school -Other	X

Evaluation System Question 2: How are MWEEs (PD) implemented by grantees?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher PD Questionnaire Items**	**On Teacher PD Nonresponse Questionnaire =X**
11	Descriptive: teacher subject	Did the majority of participating teachers teach science? -Don't know -No -Yes	What subject(s) do you primarily teach? (select one) -Science -Math -Language Arts -Social studies -Fine arts -Multiple disciplines, including science -Multiple disciplines, not including science -Other	X
12	Descriptive: teacher?		Are you currently a PreK-12 teacher or educator? -Yes -No	X
13	Descriptive: teachers' students' ethnicity/race	NA	About what percent of your students are (percent should equal 100): -Hispanic or Latino -American Indian or Alaska Native -Asian -Black or African American -Native Hawaiian or Other Pacific Islander -White -Other _____	
14	Descriptive: teachers' students' socioeconomic status		Is the school where you teacher a Title 1 school? -No -Yes -N/A	
15	Descriptive: zip code?	(see Grantee Support tab)	In what zip code is your school located?	
16	Descriptives: Number of teachers served teachers, K-12 schools, and school districts served	For about how many teachers, schools, and school districts did your organization provide professional development or support (e.g., trained in workshops, coached at schools or in the field) this past grant year as a result of your B-WET grant? (Please provide one number, NOT a range.) About ____ teachers served About ____ K-12 schools served About____ school districts served		

Evaluation System Question 2: How are MWEEs (PD) implemented by grantees?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher PD Questionnaire Items**	**On Teacher PD Nonresponse Questionnaire =X**
17	PD best practices: during workshop/institute PD	As part of your B-WET professional development workshops or institutes this past grant year, did your organization typically include the following: - Presented information and examples illustrating how other teachers have integrated MWEEs into their curriculum -Discussed how teachers may be able to integrate MWEEs into their own curriculum or classroom activities -Discussed alignment of MWEEs with state, regional, or national standards -Provided examples of how MWEEs align with standards -Engaged teachers in aligning MWEEs with their school or school district standards -Allowed teachers time to plan how they will implement MWEEs -Engaged teachers in the same activities/practices they can use with their students -Included more than one teacher from individual schools -Presented how NOAA data can be used to support student scientific inquiry -Discussed how to use NOAA data to obtain knowledge about local issues -Shared examples of how other teachers have used NOAA data with their students -Allowed teachers time to plan how they will integrate the use of NOAA data	Did you participate in an education/training workshop, institute, or class as part of your professional development? -Yes -No If Yes, Did the workshops, institutes, or classes you participated in include the following professional development practices? (a) Please indicate yes or no for each statement. (b) Then indicate which 3 practices were most valuable in helping you implement MWEEs. -Sharing of information and examples illustrating how other teachers have integrated MWEEs -Discussion of how teachers may be able to integrate MWEEs into their own curriculum or classroom activities -Discussion of alignment of MWEEs with state, regional, or national standards -Provision of examples of how MWEEs align with standards -Engaging you and other participating teachers in aligning MWEEs with your school or school district standards -Participating along with other teachers from my school, at the same time -Allowing you and other participating teachers time to plan how to implement MWEEs -Engaging you and other participating teachers in activities/practices that can be used with your students -Presentation of how NOAA data can be used to support student scientific inquiry -Discussion of how NOAA data can be used to obtain knowledge about local issues -Examples of how other teachers have used NOAA data with their students -Allow you and other participating teachers time to plan how to integrate the use of NOAA data with your students	

Evaluation System Question 2: How are MWEEs (PD) implemented by grantees?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher PD Questionnaire Items**	**On Teacher PD Nonresponse Questionnaire =X**
18	PD best practices: support from others (e.g., mentor teachers)	What types of support did your organization typically provide to teachers participating in MWEE professional development this past grant year? -Assisted teachers with conducting field trips or field work -Assisted teachers with establishing schoolyard habitats -Assisted teachers with establishing restoration projects -Co-teaching in teachers' classrooms or in field -Provided coaching in participating teachers' classrooms -Provided demonstrations in teachers' classrooms -Assisted with the use of equipment or technologies -Communicated with teachers through personal phone calls or email -Communicated with teachers through newsletters or web-site (e.g., an online community)	What types of support did you receive from your MWEE professional development provider? (a) Please indicate yes or no for each statement. (b) Then indicate which 3 practices were most valuable in helping you implement MWEEs. -Assistance with conducting field trips or field work -Assistance with establishing schoolyard habitats -Assistance with establishing restoration projects -Co-teaching in my classrooms or in field -Coaching in my classroom -Demonstrations in my classroom -Assistance with the use of equipment or technologies -Communicating with provider through personal phone calls or email -Communication with provider through newsletters or web-site (e.g., an online community)	
19	PD best practices: support from PD provider	Which characteristics describe your organization's typical MWEE professional development this past grant year? -Helped make connections to local community organizations and resources -Facilitated interactions with NOAA scientists/staff -Facilitated interactions with natural resource professionals -Provided teacher stipends -Offered continuing education credits -Offered graduate credits -Provided equipment -Provided instructional/educational/curriculum materials -Provided information on how to obtain grants or funding for MWEEs	Which additional practices did your MWEE professional development and/or the support you received include? (a) Please indicate yes or no for each statement. (b) Then indicate which 3 practices were most valuable in helping you implement MWEEs. -Connections were made to local community organizations and resources -Interactions were facilitated with NOAA scientists/staff -Interactions were facilitated with natural resource professionals -I was provided with a stipend -I was offered continuing education credits -I was offered graduate credits -I was provided with equipment -I was provided with instructional/educational/curriculum materials -I was provided with information on how to obtain grants or funding for MWEEs	

Evaluation System Question 2: How are MWEEs (PD) implemented by grantees?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher PD Questionnaire Items**	**On Teacher PD Nonresponse Questionnaire =X**
20	PD goals: Attitudes/ towards science teaching	It is a goal of my organization's B-WET-funded MWEE professional development that teachers will: Be more enthusiastic about teaching science		
21	PD goals: Behavior/ stewardship (as model for students)	It is a goal of my organization's B-WET-funded MWEE professional development that teachers will: Be more likely to act to protect and/or restore ocean, coastal, or Great Lakes watersheds		
22	PD goals: Instruction/ MWEE component use	It is a goal of my organization's B-WET-funded MWEE professional development that teachers will: Teach more about watersheds Be more likely to implement MWEEs Be more likely to implement MWEEs after they are no longer supported by our organization Be more likely to use NOAA resources to enhance their students' MWEE experiences Be more likely to guide students through taking action to protect or restore watersheds Be more likely to use science inquiry instruction Be more likely to use the outdoors for instruction Be more likely to use local community resources as part of instruction Be more likely to use interdisciplinary approaches to instruction		
23	PD goals: Knowledge/ environmental impacts of human behaviors (issues)	It is a goal of my organization's B-WET-funded professional development that teachers will be able to: Recognize that both natural processes and human activities affect water flow and water quality in watersheds. Identify connections between human welfare and water flow and quality Identify possible point and non-point sources of water pollution		

Evaluation System Question 2: How are MWEEs (PD) implemented by grantees?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher PD Questionnaire Items**	**On Teacher PD Nonresponse Questionnaire =X**
24	PD goals: Knowledge/ stewardship behaviors	It is a goal of my organization's B-WET-funded professional development that teachers will be able to: Identify actions individuals can engage in to protect/restore water quality in watersheds		
25	PD goals: Knowledge/ watersheds	It is a goal of my organization's B-WET-funded professional development that teachers will be able to: Define the term "watershed" Identify their local watershed(s) Identify how watersheds are connected to the ocean via streams, rivers, and human-made structures Identify the functions that occur in a watershed (transport, store, and cycle water)		
26	PD instruction: alignment with standards	To what extent was your organization's MWEE professional development content aligned with: (Not at all=1 to To a great extent=5) School district education standards State education standards National education standards Regional environmental/natural resources management priorities		
27	PD instruction: education methods	What education methods were used during your MWEE professional development? (select No or Yes for each method) (Not sure, No, Yes) Outdoor field trip Field work Place-based education Scientific-inquiry-based learning Issue investigation Did teachers participate in any of these activities to protect and/or restore ocean, coastal and/or Great Lakes watersheds during their MWEE professional development? Monitored water quality over a period of time	What education methods were used during your MWEE professional development? (select No or Yes for each method) Outdoor field trip Field work Place-based education Scientific-inquiry-based learning Issue investigation During your MWEE professional development, did you participate in any of these activities that protect and/or restore ocean, coastal, and/or Great Lakes watersheds? Monitored water quality over a period of time	

Evaluation System Question 2: How are MWEEs (PD) implemented by grantees?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher PD Questionnaire Items**	**On Teacher PD Nonresponse Questionnaire =X**
28	PD instruction: hours	About how many hours of MWEE professional development and/or support did your organization typically provide for any one teacher this past grant year? -N/A -None -1-2 hours -3-5 hours -6-10 hours -11-20 hours -21-40 hours -41-60 hours -61-80 hours -More than 80 hours	About how many hours of MWEE professional development and/or support did you receive over the past 12 months? -1-2 hours -3-5 hours -6-10 hours -11-20 hours -21-40 hours -41-60 hours -61-80 hours -More than 80 hours	X
29	PD instruction: hours outdoors	About how many hours did the typical teacher participate in outdoor activities as part of your organization's MWEE professional development this past grant year? None -1-2 hours -3-5 hours -6-10 hours -11-20 hours -21-40 hours -41-60 hours -61-80 hours -More than 80 hours	About how many hours of those MWEE professional development hours did you spend outdoors? -None -1-2 hours -3-5 hours -6-10 hours -11-20 hours -21-40 hours -41-60 hours -61-80 hours -More than 80 hours	
30	PD instruction: science inquiry methods	IF SELECTED Scientific-inquiry learning above: Which of the following steps did you include: Engaged teachers in: Formulating scientific questions they can answer using data Making predictions or hypotheses Collecting data or using existing data Analyzing and interpreting data Making conclusions and adjusting predictions/hypotheses Developing presentations of their findings	If responded Yes to "Scientific-inquiry-based learning" in "What education methods were used during your students' MWEEs?", then answer this question: As part of your MWEE professional development, were you involved in… Formulating scientific questions that can be answered using data Making predictions or hypotheses Collecting data or using existing data Analyzing and interpreting data Making conclusions and adjusting predictions/hypotheses Developing presentations of findings	
31	PD instruction: stewardship behaviors	Did teachers participate in any of these activities to protect and/or restore ocean, coastal and/or Great Lakes watersheds during their MWEE professional development?	During your MWEE professional development, did you participate in any of these activities that protect and/or restore ocean, coastal, and/or Great Lakes watersheds?	

Evaluation System Question 2: How are MWEEs (PD) implemented by grantees?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher PD Questionnaire Items**	**On Teacher PD Nonresponse Questionnaire =X**
		Created a schoolyard or backyard habitat Installed a rain barrel at school or at home Gave presentation(s) about the local watershed (e.g., for school, other organizations) Participated in or organized event(s) to raise awareness about the importance of watersheds Participated in or helped coordinate a clean-up of a local stream or beach Participated in a restoration activity (e.g., planting trees) Limited or avoided the use of household chemicals including fertilizers, herbicides and pesticides Told others about ways they can protect their local watershed	Created a schoolyard or backyard habitat Installed a rain barrel at school or at home Gave presentation(s) about the local watershed (e.g., for school, other organizations) Participated in or organized event(s) to raise awareness about the importance of watersheds Participated in or helped coordinate a clean-up of a local stream or beach Participated in a restoration activity (i.e., planting trees) Limited or avoided the use of household chemicals including fertilizers, herbicides and pesticides Told others about ways they can protect their local watershed	
32	PD instruction: type	Which of the following types of B-WET-funded MWEE professional development did you typically provide over the past grant year? <u>Teacher Education</u> One day workshops (usually less than 8 hours) Teacher institute (usually on consecutive days that cumulatively consist of 40 hours of more Multi-day workshops (events that last at least 6 hours, but are less than 40 hours, e.g., a three-day workshop on a specific topic or a series of five Saturday sessions) A college-level course Professional development provider training (training for individuals who provide teacher professional development) <u>Teacher Support</u> Individual teacher coaching and support (e.g., curriculum planning, shared teaching, demonstrations and/or other forms of in-school or in-field support) On-line professional development support (e.g., courses, webinars, discussion forums)	Which type(s) of MWEE professional development did you participate in or receive: (please select yes or no for each type) TEACHER EDUCATION One day workshops (usually less than 8 hours) Teacher institute (usually on consecutive days that cumulatively consist of 40 hours of more Multi-day workshops (events that last at least 6 hours, but are less than 40 hours, e.g., a three-day workshop on a specific topic or a series of five Saturday sessions) A college-level course Professional development provider training (training for individuals who provide teacher professional development) TEACHER SUPPORT Individual teacher coaching and support (e.g., curriculum planning, shared teaching, demonstrations and/or other forms of in-school or in-field support On-line professional development support (e.g., courses, webinars, discussion forums)	X

Evaluation System Question 2: How are MWEEs (PD) implemented by grantees?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher PD Questionnaire Items**	**On Teacher PD Nonresponse Questionnaire =X**
33	PD instruction: use of NOAA resources	Which NOAA resources were incorporated into your organization's typical B-WET-funded MWEE professional development? (No/Yes/Not sure) None Information from NOAA studies or reports Data collected by and accessible through NOAA IF YES: Name the NOAA data source:_____ NOAA expert (e.g., scientist, educator, Sea Grant staff member, policy expert) NOAA curricula and education programs IF YES: Name the curricula or programs:_____ NOAA labs or facilities IF YES: Name the lab or facility:_____ NOAA National Marine Sanctuary NOAA National Estuarine Research Reserve	Which NOAA resources were used as part of your MWEE professional development? None Information from NOAA research studies or reports Data collected by and accessible through NOAA IF YES: Name the NOAA data source ¬¬-_____ NOAA expert (e.g., scientist, educator, Sea Grant staff member, policy expert) NOAA curricula and education programs IF YES: Name the curricula or programs:_____ NOAA labs or facilities IF YES: Name the lab or facility:_____ NOAA National Marine Sanctuary NOAA National Estuarine Research Reserve	
34	Teacher satisfaction		What component(s) of the MWEE professional development best prepared you to teach your students about local watersheds? How could the MWEE professional development be improved to better prepare teachers to teach about the watershed? On Teacher MWEE questionnaire: What are could be done by others to help you develop and implement improved MWEEs?	
35	Teacher satisfaction		Overall, what grade would you give your MWEE professional development experience? Scale from F to A+ Briefly describe why you selected this grade.	X

Evaluation System Question 2: How are MWEEs (student) implemented by grantees and teachers?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher MWEE Questionnaire Items**	**On Teacher MWEE Nonresponse Survey=X**
1	1Unique ID or Award Number	(see descriptives in Grantee Support tab)	TEACHER UNIQUE ID (links teacher to PD): To allow us to compare your past, current, and future responses, please create a unique 8-digit ID number using the 2 digits of your birth month, the 2 digits of your birth day, and the last 4 digits of most often used phone number. If you were born on March 9 and your home phone is 410.719.1234, your ID number would be 03091234.	X
2	Descriptive: number of students, K-12 schools, and school districts served	How many students, schools, and school districts were served directly by your organization this past grant year as a result of your B-WET grant? (Please provide one number, NOT a range .) ABOUT ____ STUDENTS SERVED ABOUT _____ K-12 SCHOOLS SERVED ABOUT ____ SCHOOL DISTRICTS SERVED	How many of your students participated in a MWEE during the most recent school year? (Please provide your best estimate, NOT a range) ABOUT ____ STUDENTS	X
3	Descriptive: student academic level			

Evaluation System Question 2: How are MWEEs (student) implemented by grantees and teachers?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher MWEE Questionnaire Items**	**On Teacher MWEE Nonresponse Survey=X**
4	Descriptive: student ESOL	What percent of the participating students speak English as a second language (aka English Language Learners)? Don't know Less than 20% 21-40% 41-60% 61-80% 81-100%		
5	Descriptive: student ethnicity/race			
6	Descriptive: student gender			
7	Descriptive: student grade level	What percent of the students/youth directly served by your organization were in each of the following grades levels? (total should equal 100%) • Pre-K • Elementary • Middle • High • Other • I don't know		

Evaluation System Question 2: How are MWEEs (student) implemented by grantees and teachers?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher MWEE Questionnaire Items**	**On Teacher MWEE Nonresponse Survey=X**
8	Descriptive: student socioeconomic status	What percent of the participating students' schools are Title 1? Don't know Less than 20% 21-40% 41-60% 61-80% 81-100%		
9	Descriptives: person/organization completing questionnaire		Are you currently a PreK-12 teacher or educator? -Yes -No	X
10	Descriptives: person/organization completing questionnaire		In what setting do you teach? -Public school -Private school -Non-formal education (e.g., environmental centers, zoos, museums, interpretive programs at local or state level parks, youth organizations) -Home-school -Other	X
11	Instruction: education methods	IF SELECTED Scientific-inquiry learning above: Which of the following steps did you include: Engage students in: Formulating scientific questions they can answer using data Making predictions or hypotheses Collecting data or using existing data Analyzing and interpreting data Making conclusions and adjusting predictions/hypotheses Developing presentations of their findings	If responded Yes to "Scientific-inquiry-based learning" in "What education methods were used during your students' MWEEs?", then answer this question: Which of the following steps did you engage students in… Formulating scientific questions they can answer using data Making predictions or hypotheses Collecting data or using existing data Analyzing and interpreting data Making conclusions and adjusting predictions/hypotheses Developing presentations of their findings	

Evaluation System Question 2: How are MWEEs (student) implemented by grantees and teachers?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher MWEE Questionnaire Items**	**On Teacher MWEE Nonresponse Survey=X**
12	Instruction: education methods	What education methods were used by your organization's staff with students during your organization's typical B-WET-funded MWEEs? (select No or Yes for each method) Outdoor field trip Field work Place-based education Scientific-inquiry-based learning Issue investigation Service learning	What education methods were used during your students' MWEEs? (select No or Yes for each method) Outdoor field trip Field work Place-based education Scientific-inquiry-based learning Issue investigation Service learning	
13	Instruction: MWEE action - data collection	Did students participate in any of these activities to protect and/or restore ocean, coastal and/or Great Lakes watersheds during your organization's B-WET-funded MWEEs? (please indicate no or yes for each activity) Monitored water quality over a period of time	During the outdoor learning experience(s), my students: Conducted a one-time data or sample collection Conducted water quality monitoring over a period of time	

Evaluation System Question 2: How are MWEEs (student) implemented by grantees and teachers?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher MWEE Questionnaire Items**	**On Teacher MWEE Nonresponse Survey=X**
14	Instruction: MWEE action - stewardship behaviors	Did students participate in any of these activities to protect and/or restore ocean, coastal and/or Great Lakes watersheds during your organization's B-WET-funded MWEEs? (please indicate no or yes for each activity) Created a schoolyard or backyard habitat Conserved water at school to protect the local watershed Installed a rain barrel at school Reduced litter at the school Gave presentation(s) about the local watershed (e.g., for school, other organizations) Participated in an event to raise awareness about the importance of watersheds Helped clean up or take care of a local stream or beach Participated in a restoration activity (e.g., planting trees) Told others about ways they can protect their local watershed	Did students participate in any of the following activities to protect and/or restore ocean, coastal, and/or Great Lakes watersheds during their MWEE? (please indicate no or yes for each activity) Created a schoolyard or backyard habitat Conserved water at school to protect the local watershed Installed a rain barrel at school Reduced litter at the school Gave presentation(s) about the local watershed (e.g., for school, other organizations) Participated in an event to raise awareness about the importance of watersheds Helped clean up or take care of a local stream or beach Participated in a restoration activity (e.g., planting trees) to benefit watersheds Told others about ways they can protect their local watersheds	
15	Instruction: MWEE alignment with standards	To what extent were your organization's MWEEs aligned with: (Not at all=1 to To a great extent=5) School district education standards State education standards National education standards Regional environmental/natural resources management priorities	To what extent was the content of your students' MWEEs aligned with: : (Not at all=1 to To a great extent=5) school district education standards state education standards national education standards regional environmental/natural resources management priorities	

Evaluation System Question 2: How are MWEEs (student) implemented by grantees and teachers?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher MWEE Questionnaire Items**	**On Teacher MWEE Nonresponse Survey=X**
16	Instruction: MWEE hours outdoors	On average during the past grant year, a typical student spent ____ hours outdoors being taught by your organization's staff during a B-WET-funded MWEE. -None -1-2 hours -3-5 hours -6-9 hours -10-16 hours -17-24 hours -25-40 hours -More than 40 hours	On average during the last school year, about how many hours did a typical student spend outdoors during MWEE activities? (check one) -None -1-2 hours -3-5 hours -6-9 hours -10-16 hours -17-24 hours -25-40 hours -more than 40 hours	X
17	Instruction: MWEE hours total	On average during the past grant year, a typical student spent ____ hours being taught by your organization's staff during a B-WET-funded MWEE. -None -1-2 hours -3-5 hours -6-9 hours -10-16 hours -17-24 hours -25-40 hours -More than 40 hours	On average during the last school year, about how many hours did a typical student spend involved in MWEE activities? (check one) -None -1-2 hours -3-5 hours -6-9 hours -10-16 hours -17-24 hours -25-40 hours -more than 40 hours	X
18	Instruction: MWEE integration (classroom/outdoors)	NA	Overall, what I taught my students about watersheds in the classroom was closely integrated with students' outdoor learning experience(s). (7-point agreement scale) My students' outdoor learning experiences were designed to help them understand what they had been introduced to during regular science class My students' outdoor learning experiences were designed to reinforce what students learned during regular science class	

Evaluation System Question 2: How are MWEEs (student) implemented by grantees and teachers?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher MWEE Questionnaire Items**	**On Teacher MWEE Nonresponse Survey=X**
19	Instruction: MWEE length	On average, a typical student participated in your organization's B-WET-funded MWEEs over the course of: -One day -2-6 days -One week -2-3 weeks -One month -2-3 months -4-8 months -A full school year (about 9 months) -A full calendar year -Multiple years	On average, did students participate in a MWEE over the course of: -One day -2-6 days -One week -2-3 weeks -One month -2-3 months -4-8 months -A full school year (about 9 months) -A full calendar year -Multiple years	X
20	Instruction: MWEE location		Where did the outdoor component of your students' MWEEs occur? On school grounds Near the school (1-5 minute walk) Walkable from the school (more than 5 minutes) In a location to which the students were bussed or driven	
21	Instruction: MWEE preparation		BEFORE students participated in their outdoor learning experience: I provided them with detailed information about what they were going to do I let students know what activities they were going to do I spent a lot of time preparing students for what to expect I introduced relevant science concepts	

Evaluation System Question 2: How are MWEEs (student) implemented by grantees and teachers?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher MWEE Questionnaire Items**	**On Teacher MWEE Nonresponse Survey=X**
22	Instruction: MWEE reflection		AFTER students participated in the outdoor learning experience(s): They discussed results based on their observations They offered explanations for what they observed They were expected to draw on what had been learned I spent a lot of time to make sure the students had integrated what they had learned	
23	Instruction: MWEE subjects	Were your organization's typical B-WET-funded MWEEs focused only on science concepts, or on concepts from multiple disciplines (e.g., science, math, social studies, literature, art, music)? -Only science concepts -Concepts from multiple disciplines, including science -Other	Were your typical MWEEs focused only on science concepts, or on concepts from multiple disciplines (e.g., science, math, social studies, literature, art, music)? -Only science concepts -Concepts from multiple disciplines, including science -Other	

Evaluation System Question 2: How are MWEEs (student) implemented by grantees and teachers?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher MWEE Questionnaire Items**	**On Teacher MWEE Nonresponse Survey=X**
24	Instruction: MWEE type	Which of the following did your B-WET-funded programs provide for students during this past grant year? Off-site field programs during the school day Schoolyard-based programs during the school day Classroom-based programs during the school day, including distance learning experiences After-school or weekend programs (e.g., science clubs) Summer programs Events for youth with their families		
25	Instruction: MWEE use of NOAA resources	Which NOAA resources were used as part of MWEEs for students, if any? None Information from NOAA studies or reports Data collected by and accessible through NOAA IF YES: Name the NOAA data source: _____ NOAA expert (e.g., scientist, educator, Sea Grant staff member, policy expert) NOAA curricula and education programs IF YES: Name the curricula or programs: _____ NOAA labs or facilities IF YES: Name the lab or facility:_____ NOAA National Marine Sanctuary NOAA National Estuarine Research Reserve	Which NOAA resources were used as part of your typical student MWEE? None Information from NOAA research studies or reports Data collected by and accessible through NOAA IF YES: Name the NOAA data source:_____ NOAA expert (e.g., scientist, educator, Sea Grant staff member, policy expert) NOAA curricula and education programs IF YES: Name the curricula or programs:_____ NOAA labs or facilities IF YES: Name the lab or facility: _____ NOAA National Marine Sanctuary NOAA National Estuarine Research Reserve	

Evaluation System Question 2: How are MWEEs (student) implemented by grantees and teachers?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher MWEE Questionnaire Items**	**On Teacher MWEE Nonresponse Survey=X**
26	MWEE goals: academic achievement	It is a goal of my organization's B-WET-funded MWEEs that students will: Perform better academically in science Perform better on state standardized tests Be more engaged in their science learning		
27	MWEE goals: Attitudes/Career interest	It is a goal of my organization's B-WET-funded MWEEs that students will: Be more likely to express an interest in pursuing science careers		
28	MWEE goals: Attitudes/towards watershed resources	It is a goal of my organization's B-WET-funded MWEEs that students will: Feel more connected to their local watershed Express greater caring and concern for watersheds		
29	MWEE goals: Behavior/Stewardship change	It is a goal of my organization's B-WET-funded MWEEs that students will: Be more likely to act to protect and/or restore watersheds Be better able to make informed decisions to protect or restore watersheds		
30	MWEE goals: Behavior/Stewardship self-efficacy	It is a goal of my organization's B-WET-funded MWEEs that students will: Be more confident in their ability to protect and/or restore watersheds		

Evaluation System Question 2: How are MWEEs (student) implemented by grantees and teachers?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher MWEE Questionnaire Items**	**On Teacher MWEE Nonresponse Survey=X**
31	MWEE goals: Knowledge/environmental impacts of human behaviors (issues)	It is a goal of my organization's B-WET-funded MWEEs that students will: Recognize that both natural processes and human activities affect water flow and water quality in watersheds. Identify connections between human welfare and water flow and quality Identify possible point and non-point sources of water pollution	Did your typical MWEE include any of the following learning objectives? Students will be able to: Recognize that both natural processes and human activities affect water flow and water quality in watersheds Identify connections between human welfare and water flow and quality Identify possible point and non-point sources of water pollution	
32	MWEE goals: Knowledge/Stewardship behaviors	It is a goal of my organization's B-WET-funded MWEEs that students will be able to: Identify actions individuals can engage in to protect/restore water quality in watersheds	Did your typical MWEE include any of the following learning objectives? Students will be able to: Identify actions individuals can engage in to protect/restore water quality in watersheds	
33	MWEE goals: Knowledge/watersheds	It is a goal of my organization's B-WET-funded MWEEs that students will be able to: Define the term "watershed" Identify their local watershed(s) Identify how watersheds are connected to the ocean via streams, rivers, and human-made structures Identify the functions that occur in a watershed (transport, store, and cycle water)	Did your typical MWEE include any of the following learning objectives? Students will be able to: Define the term "watershed" Identify their local watershed(s) Identify how watersheds are connected to the ocean via streams, rivers, and human-made structures Identify the functions that occur in a watershed (transport, store, and cycle water)	
34	MWEE goals: Skills/Science inquiry skills, such as critical thinking	It is a goal of my organization's B-WET-funded MWEEs that students will: Be better able to conduct scientific investigations		

Evaluation System Question 2: How are MWEEs (student) implemented by grantees and teachers?				
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher MWEE Questionnaire Items**	**On Teacher MWEE Nonresponse Survey=X**
35	MWEE implemented?		In the past 12 months, did you implement a Meaningful Watershed Educational Experience (MWEE) with your students? -Yes -No [IF NO] Please explain why you did not implement a MWEE. (essay box)	X
36	Student satisfaction			

Evaluation System Question 3: 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 implement high quality MWEEs?			
Row	**Constructs (alphabetical)**	**Teacher PD Questionnaire Items**	**On Teacher PD Nonresponse Survey=X**
1	1Unique ID or Award Number	**TEACHER UNIQUE ID:** To allow us to compare your past, current, and future responses, please create a unique 8-digit ID number using the 2 digits of your birth month, the 2 digits of your birth day, and the last 4 digits of most often used phone number. If you were born on March 9 and your home phone is 410.719.1234, your ID number would be 03091234.	
2	Behavior: stewardship (as role model for students)	BEFORE the MWEE professional development, how confident were you in your ability to: AFTER the MWEE professional development, how confident are you in your ability to: In the FUTURE, I intend to ...: -Act to protect and/or restore ocean, coastal, or Great Lakes watersheds	X
3	Instruction: MWEE confidence	(retrospective pre/post) BEFORE the MWEE professional development, how confident were you in your ability to: AFTER the MWEE professional development, how confident are you in your ability to: Teach my students about local watersheds Incorporate MWEEs into my curriculum Implement MWEEs without support from a professional development provider Use NOAA resources to enhance my students' MWEE experiences Guide students through taking action to protect or restore watersheds Research environmental issues affecting watersheds with students Use scientific inquiry instruction Use the outdoors for instruction	X (teach my students… and incorporate MWEEs….)
4	Instruction: MWEE intention to teach	In the FUTURE, I intend to ...: Teach my students about local watersheds Incorporate MWEEs into my curriculum Implement MWEEs without support from a professional development provider Use NOAA resources to enhance my students' MWEE experiences Guide students through taking action to protect or restore watersheds Research environmental issues affecting watersheds with students Use scientific inquiry instruction Use the outdoors for instruction	X (teach my students… and incorporate MWEEs….)
5	Knowledge: environmental impacts of human behaviors	As a result of participating in the MWEE professional development, I am better able to: Recognize that both natural processes and human activities affect water flow and water quality in watersheds Identify connections between human welfare and water flow and quality Identify possible point and non-point sources of water pollution	

Evaluation System Question 3: 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 implement high quality MWEEs?			
Row	**Constructs (alphabetical)**	**Teacher PD Questionnaire Items**	**On Teacher PD Nonresponse Survey=X**
6	Knowledge: stewardship behaviors	As a result of participating in the MWEE professional development, I am better able to: Identify actions individuals can engage in to protect/restore water quality in watersheds	
7	Knowledge: watersheds	As a result of participating in the MWEE professional development, I am better able to: Define the term "watershed" Identify my local watershed(s) Identify how watersheds are connected to the ocean via streams, rivers, and human-made structures Identify the functions that occur in a watershed (transport, store, and cycle water)	

Evaluation System Question 4: 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?			
Row	**Constructs (alphabetical)**	**Teacher MWEE Questionnaire Items**	**On Teacher MWEE Nonresponse Survey=X**
1	1Unique ID or Award Number	(see MWEE Implementation tab for teacher descriptives)	
2	Academic achievement	As a result of participating in MWEEs, students: Perform better in science Perform better academically Perform better on state standardized tests Are more engaged in their science learning	X
3	Attitudes: career interest	As a result of participating in MWEEs, students: Are more likely to express an interest in pursuing science careers	X
4	Attitudes: towards watershed resources	As a result of participating in MWEEs, students: Express greater caring and concern for their local watershed	X
5	Behavior: stewardship change	As a result of participating in MWEEs, students: Are more likely to act to protect or restore watersheds Are better able to make informed decisions to protect or restore watersheds As a result of participating in my typical MWEEs, students are more likely to _____ to protect and/or restore ocean, coastal, and/or Great Lakes watersheds. Create a schoolyard or backyard habitat Conserve water at school to protect the local watershed Install a rain barrel at school Reduce litter at the school Give presentation(s) about the local watershed (e.g., for school, other organizations) Participate in an event to raise awareness about the importance of watersheds Help clean up or take care of a local stream or beach Participate in a restoration activity (e.g., planting trees) to benefit watersheds Tell others about ways they can protect their local watersheds Other: text box	X (first statement only)
6	Behavior: stewardship self-efficacy	As a result of participating in MWEEs, students: Are more confident in their ability to protect and/or restore watersheds	X
7	Knowledge: watersheds	As a result of participating in MWEEs, students: Know more about watersheds	X

Evaluation System Question 4: 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?			
Row	**Constructs (alphabetical)**	**Teacher MWEE Questionnaire Items**	**On Teacher MWEE Nonresponse Survey=X**
8	Most important outcomes	What is the most important benefit of MWEEs for your students?	
9	Skills: Science inquiry skills, such as critical thinking	As a result of participating in MWEEs, students: Are better able to conduct scientific investigations Are better able to understand the nature of scientific research	X

Exploratory Questions			
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher PD Questionnaire Items**
1	Education policy impact	To what extent do you (dis)agree with the following statement: NOAA B-WET has had, or will have, a positive impact on education policy in my area? (NA, Strongly disagree to Strongly agree 7-point scale) Please explain why you selected the response you did.	
2	EE impact	To what extent do you (dis)agree with the following statement: NOAA B-WET has had, or will have, a positive impact on environmental education in my area's formal education system? (NA, Strongly disagree to Strongly agree 7-point scale) Please explain why you selected the response you did.	
3	Environment impact	To what extent do you (dis)agree with the following statement: The health of our local watershed(s) has improved, or will improve, as a result of my organization's B-WET-funded professional development or MWEEs. (NA, Strongly disagree to Strongly agree 7-point scale) Please explain why you selected the response you did.	
4	Environmental policy impact	To what extent do you (dis)agree with the following statement: NOAA B-WET has had, or will have, a positive impact on environmental policy in my area? (NA, Strongly disagree to Strongly agree 7-point scale) Please explain why you selected the response you did.	
5	NOAA visibility	To what extent do you (dis)agree with the following statement: As a result of NOAA B-WET, the public is more familiar with NOAA, such as NOAA science, resources, and experts? (NA, Strongly disagree to Strongly agree 7-point scale) Please explain why you selected the response you did.	
6	NOAA visibility		Did your B-WET professional development provider indicate that it was funded (in part) with funding from the National Oceanic and Atmospheric Administration (NOAA)? - No - Yes Did participating in the B-WET professional development increase your knowledge of … what NOAA does? No Yes scientific data accessible through NOAA? No Yes educational resources available through NOAA? No Yes

Exploratory Questions			
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher PD Questionnaire Items**
7	Organization impact	To what extent do you (dis)agree with the following statement: The B-WET grant has improved, or will improve, the overall quality of environmental education provided by my organization? (NA, Strongly disagree to Strongly agree 7-point scale) Please explain why you selected the response you did.	
8	Evaluation	Which of the following best describes the situation with regard to evaluation(s) of your organization's B-WET-funded programs? -Don't know -No evaluation has been conducted and there are no plans to complete one -No evaluation has been conducted, but there are plans to complete one -An evaluation is being conducted, but it is not yet finished -One or more evaluations has been completed -Other (please describe) _____ IF SELECTED ' One or more evaluations has/have been completed' ABOVE: What type of evaluation has been completed? Needs assessment Process/Implementation Outcome Impact	
9	Evaluation	If outcome or impact evaluation: Which of the following best describes who led the evaluation? -Don't know -Internal staff member (someone who is an employee of your organization) -External consultant (someone who is not an employee of your organization) If selected, please provide consultant/firm name: _____ -Other (please describe) _____	

Exploratory Questions			
Row	**Constructs (alphabetical)**	**Grantee Questionnaire Items**	**Teacher PD Questionnaire Items**
10	Evaluation	If outcome or impact evaluation: Does the evaluation report include evidence of: (Don't know, Not measured, No, Yes) Increases in knowledge about watersheds (participants learned new information) Changes in attitudes toward watersheds (participants'; changed their beliefs, opinions, feelings, or perspectives) Increases in the skills needed to engage in behaviors to protect and/or restore ocean, coastal and/or Great Lakes watersheds (verbal, mental, or physical) Increases in intentions to act on behalf of watersheds Participants engaging in actions that protect or restore watersheds Improved water quality (positive changes in physical watershed that can be attributed to participants'; actions) Improved academic performance	

ATTACHMENT 2: NOAA B-WET GRANTEE SURVEY

Greetings! Please answer the following questions in reference to the most recently-completed grant year of your current NOAA B-WET grant. You will be asked about a range of practices and outcomes that represent the diversity of Meaningful Watershed Educational Experiences (MWEEs) offered by B-WET-funded programs, some of which may not apply directly to your project. It is acceptable to answer "not applicable" (N/A) in those instances.

For the purposes of this questionnaire, we assume that Meaningful Watershed Educational Experiences (MWEEs) are investigative, project-oriented, sustained activities that include one or more outdoor experiences, consider the watershed as a system, and are an integral part of a school instructional program. MWEEs for students are projects that provide K-12 students opportunities for these activities. MWEEs for teachers provide K-12 teachers opportunities for professional development to build their confidence and capacity to implement MWEE activities with their students. MWEEs are enhanced by NOAA products, services, or personnel; support regional environmental and natural resource management priorities; and are designed to increase students' and teachers' understanding and stewardship of watersheds and related ocean, coastal and Great Lakes ecosystems.

We realize that not all MWEEs are designed in the same way and that your organization does not necessarily only offer one type. For the purposes of this survey, please respond in reference to NOAA B-WET-funded MWEEs and professional development. Also, because we are attempting to generalize, we will ask you to consider a "typical" MWEE offered by your organization. Please consider your most frequently offered B-WET-funded MWEE as "typical."

All responses will be kept anonymous, that is they will not be associated with you and your organization. THANK YOU in advance for your candor and thoughtfulness in answering the questions that follow.

Note: The term "organization" is used generically to mean the B-WET funds "awardee." The awardee may be one nonprofit organization or an academic institution completing the work, or the awardee may be an institution that is serving as the leader of a partnership of organizations that are completing the work. If you are the latter type of awardee, please respond on behalf of your collective group of partners.

Note: We apologize for redundancy in information you have previously provided to NOAA B-WET as part of your award.

It will take between 30-60 minutes to complete this survey, depending on the nature of your project. You can close the survey and return to the same place as long as you use the same computer to continue completing the survey.

If you have questions about this survey, please contact either your regional B-WET manager or Bronwen Rice, B-WET National Coordinator (Bronwen.Rice@noaa.gov). Thank you.

OMB Control Number: 0648-xxxx Expires: xx/xx/20xx
Paperwork Reduction Act Statement
Public reporting burden for this collection of information is estimated to average 30-60 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other suggestions for reducing this burden to Bronwen Rice, NOAA Office of Education, Herbert C. Hoover Building, Room 6863, 14th and Constitution Avenue, NW Washington, DC 20230. Responses are voluntary and collected and maintained as anonymous data. Information will be treated in accordance with the Freedom of Information Act (5 USC 552). Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

Did you or your organization operate a NOAA B-WET funded program this past grant year?

❍ No
❍ Yes

SKIP TO END IF ANSWERED NO ABOVE

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 ONLY to 1) identify your B-WET region, not your organization, and 2) allow us to link information you provide with that of data that may be provided by your project's teachers.

To what extent were you (personally) involved in:

	Not at all 1	2	3	4	To a great extent 5
Developing your organization's most recent funded B-WET grant proposal (on your own or through collaborating with an external grant writer)	❍	❍	❍	❍	❍
Implementing your organization's most recent B-WET-funded grant	❍	❍	❍	❍	❍
Evaluating your organization's most recent B-WET-funded grant (on your own or through collaborating with an external evaluation consultant)	❍	❍	❍	❍	❍

In what 5-digit zip code is your organization located?

In which region(s) were your organization's MWEEs offered this past grant year? (check one)
- ❍ California
- ❍ Chesapeake Bay
- ❍ Great Lakes
- ❍ Gulf of Mexico
- ❍ Hawaii
- ❍ New England
- ❍ Pacific Northwest
- ❍ Other (please describe) _____

What is the total amount of funding you received this past grant year from NOAA for your B-WET project?
- ❍ $1-20,000
- ❍ $20,001-$50,000
- ❍ $50,001-$100,000
- ❍ $100,001-$200,000
- ❍ $200,001-$300,000
- ❍ $300,001 or greater
- ❍ None

What is the total amount of funding for this project, from all sources, this past grant year?
- ❍ $1-20,000
- ❍ $20,001-$50,000
- ❍ $50,001-$100,000
- ❍ $100,001-$200,000
- ❍ $200,001-$300,000
- ❍ $300,001 or greater
- ❍ None

Including this past grant year, for how many years has your organization received funding from NOAA B-WET for the currently-funded project?
- ❍ 1 year
- ❍ 2 years
- ❍ 3 years
- ❍ 4 or more years

For how many years total has this B-WET project been in existence, including years not funded by NOAA B-WET?
- ❍ 1 year
- ❍ 2 years
- ❍ 3 years
- ❍ 4 or more years

For what type of organization do you work? (choose one)

- ❍ Academic institution (community college, college, university)
- ❍ Business/Corporation
- ❍ Local government
- ❍ State education agency
- ❍ State natural resource agency
- ❍ Non-profit organization (including informal education institutions)
- ❍ School/school district
- ❍ Other (please describe) _____

Overall, what grade would you give the support you received from your region's NOAA B-WET staff over the past grant year?

- ❍ F
- ❍ D
- ❍ C
- ❍ B
- ❍ A

Briefly describe why you selected this grade.

If offered, how likely is it that you will make use of each of the following to help you implement your B-WET-funded programs?

	Extremely unlikely 1	2	3	4	5	6	Extremely likely 7
One-on-one time with B-WET program staff (i.e., regional or national coordinators)	❍	❍	❍	❍	❍	❍	❍
Facilitated networking with other B-WET grantees in my region	❍	❍	❍	❍	❍	❍	❍
Facilitated networking with other B-WET grantees from other regions	❍	❍	❍	❍	❍	❍	❍
Email listserv, web forum, Facebook page, or other tools for virtual interaction with other grantees	❍	❍	❍	❍	❍	❍	❍
Access to local NOAA subject-matter experts	❍	❍	❍	❍	❍	❍	❍
Information about and access to current NOAA data sets	❍	❍	❍	❍	❍	❍	❍
NOAA materials and lesson plans relevant to watersheds	❍	❍	❍	❍	❍	❍	❍
Suggested "best" or "preferred" practices for MWEEs	❍	❍	❍	❍	❍	❍	❍
Assistance with evaluating MWEEs	❍	❍	❍	❍	❍	❍	❍
Assistance with grant management	❍	❍	❍	❍	❍	❍	❍
Opportunities to learn about watershed science	❍	❍	❍	❍	❍	❍	❍
Opportunities to learn about local or regional environmental issues	❍	❍	❍	❍	❍	❍	❍
Opportunities to learn about local or regional policy efforts impacting environmental education	❍	❍	❍	❍	❍	❍	❍
Opportunities to learn about national policy efforts impacting environmental education	❍	❍	❍	❍	❍	❍	❍
Opportunities to learn about climate literacy principles	❍	❍	❍	❍	❍	❍	❍
Opportunities to learn about ocean literacy principles	❍	❍	❍	❍	❍	❍	❍

(BRANCHING QUESTION)
Which of the following B-WET-funded programs did your organization provide? (choose no or yes for each line)

	No	Yes
MWEEs for students/youth who are between the ages of 4-18 (or grades PreK-12)	❍	❍
MWEE professional development or support for teachers	❍	❍
Other (please describe)	❍	❍

TEACHER PROFESSIONAL DEVELOPMENT

Which of the following types of B-WET-funded MWEE professional development did you typically provide over the past grant year?

	No	Yes
One day workshops (usually less than 8 hours)	❍	❍
Teacher institute (usually on consecutive days that cumulatively consist of 40 hours or more	❍	❍
Multi-day workshops (events that last at least 6 hours, but are less than 40 hours, e.g., a three-day workshop on a specific topic or a series of five Saturday sessions)	❍	❍
A college-level course	❍	❍
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)	❍	❍
On-line professional development support (e.g., courses, webinars, discussion forums)	❍	❍

For about how many teachers, schools, and school districts did your organization provide professional development or support (e.g., trained in workshops, coached at schools or in the field) this past grant year as a result of your B-WET grant? (Please provide one number, NOT a range.)

About ____ teachers served
About ____ K-12 schools served
About ____ school districts served

What percent of the participating teachers taught the following grade levels? (total should equal 100%)

_____ PreK
_____ Elementary
_____ Middle
_____ High
_____ I don't know

Did the majority of participating teachers teach science?

❍ No
❍ Yes
❍ Don't know

About how many hours of MWEE professional development and/or support did your organization typically provide for any one teacher this past grant year?

- ❍ None
- ❍ 1-2 hours
- ❍ 3-5 hours
- ❍ 6-10 hours
- ❍ 11-20 hours
- ❍ 21-40 hours
- ❍ 41-60 hours
- ❍ 61-80 hours
- ❍ More than 80 hours

About how many hours did a typical teacher participate in outdoor activities as part of your organization's MWEE professional development this past grant year?

- ❍ None
- ❍ 1-2 hours
- ❍ 3-5 hours
- ❍ 6-10 hours
- ❍ 11-20 hours
- ❍ 21-40 hours
- ❍ 41-60 hours
- ❍ 61-80 hours
- ❍ More than 80 hours

To what extent was your organization's MWEE professional development content aligned with:

	NA	Don't know	Not at all 1	2	3	4	To a great extent 5
School district education standards	❍	❍	❍	❍	❍	❍	❍
State education standards	❍	❍	❍	❍	❍	❍	❍
National education standards	❍	❍	❍	❍	❍	❍	❍
Regional environmental/natural resources management priorities	❍	❍	❍	❍	❍	❍	❍

Were NOAA resources used as part of MWEE professional development for teachers?

- ❍ No
- ❍ Yes

DISPLAYED IF ANSWERED YES ABOVE
Which NOAA resources were incorporated into your organization's typical B-WET-funded MWEE professional development?

	Not sure	No	Yes
Information from NOAA studies or reports	❍	❍	❍
Data collected by and accessible through NOAA, IF YES: Name the NOAA data source:	❍	❍	❍
NOAA expert (e.g., scientist, educator, Sea Grant staff member, policy expert)	❍	❍	❍
NOAA curricula and education programs, IF YES: Name the curricula or programs:	❍	❍	❍
NOAA labs or facilities, IF YES: Name the lab or facility:	❍	❍	❍
NOAA National Marine Sanctuary	❍	❍	❍
NOAA National Estuarine Research Reserve	❍	❍	❍

What education methods were used during your MWEE professional development? (select No or Yes for each method)

	Not sure	No	Yes
Outdoor field trip (i.e., excursion to learn about natural history and ecology in the outdoors, may or may not include data collection)	❍	❍	❍
Field work (i.e., scientific study carried out somewhere other than in a classroom/laboratory, includes data collection)	❍	❍	❍
Place-based education (i.e., an interdisciplinary instructional strategy that uses the local environment and community as the context for teaching and learning)	❍	❍	❍
Scientific-inquiry-based learning (i.e., an instructional strategy that gives students the opportunity to explore an idea or question. To arrive at an answer or to better understand the concept, students often collect and analyze data)	❍	❍	❍
Issue investigation (i.e., an interdisciplinary instructional strategy that engages learners in investigating complex, real-world environmental issues and problem-solving as the context for teaching and learning)	❍	❍	❍
Service learning (i.e., an instructional strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities)	❍	❍	❍

DISPLAYED IF ANSWERED YES TO SCIENTIFIC INQUIRY ABOVE
Which of the following science inquiry steps did you include? Engaged teachers in:

	No	Yes
Formulating scientific questions they can answer using data	❍	❍
Making predictions or hypotheses	❍	❍
Collecting data or using existing data	❍	❍
Analyzing and interpreting data	❍	❍
Making conclusions and adjusting predictions/hypotheses	❍	❍
Developing presentations of their findings	❍	❍

As part of your B-WET professional development workshops or institutes this past grant year, did your organization typically include the following:

	No	Yes
Presented information and examples illustrating how other teachers have integrated MWEEs into their curriculum	❍	❍
Discussed how teachers may be able to integrate MWEEs into their own curriculum or classroom activities	❍	❍
Discussed alignment of MWEEs with state, regional, or national standards	❍	❍
Provided examples of how MWEEs align with standards	❍	❍
Engaged teachers in aligning MWEEs with their school or school district standards	❍	❍
Allowed teachers time to plan how they will implement MWEEs	❍	❍
Engaged teachers in the same activities/practices they can use with their students	❍	❍
Included more than one teacher from individual schools	❍	❍
Presented how NOAA data can be used to support student scientific inquiry	❍	❍
Discussed how to use NOAA data to obtain knowledge about local issues	❍	❍
Shared examples of how other teachers have used NOAA data with their students	❍	❍
Allowed teachers time to plan how they will integrate the use of NOAA data	❍	❍

What types of support did your organization typically provide to teachers participating in MWEE professional development this past grant year?

	No	Yes
Assisted teachers with conducting field trips or field work	❍	❍
Assisted teachers with establishing schoolyard habitats	❍	❍
Assisted teachers with establishing restoration projects	❍	❍
Co-teaching in teachers' classrooms or in field	❍	❍
Provided coaching in participating teachers' classrooms	❍	❍
Provided demonstrations in teachers' classrooms	❍	❍
Assisted with the use of equipment or technologies	❍	❍
Communicated with teachers through personal phone calls or email	❍	❍
Communicated with teachers through newsletters or web-site (e.g., an online community)	❍	❍

Which characteristics describe your organization's typical MWEE professional development this past grant year?

	No	Yes
Helped make connections to local community organizations and resources	❍	❍
Facilitated interactions with NOAA scientists/staff	❍	❍
Facilitated interactions with natural resource professionals	❍	❍
Provided teacher stipends	❍	❍
Offered continuing education credits	❍	❍
Offered graduate credits	❍	❍
Provided equipment	❍	❍
Provided instructional/educational/curriculum materials	❍	❍
Provided information on how to obtain grants or funding for MWEEs	❍	❍

Did teachers participate in any of these activities to protect and/or restore ocean, coastal and/or Great Lakes watersheds DURING their MWEE professional development?

	No	Yes
Created a schoolyard or backyard habitat	❍	❍
Installed a rain barrel at school or at home	❍	❍
Gave presentation(s) about the local watershed (e.g., for school, other organizations)	❍	❍
Participated in or organized event(s) to raise awareness about the importance of watersheds	❍	❍
Participated in or helped coordinate a clean-up of a local stream or beach	❍	❍
Participated in a restoration activity (e.g., planting trees)	❍	❍
Limited or avoided the use of household chemicals including fertilizers, herbicides and pesticides	❍	❍
Told others about ways they can protect their local watershed	❍	❍
Monitored water quality over a period of time	❍	❍

It is a goal of my organization's B-WET-funded professional development that teachers will be able to:

	NA	Don't know	No	Yes
Define the term "watershed"	❍	❍	❍	❍
Identify their local watershed(s)	❍	❍	❍	❍
Identify how watersheds are connected to the ocean via streams, rivers, and human-made structures	❍	❍	❍	❍
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.	❍	❍	❍	❍
Identify connections between human welfare and water flow and quality	❍	❍	❍	❍
Identify possible point and non-point sources of water pollution	❍	❍	❍	❍
Identify actions individuals can engage in to protect/restore water quality in watersheds	❍	❍	❍	❍

It is a goal of my organization's B-WET-funded MWEE professional development that teachers will:

	NA	Don't know	No	Yes
Teach more about watersheds	❍	❍	❍	❍
Be more likely to implement MWEEs	❍	❍	❍	❍
Be more likely to implement MWEEs after they are no longer supported by our organization	❍	❍	❍	❍
Be more likely to use NOAA resources to enhance their students' MWEE experiences	❍	❍	❍	❍
Be more likely to guide students through taking action to protect or restore watersheds	❍	❍	❍	❍
Be more likely to use science inquiry instruction	❍	❍	❍	❍
Be more likely to use the outdoors for instruction	❍	❍	❍	❍
Be more likely to use local community resources as part of instruction	❍	❍	❍	❍
Be more likely to use interdisciplinary approaches to instruction	❍	❍	❍	❍
Be more enthusiastic about teaching science	❍	❍	❍	❍
Be more likely to act to protect and/or restore ocean, coastal, or Great Lakes watersheds	❍	❍	❍	❍

STUDENT MWEEs

Please answer the following questions with regard to the instruction your organization provides directly to students (not the instruction provided by teachers).

About how many students, schools, and school districts were served directly by your organization this past grant year as a result of your B-WET grant? (Please provide one number, NOT a range.)

About ___ students served
About ___ K-12 schools served
About ___ school districts served

What percent of the students/youth directly served by your organization were in each of the following grade levels? (total must equal 100%)

_____ PreK
_____ Elementary
_____ Middle
_____ High
_____ Other
_____ I don't know

What percent of the participating students' schools are Title 1?

❍ Don't know
❍ Less than 20%
❍ 21-40%
❍ 41-60%
❍ 61-80%
❍ 81-100%

What percent of the participating students speak English as a second language (aka English Language Learners)?

❍ Don't know
❍ Less than 20%
❍ 21-40%
❍ 41-60%
❍ 61-80%
❍ 81-100%

To what extent were your organization's MWEEs aligned with:

	NA	Don't know	Not at all 1	2	3	4	To a great extent 5
School district education standards	❍	❍	❍	❍	❍	❍	❍
State education standards	❍	❍	❍	❍	❍	❍	❍
National education standards	❍	❍	❍	❍	❍	❍	❍
Regional environmental/natural resources management priorities	❍	❍	❍	❍	❍	❍	❍

Which of the following did your B-WET-funded programs provide for students during this past grant year?

	No	Yes
Off-site field programs during the school day	❍	❍
Schoolyard-based programs during the school day	❍	❍
Classroom-based programs during the school day, including distance learning experiences	❍	❍
After-school or weekend programs (e.g., science clubs)	❍	❍
Summer programs	❍	❍
Events for youth with their families	❍	❍

On average during the past grant year, a typical student spent ____ hours being taught by your organization's staff during a B-WET-funded MWEE.

- ❍ None
- ❍ 1-2 hours
- ❍ 3-5 hours
- ❍ 6-9 hours
- ❍ 10-16 hours
- ❍ 17-24 hours
- ❍ 25-40 hours
- ❍ More than 40 hours

On average during the past grant year, a typical student spent ____ hours outdoors being taught by your organization's staff during a B-WET-funded MWEE..

- ❍ None
- ❍ 1-2 hours
- ❍ 3-5 hours
- ❍ 6-9 hours
- ❍ 10-16 hours
- ❍ 17-24 hours
- ❍ 25-40 hours
- ❍ More than 40 hours

On average, a typical student participated in your organization's B-WET-funded MWEEs over the course of:

- ❍ One day
- ❍ 2-6 days
- ❍ One week
- ❍ 2-3 weeks
- ❍ One month
- ❍ 2-3 months
- ❍ 4-8 months
- ❍ A full school year (about 9 months)
- ❍ A full calendar year
- ❍ Multiple years

Were your organization's typical B-WET-funded MWEEs focused only on science concepts, or on concepts from multiple disciplines (e.g., science, math, social studies, literature, art, music)?

- ❍ Only science concepts
- ❍ Concepts from multiple disciplines, including science
- ❍ Other

Were NOAA resources used as part of MWEES for students?

- ❍ No
- ❍ Yes

DISPLAYED IF ANSWERED YES ABOVE
Which NOAA resources were used as part of MWEEs for students?

	Not sure	No	Yes
Information from NOAA studies or reports	❍	❍	❍
Data collected by and accessible through NOAA, IF YES: Name the NOAA data source:	❍	❍	❍
NOAA expert (e.g., scientist, educator, Sea Grant staff member, policy expert)	❍	❍	❍
NOAA curricula and education programs, IF YES: Name the curricula or programs:	❍	❍	❍
NOAA labs or facilities, IF YES: Name the lab or facility:	❍	❍	❍
NOAA National Marine Sanctuary	❍	❍	❍
NOAA National Estuarine Research Reserve	❍	❍	❍

What education methods were used by your organization's staff with students during your organization's typical B-WET-funded MWEEs? (select a response for each method)

	Not sure	No	Yes
Outdoor field trip (i.e., excursion to learn about natural history and ecology in the outdoors, may or may not include data collection)	❍	❍	❍
Field work (i.e., scientific study carried out somewhere other than in a classroom/laboratory, includes data collection)	❍	❍	❍
Place-based education (i.e., an interdisciplinary instructional strategy that uses the local environment and community as the context for teaching and learning)	❍	❍	❍
Scientific-inquiry-based learning (i.e., an instructional strategy that gives students the opportunity to explore an idea or question. To arrive at an answer or to better understand the concept, students often collect and analyze data)	❍	❍	❍
Issue investigation (i.e., an interdisciplinary instructional strategy that engages learners in investigating complex, real-world environmental issues and problem-solving as the context for teaching and learning)	❍	❍	❍
Service learning (i.e., an instructional strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities)	❍	❍	❍

DISPLAYED IF ANSWERED YES TO SCIENTIFIC INQUIRY ABOVE
Which of the following science inquiry steps did you include? Engaged students in:

	No	Yes
Formulating scientific questions they can answer using data	❍	❍
Making predictions or hypotheses	❍	❍
Collecting data or using existing data	❍	❍
Analyzing and interpreting data	❍	❍
Making conclusions and adjusting predictions/hypotheses	❍	❍
Developing presentations of their findings	❍	❍

Did students participate in any of these activities to protect and/or restore ocean, coastal and/or Great Lakes watersheds during your organization's B-WET-funded MWEEs? (please indicate no or yes for each activity)

	No	Yes
Created a schoolyard or backyard habitat	❍	❍
Conserved water at school to protect the local watershed	❍	❍
Installed a rain barrel at school	❍	❍
Reduced litter at school	❍	❍
Gave presentation(s) about the local watershed (e.g., for school, other organizations)	❍	❍
Participated in an event to raise awareness about the importance of watersheds	❍	❍
Helped clean up or take care of a local stream or beach	❍	❍
Participated in a restoration activity (e.g., planting trees)	❍	❍
Told others about ways they can protect their local watershed	❍	❍
Monitored water quality over a period of time	❍	❍

It is a goal of my organization's B-WET-funded MWEEs that students will:

	NA	Don't know	No	Yes
Know more about the ocean	❍	❍	❍	❍
Know more about climate change	❍	❍	❍	❍
Feel more connected to their local watershed	❍	❍	❍	❍
Express greater caring and concern for watersheds	❍	❍	❍	❍
Be more confident in their ability to protect and/or restore watersheds	❍	❍	❍	❍
Be more likely to act to protect and/or restore watersheds	❍	❍	❍	❍
Be better able to make informed decisions about how to protect or restore watersheds	❍	❍	❍	❍
Be better able to conduct scientific investigations	❍	❍	❍	❍
Be more likely to express an interest in pursuing science careers	❍	❍	❍	❍
Perform better academically in science	❍	❍	❍	❍
Perform better on state standardized tests	❍	❍	❍	❍
Be more engaged in their science learning	❍	❍	❍	❍

It is a goal of my organization's B-WET-funded MWEEs that students will be able to:

	NA	Don't know	No	Yes
Define the term "watershed"	❍	❍	❍	❍
Identify their local watershed(s)	❍	❍	❍	❍
Identify how watersheds are connected to the ocean via streams, rivers, and human-made structures	❍	❍	❍	❍
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.	❍	❍	❍	❍
Identify connections between human welfare and water flow and quality	❍	❍	❍	❍
Identify possible point and non-point sources of water pollution	❍	❍	❍	❍
Identify actions individuals can engage in to protect/restore water quality in watersheds	❍	❍	❍	❍

PROGRAM EVALUATION

Which of the following best describes the situation with regard to evaluation(s) of your organization's B-WET-funded programs?

- ❍ Don't know
- ❍ No evaluation has been conducted and there are no plans to complete one
- ❍ No evaluation has been conducted, but there are plans to complete one
- ❍ An evaluation is being conducted, but it is not yet finished
- ❍ One or more evaluations has/have been completed
- ❍ Other (please describe) _____

DISPLAYED IF ANSWERED ONE OR MORE COMPLETED ABOVE

What type of evaluation has been completed?

	Not conducted	Completed but no report is available	Completed and report is available
Needs assessment (determines the need for a project by considering aspects such as available resources, extent of the problem and need to address it, participant interest and knowledge, etc. This is also known as front-end evaluation.)	❍	❍	❍
Process/implementation (examines the implementation of a project, focusing on the effort invested in the project and its direct outputs. For example, an implementation evaluation might measure how the project is being delivered, who participated, and whether they were satisfied with it). Note that this type of evaluation is NOT the same as a program report!	❍	❍	❍
Outcome (shows the programs' direct effects on target outcomes and provides direction for program improvement. For example, outcome evaluation may show that a program was (or was not) successful in changing participants' knowledge, attitudes, skills, intentions, or behaviors)	❍	❍	❍
Impact (seeks to assess the broader, longer-term changes that occurred as a result of a project such as in improved environmental quality)	❍	❍	❍

DISPLAYED IF OUTCOME OR IMPACT CHOSEN ABOVE
Please answer the following questions with regard to the outcome or impact evaluation your organization completed. If your organization completed more than one outcome or impact evaluation, please answer the following questions based on the evaluation with the most rigorous research (e.g., valid/reliable instruments, appropriate sampling, use of control/comparison groups, content analysis of qualitative data, etc.) methods:

Which of the following best describes who led the evaluation?
- ❍ Don't know
- ❍ Internal staff member (someone who is an employee of your organization)
- ❍ External consultant (someone who is not an employee of your organization) If selected, please provide consultant/firm name: _____
- ❍ Other (please describe) _____

Do the evaluation results include evidence of:

	Don't know	Not measured	No	Yes
Increases in knowledge about watersheds (participants learned new information)	❍	❍	❍	❍
Changes in attitudes toward watersheds (participants' changed their beliefs, opinions, feelings, or perspectives)	❍	❍	❍	❍
Increases in the skills needed to engage in behaviors to protect and/or restore ocean, coastal and/or Great Lakes watersheds (verbal, mental, or physical)	❍	❍	❍	❍
Increases in intentions to act on behalf of watersheds	❍	❍	❍	❍
Participants engaging in actions that protect or restore watersheds	❍	❍	❍	❍
Improved water quality (positive changes in physical watershed that can be attributed to participants' actions)	❍	❍	❍	❍
Improved academic performance	❍	❍	❍	❍

NOAA B-WET IMPACT
Please indicate to what extent you agree or disagree with the next 6 statements.

As a result of NOAA B-WET, the public is more familiar with NOAA, such as NOAA science, resources, and experts.
- ❍ N/A
- ❍ Strongly Disagree 1
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ Strongly Agree 7

Please explain why you selected the response you did.

The B-WET grant has improved - or will improve - the overall quality of environmental education provided by my organization.

- ❍ N/A
- ❍ Strongly Disagree 1
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ Strongly Agree 7

Please explain why you selected the response you did.

NOAA B-WET has - or will have - a positive impact on environmental education in my area's formal education system.

- ❍ N/A
- ❍ Strongly Disagree 1
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ Strongly Agree 7

Please explain why you selected the response you did.

NOAA B-WET has had - or will have - a positive impact on education policy in my area.

- ❍ N/A
- ❍ Strongly Disagree 1
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ Strongly Agree 7

Please explain why you selected the response you did.

NOAA B-WET has had - or will have - a positive impact on environmental policy in my area.

- ❍ N/A
- ❍ Strongly Disagree 1
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ Strongly Agree 7

Please explain why you selected the response you did.

The health of our local watershed(s) has improved - or will improve - as a result of my organization's B-WET-funded MWEEs .

- ❍ N/A
- ❍ Strongly Disagree 1
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ Strongly Agree 7

Please explain why you selected the response you did.

FEEDBACK

This questionnaire was .... (choose one for each)

	1	2	3	4	5	6	7	
Difficult to complete	❍	❍	❍	❍	❍	❍	❍	Easy to complete
Not informative	❍	❍	❍	❍	❍	❍	❍	Informative
Long	❍	❍	❍	❍	❍	❍	❍	Short

How can this questionnaire be improved?

Anything else you would like to add?

Thank you for completing this survey. Please click on the Submit button below.

ATTACHMENT 2a: REQUEST FROM B-WET TO GRANTEES TO COMPLETE QUESTIONNAIRE

Email Request: Sent at the end of the grant year

Dear [FirstName] [LastName],

You received this email because you are at the end of your NOAA B-WET grant year. Please provide NOAA with feedback on B-WET's services to you as a grantee and with information on how you implemented your B-WET funded programs. The questionnaire will take about 30-60 minutes to complete.

Click on this link to begin: [SurveyLink]

Please be completely honest in your responses. YOUR RESPONSES WILL BE ANONYMOUS. None of the data you provide will be associated with your name or other identifying information. Your responses are very important and will be used to improve future NOAA-funded programs.

Thank you for taking the time to complete this questionnaire! If you have any questions or concerns, please contact either of the contacts below.

Bronwen Rice, NOAA B-WET National Coordinator
NOAA Office of Education
Bronwen.Rice@noaa.gov
202.482.6797

OMB Control Number: 0648-xxxx Expires: xx/xx/20xx

ATTACHMENT 3: NOAA B-WET PD TEACHER SURVEY

Please answer the following questions in reference to your most recently-completed Meaningful Watershed Educational Experience (MWEE) professional development (PD). You will be asked about a range of practices and outcomes that represent the diversity of MWEE PD funded by the National Oceanic and Atmospheric Administration's Bay Watershed Education and Training program (NOAA B-WET), some of which may not apply directly to your experience. It is acceptable to answer "not applicable" (N/A) in those instances.

Your responses will be entered anonymously and will not be associated with you as an individual. THANK YOU in advance for your candor and thoughtfulness in answering the questions. Your responses will be aggregated with other teachers' responses, and will be used by NOAA B-WET and B-WET-funded organizations to improve future professional development programs.

It will take about 20-30 minutes to complete this survey, depending on the nature of your professional development experience.

Thank you.

If you have questions about this survey, please contact Bronwen Rice, NOAA B-WET National Coordinator, Bronwen.Rice@noaa.gov

OMB Control Number: 0648-xxxx Expires: xx/xx/20xx
Paperwork Reduction Act Statement
Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other suggestions for reducing this burden to Bronwen Rice, NOAA Office of Education, Herbert C. Hoover Building, Room 6863, 14th and Constitution Avenue, NW Washington, DC 20230. Responses are voluntary and collected and maintained as anonymous data. Information will be treated in accordance with the Freedom of Information Act (5 USC 552). Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

Are you currently a PreK-12 teacher or educator?
- ❍ No
- ❍ Yes

IF NO, SKIP TO END OF SURVEY

In what setting do you teach?

- ❑ Public school
- ❑ Private school
- ❑ Non-formal education (e.g., environmental centers, zoos, museums, interpretive programs at local or state level parks, youth organizations)
- ❑ Home-school
- ❑ Other

IF NEITHER PUBLIC NOR PRIVATE SCHOOL, SKIP TO END OF SURVEY

Did you recently complete a professional development opportunity focused on watersheds or water quality issues (also known as a Meaningful Watershed Education Experience {MWEE} professional development)?

- ❍ No
- ❍ Not sure
- ❍ Yes

IF NO OR NOT SURE, SKIP TO END OF SURVEY

CREATE A UNIQUE ID: To allow us to compare your current and future responses, please create a unique 8-digit ID number using the 2 digits of your birth month, the 2 digits of your birth day, and the last 4 digits of your most often used phone number. For example, if you were born on March 9 and your home phone is 410.719.1234, your ID number would be 03091234.

In what 5-digit zip code is your school located?

In which region(s) did you teach this past year? (check one)

- ❍ California
- ❍ Chesapeake Bay
- ❍ Great Lakes
- ❍ Gulf of Mexico
- ❍ Hawaii
- ❍ New England
- ❍ Pacific Northwest
- ❍ Other (please describe) _____

In which grade level(s) do you primarily teach? (select all that apply)

- ❑ PreK
- ❑ Elementary
- ❑ Middle
- ❑ High
- ❑ Other

What subject(s) do you primarily teach? (select one)

- ❍ Science
- ❍ Math
- ❍ Language Arts
- ❍ Social studies
- ❍ Fine arts
- ❍ Multiple disciplines, including science
- ❍ Multiple disciplines, not including science
- ❍ Other

Which of these categories best describes your school's community (during the school year)?

- ❍ Rural (population of less than 10,000)
- ❍ Town/Suburban (population 10,000-99,999)
- ❍ Small urban (population 100,000-250,000)
- ❍ Urban (population greater than 250,000)

What is your ethnicity? (check one):

- ❍ Hispanic or Latino
- ❍ Not Hispanic or Latino
- ❍ I prefer not to respond

What is your race? (check all that apply):

- ❑ American Indian or Alaska Native
- ❑ Asian
- ❑ Black or African American
- ❑ Native Hawaiian or Other Pacific Islander
- ❑ White
- ❑ I prefer not to respond

Is the school where you teach a Title 1 school?

- ❍ No
- ❍ Yes
- ❍ NA

What percent of your students speak English as a second language (aka English Language Learners)?
- ❍ Don't know
- ❍ Less than 20%
- ❍ 21-40%
- ❍ 41-60%
- ❍ 61-80%
- ❍ 81-100%

About what percent of your students are (percent should equal 100):
_____ American Indian or Alaska Native
_____ Asian
_____ Black or African American
_____ Hispanic or Latino
_____ Native Hawaiian or Other Pacific Islander
_____ White
_____ Don't know

Did you conduct MWEEs with your students before participating in the MWEE professional development?
- ❍ No
- ❍ Yes

What was your PRIMARY reason for participating in the MWEE professional development? (check one)
- ❍ To obtain information and resources for teaching
- ❍ Personal interest in the topic of the professional development
- ❍ To obtain continuing education, recertification, or graduate credit
- ❍ I was required to attend
- ❍ I was asked to attend
- ❍ Other, please describe: _____

Please answer all of the following questions based on the last MWEE (watershed education) professional development you participated in.

Which type(s) of MWEE professional development did you participate in or receive: (please select yes or no for each type)

	No	Yes
One day workshops (usually less than 8 hours)	❍	❍
Teacher institute (usually on consecutive days that cumulatively consist of 40 hours of more)	❍	❍
Multi-day workshops (events that last at least 6 hours, but are less than 40 hours, e.g., a three-day workshop on a specific topic or a series of five Saturday sessions)	❍	❍
A college-level course	❍	❍
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	❍	❍
On-line professional development support (e.g., courses, webinars, discussion forums)	❍	❍

About how many hours of MWEE professional development and/or support did you receive over the past 12 months?

❍ 1-2 hours
❍ 3-5 hours
❍ 6-10 hours
❍ 11-20 hours
❍ 21-40 hours
❍ 41-60 hours
❍ 61-80 hours
❍ More than 80 hours

About how many of those MWEE professional development hours did you spend outdoors?

❍ None
❍ 1-2 hours
❍ 3-5 hours
❍ 6-10 hours
❍ 11-20 hours
❍ 21-40 hours
❍ 41-60 hours
❍ 61-80 hours
❍ More than 80 hours

Were NOAA resources used as part of MWEE professional development for teachers?

❍ No
❍ Yes

DISPLAY IF ANSWER YES ABOVE

Which NOAA resources were used as part of your MWEE professional development?

	Not sure	No	Yes
Information from NOAA research studies or reports	❍	❍	❍
Data collected by and accessible through NOAA, IF YES: Name the NOAA data source:	❍	❍	❍
NOAA expert (e.g., scientist, educator, Sea Grant staff member, policy expert)	❍	❍	❍
NOAA curricula and education programs, IF YES: Name the curricula or programs:	❍	❍	❍
NOAA labs or facilities, IF YES: Name the lab or facility:	❍	❍	❍
NOAA National Marine Sanctuary	❍	❍	❍
NOAA National Estuarine Research Reserve	❍	❍	❍

What education methods were used during your MWEE professional development? (select No or Yes for each method)

	No	Yes
Outdoor field trip (i.e., excursion to learn about natural history and ecology in the outdoors, may or may not include data collection)	❍	❍
Field work (i.e., scientific study carried out somewhere other than in a classroom/laboratory, includes data collection)	❍	❍
Place-based education (i.e., an interdisciplinary instructional strategy that uses the local environment and community as the context for teaching and learning)	❍	❍
Scientific-inquiry-based learning (i.e., an instructional strategy that gives students the opportunity to explore an idea or question. To arrive at an answer or to better understand the concept, students often collect and analyze data)	❍	❍
Issue investigation (i.e., an interdisciplinary instructional strategy that engages learners in investigating complex, real-world environmental issues and problem-solving as the context for teaching and learning)	❍	❍
Service learning (i.e., an instructional strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities)	❍	❍

DISPLAY IS ANSWER YES TO SCIENTIFIC INQUIRY ABOVE
As part of your MWEE professional development, were you involved in ...

	Not sure	No	Yes
Formulating scientific questions that can be answered using data	❍	❍	❍
Making predictions or hypotheses	❍	❍	❍
Collecting data or using existing data	❍	❍	❍
Analyzing and interpreting data	❍	❍	❍
Making conclusions and adjusting predictions/hypotheses	❍	❍	❍
Developing presentations of findings	❍	❍	❍

Did you participate in an education/training workshop, institute, or class as part of your professional development?

❍ No
❍ Yes

If No Is Selected, Then Skip To What types of support did you recei...

Did the workshops, institutes, or classes you participated in include the following professional development practices? (Please indicate yes or no for each statement)

	No	Yes
Sharing of information and examples illustrating how other teachers have integrated MWEEs	❍	❍
Discussion of how teachers may be able to integrate MWEEs into their own curriculum or classroom activities	❍	❍
Discussion of alignment of MWEEs with state, regional, or national standards	❍	❍
Provision of examples of how MWEEs align with standards	❍	❍
Engaging you and other participating teachers in aligning MWEEs with your school or school district standards	❍	❍
Participating along with other teachers from my school, at the same time	❍	❍
Allowing you and other participating teachers time to plan how to implement MWEEs	❍	❍
Engaging you and other participating teachers in activities/practices that can be used with your students	❍	❍
Presentation of how NOAA data can be used to support student scientific inquiry	❍	❍
Discussion of how NOAA data can be used to obtain knowledge about local issues	❍	❍
Examples of how other teachers have used NOAA data with their students	❍	❍
Allow you and other participating teachers time to plan how to integrate the use of NOAA data with your students	❍	❍

Please indicate which 3 practices were most valuable in helping you implement MWEEs. Type a 1 for most valuable, 2 for less valuable, and 3 for least valuable of the three.
POPULATED FROM SELECTED ITEMS ABOVE

What types of support did you receive from your MWEE professional development provider? (Please indicate yes or no for each statement)

	No	Yes
Assistance with conducting field trips or field work	❍	❍
Assistance with establishing schoolyard habitats	❍	❍
Assistance with establishing restoration projects	❍	❍
Co-teaching in my classrooms or in field	❍	❍
Coaching in my classroom	❍	❍
Demonstrations in my classroom	❍	❍
Assistance with the use of equipment or technologies	❍	❍
Communicating with provider through personal phone calls or email	❍	❍
Communication with provider through newsletters or web-site (e.g., an online community)	❍	❍

Please indicate which 3 support practices were most valuable in helping you implement MWEEs. Type a 1 for most valuable, 2 for less valuable, and 3 for least valuable of the three.
POPULATED FROM SELECTED ITEMS ABOVE

Which additional practices did your MWEE professional development and/or the support you received include? (Please indicate yes or no for each statement)

	No	Yes
Connections were made to local community organizations and resources	❍	❍
Interactions were facilitated with NOAA scientists/staff	❍	❍
Interactions were facilitated with natural resource professionals	❍	❍
I was provided with a stipend	❍	❍
I was offered continuing education credits	❍	❍
I was offered graduate credits	❍	❍
I was provided with equipment	❍	❍
I was provided with instructional/educational/curriculum materials	❍	❍
I was provided with information on how to obtain grants or funding for MWEEs	❍	❍

Please indicate which 3 practices were most valuable in helping you implement MWEEs. Type a 1 for most valuable, 2 for less valuable, and 3 for least valuable of the three.
POPULATED FROM SELECTED ITEMS ABOVE

During your MWEE professional development, did you participate in any of these activities that protect and/or restore ocean, coastal, and/or Great Lakes watersheds?

	No	Yes
Created a schoolyard or backyard habitat	❍	❍
Installed a rain barrel at school or at home	❍	❍
Gave presentation(s) about the local watershed (e.g., for school, other organizations)	❍	❍
Participated in or organized event(s) to raise awareness about the importance of watersheds	❍	❍
Participated in or helped coordinate a clean-up of a local stream or beach	❍	❍
Participated in a restoration activity (i.e., planting trees)	❍	❍
Limited or avoided the use of household chemicals including fertilizers, herbicides and pesticides	❍	❍
Told others about ways they can protect their local watershed	❍	❍
Monitored water quality over a period of time	❍	❍

Did your B-WET professional development provider indicate that it was funded (in part) with funding from the National Oceanic and Atmospheric Administration (NOAA)?

❍ No
❍ Yes

Overall, what grade would you give your MWEE professional development experience? (slide the scale between F and A+)

❍ 1
❍ 2
❍ 3
❍ 4
❍ 5
❍ 6
❍ 7
❍ 8
❍ 9
❍ 10
❍ 11
❍ 12
❍ 13

Briefly describe why you selected this grade.

As a result of participating in the MWEE professional development, I am better able to:

	NA	Strongly disagree 1	2	3	4	5	6	Strongly agree 7
Define the term "watershed"	❍	❍	❍	❍	❍	❍	❍	❍
Identify my local watershed(s)	❍	❍	❍	❍	❍	❍	❍	❍
Identify how watersheds are connected to the ocean via streams, rivers, and human-made structures	❍	❍	❍	❍	❍	❍	❍	❍
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	❍	❍	❍	❍	❍	❍	❍	❍
Identify connections between human welfare and water flow and quality	❍	❍	❍	❍	❍	❍	❍	❍
Identify possible point and non-point sources of water pollution	❍	❍	❍	❍	❍	❍	❍	❍
Identify actions individuals can engage in to protect/restore water quality in watersheds	❍	❍	❍	❍	❍	❍	❍	❍

Did participating in the B-WET professional development increase your knowledge of …

	No	Yes
what NOAA does?	❍	❍
scientific data accessible through NOAA?	❍	❍
educational resources available through NOAA?	❍	❍

For each statement, select one response for BEFORE, one response for AFTER, and one response for FUTURE.

	BEFORE the MWEE professional development, how confident were you in your ability to:							AFTER the MWEE professional development, how confident are you in your ability to:							In the FUTURE, I intend to ...						
	Not at all confident 1	2	3	4	5	6	Extremely confident 7	Not at all confident 1	2	3	4	5	6	Extremely confident 7	Strongly disagree 1	2	3	4	5	6	Strongly agree 7
Teach my students about local watersheds	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Incorporate MWEEs into my curriculum	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Implement MWEEs without support from a professional development provider	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Use NOAA resources to enhance my students' MWEE experiences	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Guide students through taking action to protect or restore	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍

watersheds																						
Research environmental issues affecting watersheds with students	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Use scientific inquiry instruction	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Use the outdoors for instruction	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Act to protect and/or restore ocean, coastal, or Great Lakes watersheds	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍

What component(s) of the MWEE professional development best prepared you to teach your students about local watersheds?

How could the MWEE professional development be improved to better prepare teachers to teach about the watershed?

Do you have any other comments about the MWEE professional development?

Thank you for completing this survey! Please click on the Submit button below.

This questionnaire was .... (choose one for each line)

	1	2	3	4	5	6	7	8
Difficult to complete:Easy to complete	❍	❍	❍	❍	❍	❍	❍	❍
Not informative:Informative	❍	❍	❍	❍	❍	❍	❍	❍
Long:Short	❍	❍	❍	❍	❍	❍	❍	❍

How can this questionnaire be improved?

Thank you for completing this survey! Please click on the Submit button below.

ATTACHMENT 3a: PRE-NOTICE FROM GRANTEES TO TEACHERS TO COMPLETE PD AND MWEE QUESTIONNAIRES
Email Request: Sent <u>before</u> the teachers' professional development program.

Dear [Teacher FirstName] [Teacher LastName],

The professional development you are about to begin, provided by [PD organization], is funded by the National Oceanic and Atmospheric Administration's Bay Watershed Education and Training program (NOAA B-WET). [PD organization] and NOAA would like your feedback on the professional development.

At the end of the professional development, we will send you an email containing a link to an online questionnaire. The questionnaire will ask for your opinion of the professional development and how well-prepared you feel to teach students about water bodies and watersheds. The questionnaire will take about 20-30 minutes to complete.

Several months from the completion of the professional development, you will receive a request to complete a follow-up questionnaire. That questionnaire will ask you whether you taught your students about water bodies and watersheds and what additional resources you need.

Your responses will be anonymous. None of the data you provide will be associated with your name or other identifying information.

Your feedback is very important and will be used to improve future professional development programs. Thank for you in advance for participating in this survey. Please contact me or Bronwen Rice at NOAA if you have any questions.

NAME, TITLE
PD ORGANIZATION
CONTACT INFORMATION

Bronwen Rice, NOAA B-WET National Coordinator
NOAA Office of Education
Bronwen.Rice@noaa.gov
202.482.6797

OMB Control Number: 0648-xxxx Expires: xx/xx/20xx

ATTACHMENT 3b: REQUEST FROM GRANTEES TO TEACHERS TO COMPLETE PD QUESTIONNAIRE
Email Request: Sent at the end of the teachers' professional development program.

Dear [FirstName] [LastName],

You received this email because you are at the close of, or recently participated in, a professional development provided by [PD organization]. This professional development program was funded by the National Oceanic and Atmospheric Administration's Bay Watershed Education and Training program (NOAA B-WET).

Please provide [PD organization] and NOAA with feedback on the professional development by completing a post-program questionnaire. The questionnaire asks for your opinion of the professional development and how well-prepared you feel to teach students about water bodies and watersheds. The questionnaire will take about 20-30 minutes to complete.

Click on this link to begin: [SurveyLink]

Please be completely honest in your responses. YOUR RESPONSES WILL BE ANONYMOUS. None of the data you provide will be associated with your name or other identifying information. Your responses are very important and will be used to improve future NOAA-funded professional development programs.

Thank you for taking the time to complete this questionnaire! If you have any questions or concerns, please contact either of the contacts below.

NAME, TITLE
PD ORGANIZATION
CONTACT INFORMATION

Bronwen Rice, NOAA B-WET National Coordinator
NOAA Office of Education
Bronwen.Rice@noaa.gov
202.482.6797

OMB Control Number: 0648-xxxx Expires: xx/xx/20xx

ATTACHMENT 4: NOAA B-WET PD TEACHER SURVEY - NONRESPONSE

Please answer the following questions in reference to your most recently-completed Meaningful Watershed Educational Experience (MWEE) professional development (PD). It will take about 5 minutes to complete this survey.

Your responses will be entered anonymously and will not be associated with you as an individual. THANK YOU in advance for your candor and thoughtfulness in answering the questions. Your responses will be aggregated with other teachers' responses, and will be used by NOAA B-WET and B-WET-funded organizations to improve future professional development programs.

Thank you.

If you have questions about this survey, please contact Bronwen Rice, NOAA B-WET National Coordinator, Bronwen.Rice@noaa.gov

OMB Control Number: 0648-xxxx Expires: xx/xx/20xx
Paperwork Reduction Act Statement
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Are you currently a PreK-12 teacher or educator?
- ❍ No
- ❍ Yes

IF NO, SKIP TO END OF SURVEY

In what setting do you teach?
- ❑ Public school
- ❑ Private school
- ❑ Non-formal education (e.g., environmental centers, zoos, museums, interpretive programs at local or state level parks, youth organizations)
- ❑ Home-school
- ❑ Other

IF NEITHER PUBLIC NOR PRIVATE, SKIP TO END OF SURVEY

Did you recently complete a professional development opportunity focused on watersheds or water quality issues (also known as a Meaningful Watershed Education Experience {MWEE} professional development)?

- ❍ No
- ❍ Not sure
- ❍ Yes

IF NO OR NOT SURE, SKIP TO END OF SURVEY

In which region did you teach this past year? (check one)

- ❍ California
- ❍ Chesapeake Bay
- ❍ Great Lakes
- ❍ Gulf of Mexico
- ❍ Hawaii
- ❍ New England
- ❍ Pacific Northwest
- ❍ Other (please describe) _____

In which grade level(s) do you primarily teach? (select all that apply)

- ❑ PreK
- ❑ Elementary
- ❑ Middle
- ❑ High
- ❑ Other

What subject(s) do you primarily teach? (select one)

- ❍ Science
- ❍ Math
- ❍ Language Arts
- ❍ Social studies
- ❍ Fine arts
- ❍ Multiple disciplines, including science
- ❍ Multiple disciplines, not including science
- ❍ Other

Please answer all of the following questions based on the last MWEE (watershed education) professional development you participated in.

What was your PRIMARY reason for participating in the MWEE professional development? (check one)

- ❍ To obtain information and resources for teaching
- ❍ Personal interest in the topic of the professional development
- ❍ To obtain continuing education, recertification, or graduate credit
- ❍ I was required to attend
- ❍ I was asked to attend
- ❍ Other, please describe: _____

Which type(s) of MWEE professional development did you participate in or receive: (please select yes or no for each type)

	No	Yes
One day workshops (usually less than 8 hours)	❍	❍
Teacher institute (usually on consecutive days that cumulatively consist of 40 hours of more)	❍	❍
Multi-day workshops (events that last at least 6 hours, but are less than 40 hours, e.g., a three-day workshop on a specific topic or a series of five Saturday sessions)	❍	❍
A college-level course	❍	❍
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	❍	❍
On-line professional development support (e.g., courses, webinars, discussion forums)	❍	❍

About how many hours of MWEE professional development and/or support did you receive over the past 12 months?

- ❍ 1-2 hours
- ❍ 3-5 hours
- ❍ 6-10 hours
- ❍ 11-20 hours
- ❍ 21-40 hours
- ❍ 41-60 hours
- ❍ 61-80 hours
- ❍ More than 80 hours

Overall, what grade would you give your MWEE professional development experience?
(slide the scale between F and A+)

- ❍ 1 (F)
- ❍ 2
- ❍ 3
- ❍ 4
- ❍ 5
- ❍ 6
- ❍ 7
- ❍ 8
- ❍ 9
- ❍ 10
- ❍ 11
- ❍ 12
- ❍ 13 (A+)

For each statement, select one response for BEFORE, one response for AFTER, and one response for FUTURE.

	BEFORE the MWEE professional development, how confident were you in your ability to:							AFTER the MWEE professional development, how confident are you in your ability to:							In the FUTURE, I intend to ...						
	Not at all confident 1	2	3	4	5	6	Extremely confident 7	Not at all confident 1	2	3	4	5	6	Extremely confident 7	Strongly disagree 1	2	3	4	5	6	Strongly agree 7
Teach my students about local watersheds	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍
Incorporate MWEEs into my curriculum	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍	❍

Thank you for completing this survey! Please click on the Submit button below.

ATTACHMENT 4a: REQUEST FROM GRANTEES TO TEACHERS TO COMPLETE PD NONRESPONSE QUESTIONNAIRE
Email Request: Sent to nonrespondents to Teacher PD Questionnaire

We did not receive a response from you regarding your use of Meaningful Watershed Educational Experiences (MWEEs) following the professional development provided by [PD organization] and funded by the National Oceanic and Atmospheric Administration's Bay Watershed Education and Training program (NOAA B-WET).

We recognize this is a busy time of year, but we hope that you will assist us with the evaluation of our programs by completing this very short follow-up questionnaire. **It should take you about 5 minutes to complete.**

The questionnaire asks a few questions about you and your experiences teaching students about water bodies and watersheds.

Click on this link to begin: [SurveyLink]

Please be completely honest in your responses. YOUR RESPONSES WILL BE ANONYMOUS. None of the data you provide will be associated with your name or other identifying information. Your responses are very important and will be used to improve future NOAA-funded professional development programs.

Thank you for taking the time to complete this questionnaire! If you have any questions or concerns, please contact either of the contacts below.

NAME, TITLE
PD ORGANIZATION
CONTACT INFORMATION

and

Bronwen Rice, NOAA B-WET National Coordinator
NOAA Office of Education
Bronwen.Rice@noaa.gov
202.482.6797

OMB Control Number: 0648-xxxx Expires: xx/xx/20xx

ATTACHMENT 5: NOAA B-WET TEACHER MWEE SURVEY

Some time ago you participated in a Meaningful Watershed Educational Experience (MWEE) professional development (PD) funded by the National Oceanic and Atmospheric Administration's Bay Watershed Education and Training program (NOAA B-WET). We would like to get your feedback on implementing MWEEs with your students, if you did so since the PD.

You will be asked about a range of practices and outcomes that represent the diversity of MWEEs, some of which may not apply directly to your experience. It is acceptable to answer "not applicable" (NA) in those instances.

Your responses will be entered anonymously and will not be associated with you as an individual. THANK YOU in advance for your candor and thoughtfulness in answering the questions. Your responses will be aggregated with other teachers' responses, and will be used by NOAA B-WET and B-WET-funded organizations to improve MWEE PD and student programs.

It will take about 20-30 minutes to complete this survey, depending on the nature of your MWEE implementation experience.

Thank you.

If you have questions about this survey, please contact Bronwen Rice, NOAA B-WET National Coordinator, Bronwen.Rice@noaa.gov

OMB Control Number: 0648-xxxx Expires: xx/xx/20xx
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Are you currently a PreK-12 teacher or educator?
- ❍ No
- ❍ Yes

IF NO, SKIP TO END OF SURVEY

In what setting do you teach?

- ❑ Public school
- ❑ Private school
- ❑ Non-formal education (e.g., environmental centers, zoos, museums, interpretive programs at local or state level parks, youth organizations)
- ❑ Home-school
- ❑ Other

IF NEITHER PUBLIC NOR PRIVATE, SKIP TO END OF SURVEY

To allow us to compare your past, current, and future responses, please create a unique 8-digit ID number using the 2 digits of your birth month, the 2 digits of your birth day, and the last 4 digits of most often used phone number. If you were born on March 9 and your home phone is 410.719.1234, your ID number would be 03091234.

In the past 12 months, did you implement a Meaningful Watershed Educational Experience (MWEE) with your students? MWEEs are investigative, project-oriented, sustained activities that include one or more outdoor experiences, consider the watershed as a system, and are an integral part of a school instructional program.

- ❍ No
- ❍ Yes

IF NOT, SKIP TO END OF SURVEY

How many of your students participated in a MWEE during the most recent school year? (Please provide your best estimate, NOT a range)

About ___ students

On average, did students participate in a MWEE over the course of:

- ❍ One day
- ❍ 2-6 days
- ❍ One week
- ❍ 2-3 weeks
- ❍ One month
- ❍ 2-3 months
- ❍ 4-8 months
- ❍ A full school year (about 9 months)
- ❍ A full calendar year
- ❍ Multiple years

On average during the last school year, about how many hours did a typical student spend involved in MWEE activities? (check one)

- ❍ None
- ❍ 1-2 hours
- ❍ 3-5 hours
- ❍ 6-9 hours
- ❍ 10-16 hours
- ❍ 17-24 hours
- ❍ 25-40 hours
- ❍ more than 40 hours

On average during the last school year, about how many hours did a typical student spend outdoors during MWEE activities? (check one)

- ❍ None
- ❍ 1-2 hours
- ❍ 3-5 hours
- ❍ 6-9 hours
- ❍ 10-16 hours
- ❍ 17-24 hours
- ❍ 25-40 hours
- ❍ more than 40 hours

IF NONE, SKIP OUTDOOR BLOCK

START OUTDOOR BLOCK

Where did the outdoor component of your students' MWEEs occur?

	No	Yes
On school grounds	❍	❍
Near the school (1-5 minute walk)	❍	❍
Walkable from the school (more than 5 minutes)	❍	❍
In a location to which the students were bussed or driven	❍	❍

To what extent do you agree or disagree with the following:

	NA	Strongly disagree 1	2	3	4	5	6	Strongly agree 7
Overall, what I taught my students about watersheds in the classroom was closely integrated with students' outdoor learning experience(s).	❍	❍	❍	❍	❍	❍	❍	❍
My students' outdoor learning experiences were designed to help them understand what they had been introduced to during regular science class	❍	❍	❍	❍	❍	❍	❍	❍
My students' outdoor learning experiences were designed to reinforce what students learned during regular science class	❍	❍	❍	❍	❍	❍	❍	❍

BEFORE students participated in their outdoor learning experience:

	NA	Strongly disagree 1	2	3	4	5	6	Strongly agree 7
I provided them with detailed information about what they were going to do	❍	❍	❍	❍	❍	❍	❍	❍
I let students know what activities they were going to do	❍	❍	❍	❍	❍	❍	❍	❍
I spent a lot of time preparing students for what to expect	❍	❍	❍	❍	❍	❍	❍	❍
I introduced relevant science concepts	❍	❍	❍	❍	❍	❍	❍	❍

DURING the outdoor learning experience(s), my students:

	NA	Strongly disagree 1	2	3	4	5	6	Strongly agree 7
Conducted a one-time data or sample collection	❍	❍	❍	❍	❍	❍	❍	❍
Conducted water quality monitoring over a period of time	❍	❍	❍	❍	❍	❍	❍	❍

AFTER students participated in the outdoor learning experience(s):

	NA	Strongly disagree 1	2	3	4	5	6	Strongly agree 7
They discussed results based on their observations	❍	❍	❍	❍	❍	❍	❍	❍
They offered explanations for what they observed	❍	❍	❍	❍	❍	❍	❍	❍
They were expected to draw on what had been learned	❍	❍	❍	❍	❍	❍	❍	❍
I spent a lot of time to make sure the students had integrated what they had learned	❍	❍	❍	❍	❍	❍	❍	❍

END OF OUTDOOR BLOCK

Were your typical MWEEs focused only on science concepts, or on concepts from multiple disciplines (e.g., science, math, social studies, literature, art, music)?

- ❍ Only science concepts
- ❍ Concepts from multiple disciplines, including science
- ❍ Other

To what extent was the content of your students' MWEEs aligned with:

	NA	To no extent 1	2	3	4	To a great extent 5
school district education standards	❍	❍	❍	❍	❍	❍
state education standards	❍	❍	❍	❍	❍	❍
national education standards	❍	❍	❍	❍	❍	❍
regional environmental/natural resources management priorities	❍	❍	❍	❍	❍	❍

Did students participate in any of the following activities to protect and/or restore ocean, coastal, and/or Great Lakes watersheds during their MWEE? (please indicate no or yes for each activity)

	No	Yes
Created a schoolyard or backyard habitat	❍	❍
Conserved water at school to protect the local watershed	❍	❍
Installed a rain barrel at school	❍	❍
Reduced litter at the school	❍	❍
Gave presentation(s) about the local watershed (e.g., for school, other organizations)	❍	❍
Participated in an event to raise awareness about the importance of watersheds	❍	❍
Helped clean up or take care of a local stream or beach	❍	❍
Participated in a restoration activity (e.g., planting trees) to benefit watersheds	❍	❍
Told others about ways they can protect their local watersheds	❍	❍

Were any NOAA resources were used as part of MWEES for students?

❍ No
❍ Yes

DISPLAY THIS QUESTION IF ANSWER IS YES
Which NOAA resources were used as part of your typical student MWEE?

	Not sure	No	Yes
Information from NOAA research studies or reports	❍	❍	❍
Data collected by and accessible through NOAA, IF YES: Name the NOAA data source:	❍	❍	❍
NOAA expert (e.g., scientist, educator, Sea Grant staff member, policy expert)	❍	❍	❍
NOAA curricula and education programs, IF YES: Name the curricula or programs:	❍	❍	❍
NOAA labs or facilities, IF YES: Name the lab or facility:	❍	❍	❍
NOAA National Marine Sanctuary	❍	❍	❍
NOAA National Estuarine Research Reserve	❍	❍	❍

What education methods were used during your students' MWEEs? (select No or Yes for each method)

	No	Yes
Outdoor field trip (i.e., excursion to learn about natural history and ecology in the outdoors, may or may not include data collection)	❍	❍
Field work (i.e., scientific study carried out somewhere other than in a classroom/laboratory, includes data collection)	❍	❍
Place-based education (i.e., an interdisciplinary instructional strategy that uses the local environment and community as the context for teaching and learning)	❍	❍
Scientific-inquiry-based learning (i.e., an instructional strategy that gives students the opportunity to explore an idea or question. To arrive at an answer or to better understand the concept, students often collect and analyze data)	❍	❍
Issue investigation (i.e., an interdisciplinary instructional strategy that engages learners in investigating complex, real-world environmental issues and problem-solving as the context for teaching and learning)	❍	❍
Service learning (i.e., an instructional strategy that integrates meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities)	❍	❍

DISPLAY THIS QUESTION IF ANSWER YES TO SCIENTIFIC INQUIRY ABOVE
Which of the following steps did you engage students in...

	No	Yes
Formulating scientific questions they can answer using data	❍	❍
Making predictions or hypotheses	❍	❍
Collecting data or using existing data	❍	❍
Analyzing and interpreting data	❍	❍
Making conclusions and adjusting predictions/hypotheses	❍	❍
Developing presentations of their findings	❍	❍

Did your typical MWEE include any of the following learning objectives? Students will be able to:

	No	Yes
Define the term "watershed"	❍	❍
Identify their local watershed(s)	❍	❍
Identify how watersheds are connected to the ocean via streams, rivers, and human-made structures	❍	❍
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	❍	❍
Identify connections between human welfare and water flow and quality	❍	❍
Identify possible point and non-point sources of water pollution	❍	❍
Identify actions individuals can engage in to protect/restore water quality in watersheds	❍	❍

What is the most important benefit of MWEEs for your students?

As a result of participating in MWEEs, students:

	NA	Strongly disagree 1	2	3	4	5	6	Strongly agree 7
Know more about watersheds	❍	❍	❍	❍	❍	❍	❍	❍
Express greater caring and concern for their local watershed	❍	❍	❍	❍	❍	❍	❍	❍
Are more confident in their ability to protect and/or restore watersheds	❍	❍	❍	❍	❍	❍	❍	❍
Are more likely to act to protect or restore watersheds	❍	❍	❍	❍	❍	❍	❍	❍
Are better able to make informed decisions about how to protect or restore watersheds	❍	❍	❍	❍	❍	❍	❍	❍
Are better able to conduct scientific investigations	❍	❍	❍	❍	❍	❍	❍	❍
Are better able to understand the nature of scientific research	❍	❍	❍	❍	❍	❍	❍	❍
Are more likely to express an interest in pursuing science careers	❍	❍	❍	❍	❍	❍	❍	❍
Perform better in science	❍	❍	❍	❍	❍	❍	❍	❍
Perform better academically	❍	❍	❍	❍	❍	❍	❍	❍
Perform better on state standardized tests	❍	❍	❍	❍	❍	❍	❍	❍
Are more engaged in their science learning	❍	❍	❍	❍	❍	❍	❍	❍

As a result of participating in my typical MWEEs, students are more likely to _____ to protect and/or restore ocean, coastal, and/or Great Lakes watersheds.

	NA	Strongly disagree 1	3	4	5	6		
Create a schoolyard or backyard habitat	❍	❍	❍	❍	❍	❍	❍	❍
Conserve water at school to protect the local watershed	❍	❍	❍	❍	❍	❍	❍	❍
Install a rain barrel at school	❍	❍	❍	❍	❍	❍	❍	❍
Reduce litter at the school	❍	❍	❍	❍	❍	❍	❍	❍
Give presentation(s) about the local watershed (e.g., for school, other organizations)	❍	❍	❍	❍	❍	❍	❍	❍
Participate in an event to raise awareness about the importance of watersheds	❍	❍	❍	❍	❍	❍	❍	❍
Help clean up or take care of a local stream or beach	❍	❍	❍	❍	❍	❍	❍	❍
Participate in a restoration activity (e.g., planting trees) to benefit watersheds	❍	❍	❍	❍	❍	❍	❍	❍
Tell others about ways they can protect their local watersheds	❍	❍	❍	❍	❍	❍	❍	❍
Other (please describe)	❍	❍	❍	❍	❍	❍	❍	❍

What could be done by others to help you develop and implement improved MWEEs?

The questionnaire was ... (select one for each line)

	1	2	3	4	5	6	7
Difficult to complete:Easy to complete	❍	❍	❍	❍	❍	❍	❍
Not informative:Informative	❍	❍	❍	❍	❍	❍	❍
Long:Short	❍	❍	❍	❍	❍	❍	❍

How can this questionnaire be improved?

Do you have any final comments you would like to share about MWEEs?

Thank you for completing this survey! Please click on the Submit button below.

ATTACHMENT 5a: REQUEST FROM GRANTEES TO TEACHERS TO COMPLETE MWEE QUESTIONNAIRE
Email Request: Sent at the end of school year or grant period, whichever comes first

Dear [FirstName] [LastName],

You received this email because you participated in professional development provided by [PD organization] in the past. That professional development program was funded by the National Oceanic and Atmospheric Administration's Bay Watershed Education and Training program (NOAA B-WET).

Please provide [PD organization] and NOAA with feedback on your experiences teaching students about water bodies and watersheds, and on your resource and professional development needs. The questionnaire will take about 20-30 minutes to complete.

Click on this link to begin: [SurveyLink]

Please be completely honest in your responses. YOUR RESPONSES WILL BE ANONYMOUS. None of the data you provide will be associated with your name or other identifying information. Your responses are very important and will be used to improve future NOAA-funded professional development programs.

Thank you for taking the time to complete this questionnaire! If you have any questions or concerns, please contact either of the contacts below.

NAME, TITLE
PD ORGANIZATION
CONTACT INFORMATION

Bronwen Rice, NOAA B-WET National Coordinator
NOAA Office of Education
Bronwen.Rice@noaa.gov
202.482.6797

OMB Control Number: 0648-xxxx Expires: xx/xx/20xx

ATTACHMENT 6: NOAA B-WET TEACHER MWEE SURVEY - NONRESPONSE

Last year you participated in professional development (PD) offered by [MWEE PD provider organization] and funded by the National Oceanic and Atmospheric Administration's Bay Watershed Education and Training program (NOAA B-WET). We would like to get your answers to a few questions about implementing Meaningful Watershed Educational Experiences (MWEEs) with your students, if you did so since the PD.

It will take about 5 minutes to complete this survey.

Your responses will be entered anonymously, will not be associated with you as an individual, and will be aggregated with other teachers' responses. NOAA B-WET and B-WET-funded organizations will use the data you and other teachers provide to improve MWEE PD and student programs.

Thank you.

If you have questions about this survey, please contact Bronwen Rice, NOAA B-WET National Coordinator, Bronwen.Rice@noaa.gov

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Are you currently a PreK-12 teacher or educator?
- ❍ No
- ❍ Yes

IF NO, SKIP TO END OF SURVEY

In what setting do you teach?
- ❑ Public school
- ❑ Private school
- ❑ Non-formal education (e.g., environmental centers, zoos, museums, interpretive programs at local or state level parks, youth organizations)
- ❑ Home-school
- ❑ Other

IF NEITHER PUBLIC NOR PRIVATE, SKIP TO END OF SURVEY

In the past 12 months, did you implement a Meaningful Watershed Educational Experience (MWEE) with your students? MWEEs are investigative, project-oriented, sustained activities that include one or more outdoor experiences, consider the watershed as a system, and are an integral part of a school instructional program.

- ❍ No
- ❍ Not sure
- ❍ Yes

IF NO OR NOT SURE, SKIP TO END OF SURVEY

How many of your students participated in a MWEE during the most recent school year? (Please provide your best estimate, NOT a range)

About ___ students

On average, did students participate in a MWEE over the course of:

- ❍ One day
- ❍ 2-6 days
- ❍ One week
- ❍ 2-3 weeks
- ❍ One month
- ❍ 2-3 months
- ❍ 4-8 months
- ❍ A full school year (about 9 months)
- ❍ A full calendar year
- ❍ Multiple years

On average during the last school year, about how many hours did a typical student spend involved in MWEE activities? (check one)

- ❍ None
- ❍ 1-2 hours
- ❍ 3-5 hours
- ❍ 6-9 hours
- ❍ 10-16 hours
- ❍ 17-24 hours
- ❍ 25-40 hours
- ❍ more than 40 hours

On average during the last school year, about how many hours did a typical student spend outdoors during MWEE activities? (check one)

- ❍ None
- ❍ 1-2 hours
- ❍ 3-5 hours
- ❍ 6-9 hours
- ❍ 10-16 hours
- ❍ 17-24 hours
- ❍ 25-40 hours
- ❍ more than 40 hours

As a result of participating in MWEEs, students:

	NA	Strongly disagree 1	2	3	4	5	6	Strongly agree 7
Know more about watersheds	❍	❍	❍	❍	❍	❍	❍	❍
Express greater caring and concern for their local watershed	❍	❍	❍	❍	❍	❍	❍	❍
Are more confident in their ability to protect and/or restore watersheds	❍	❍	❍	❍	❍	❍	❍	❍
Are more likely to act to protect or restore watersheds	❍	❍	❍	❍	❍	❍	❍	❍
Are better able to make informed decisions about how to protect or restore watersheds	❍	❍	❍	❍	❍	❍	❍	❍
Are better able to conduct scientific investigations	❍	❍	❍	❍	❍	❍	❍	❍
Are better able to understand the nature of scientific research	❍	❍	❍	❍	❍	❍	❍	❍
Are more likely to express an interest in pursuing science careers	❍	❍	❍	❍	❍	❍	❍	❍
Perform better in science	❍	❍	❍	❍	❍	❍	❍	❍
Perform better academically	❍	❍	❍	❍	❍	❍	❍	❍
Perform better on state standardized tests	❍	❍	❍	❍	❍	❍	❍	❍
Are more engaged in their science learning	❍	❍	❍	❍	❍	❍	❍	❍

Thank you for completing this survey! Please click on the Submit button below.

ATTACHMENT 6a: REQUEST FROM GRANTEES TO TEACHERS TO COMPLETE MWEE NONRESPONSE QUESTIONNAIRE
Email Request: Sent to nonrespondents to Teacher MWEE Questionnaire

We did not receive a response from you regarding the professional development provided by [PD organization] and funded by the National Oceanic and Atmospheric Administration's Bay Watershed Education and Training program (NOAA B-WET).

We recognize this is a busy time of year, but we hope that you will assist us with the evaluation of our programs by completing this very short follow-up questionnaire. **It should take you about 5 minutes to complete.**

The questionnaire asks a few questions about your experiences teaching students about water bodies and watersheds, and on your resource and professional development needs.

Click on this link to begin: [SurveyLink]

Please be completely honest in your responses. YOUR RESPONSES WILL BE ANONYMOUS. None of the data you provide will be associated with your name or other identifying information. Your responses are very important and will be used to improve future NOAA-funded professional development programs.

Thank you for taking the time to complete this questionnaire! If you have any questions or concerns, please contact either of the contacts below.

NAME, TITLE
PD ORGANIZATION
CONTACT INFORMATION

and

Bronwen Rice, NOAA B-WET National Coordinator
NOAA Office of Education
Bronwen.Rice@noaa.gov
202.482.6797

OMB Control Number: 0648-xxxx Expires: xx/xx/20xx

determination. In addition, we are making available to the ITC all non-privileged and non-proprietary information relating to this investigation. We will allow the ITC access to all privileged and business proprietary information in our files, provided the ITC confirms that it will not disclose such information, either publicly or under an administrative protective order, without the written consent of the Assistant Secretary for Import Administration. In accordance with section 705(b)(2)(B) of the Act, if our final determination is affirmative, the ITC will make its final determination within 45 days after the Department makes its final determination.

Verification

In accordance with section 782(i)(1) of the Act, we will verify the information submitted by the GOK and the respondents prior to making our final determination.

Disclosure and Public Comment

In accordance with 19 CFR 351.224(b), we will disclose to the parties the calculations for this preliminary determination within five days of its announcement. We will notify parties of the schedule for submitting case briefs and rebuttal briefs, in accordance with 19 CFR 351.309(c) and 19 CFR 351.309(d)(1), respectively. A list of authorities relied upon, a table of contents, and an executive summary of issues should accompany any briefs submitted to the Department. Executive summaries should be limited to five pages total, including footnotes. Section 774 of the Act provides that the Department will hold a public hearing to afford interested parties an opportunity to discuss the arguments raised in case or rebuttal briefs, provided that such a hearing is requested by an interested party. Interested parties who wish to request a hearing, or to participate if one is requested, must submit a written request to the Assistant Secretary for Import Administration, U.S. Department of Commerce, Room 1870, within 30 days of the publication of this notice, pursuant to 19 CFR 351.310(c). Requests should contain: (1) The party's name, address, and telephone number; (2) the number of participants; and (3) a list of the issues to be discussed. If a request for a hearing is made in this investigation, we intend to hold the hearing two days after the deadline for submission of the rebuttal briefs, pursuant to 19 CFR 351.310(d). Any such hearing will be held at the U.S. Department of Commerce, 14th Street and Constitution Avenue NW, Washington, DC 20230. Parties should confirm, by telephone, the date, time, and place of the hearing 48 hours before the scheduled time.

This determination is issued and published pursuant to sections 703(f) and 777(i) of the Act.

Dated: May 29, 2012.

Paul Piquado,

Assistant Secretary for Import Administration.

[FR Doc. 2012–13562 Filed 6–4–12; 8:45 am]

BILLING CODE 3510–DS–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

Proposed Information Collection; Comment Request; Bay Watershed Education and Training Program National Evaluation System

AGENCY: National Oceanic and Atmospheric Administration (NOAA).

ACTION: Notice.

SUMMARY: The Department of Commerce, as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to take this opportunity to comment on proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995.

DATES: Written comments must be submitted on or before August 6, 2012.

ADDRESSES: Direct all written comments to Jennifer Jessup, Departmental Paperwork Clearance Officer, Department of Commerce, Room 6616, 14th and Constitution Avenue NW., Washington, DC 20230 (or via the Internet at *JJessup@doc.gov).*

FOR FURTHER INFORMATION CONTACT: Requests for additional information or copies of the information collection instrument and instructions should be directed to Bronwen Rice, NOAA Office of Education, (202) 482–6797 or *Bronwen.Rice@noaa.gov.*

SUPPLEMENTARY INFORMATION:

I. Abstract

This request is for a new information collection.

The NOAA Office of Education's Bay Watershed Education and Training (B–WET) program seeks to contribute to NOAA's mission by supporting education efforts to create an environmentally literate citizenry with the knowledge, attitudes, and skills needed to protect watersheds and related ocean, coastal, and Great Lakes ecosystems. B–WET currently funds projects in seven regions (California, Chesapeake Bay, Great Lakes, Gulf of Mexico, Hawaii, New England, and the Pacific Northwest). B–WET proposes to create an across-region, internal evaluation system to provide ongoing feedback on program implementation and outcomes to ensure maximum quality and efficiency of the B–WET program. The evaluation system will be sustained by B–WET staff with occasional assistance from an outside contractor.

B–WET awardees and the awardees' professional development teacher-participants will be asked to voluntarily complete an online survey form to provide evaluation data. One individual from each awardee organization will be asked to complete a form once per year of the award, and the teacher-participants will be asked to complete one form at the end of their professional development program. In addition, B–WET seeks approval of an item bank that awardees can choose to use to construct surveys for youth participants (ages 10–17) in B–WET-funded programs.

II. Method of Collection

Respondents will submit their information electronically on Web-based survey forms.

III. Data

OMB Control Number: None.

Form Number: None.

Type of Review: Regular submission (new information collection).

Affected Public: Not-for-profit institutions; individuals or households.

Estimated Number of Respondents: If NOAA B–WET is fully funded, approximately 125 not-for-profit awardees and 4,000 teachers will be invited to respond each year.

Estimated Time per Response: Awardee-respondents will complete an online survey in 30 minutes and teacher-respondents will complete an online survey in 20 minutes.

Estimated Total Annual Burden Hours: 1,396.

Estimated Total Annual Cost to Public: $0 in recordkeeping/reporting costs.

IV. Request for Comments

Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden (including hours and cost) of the

proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology.

Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval of this information collection; they also will become a matter of public record.

Dated: May 31, 2012.

Gwellnar Banks,

Management Analyst, Office of the Chief Information Officer.

[FR Doc. 2012–13561 Filed 6–4–12; 8:45 am]

BILLING CODE 3510–12–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

Western Pacific Fishery Management Council; Public Meetings

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of public meetings and hearings.

SUMMARY: The Western Pacific Fishery Management Council (Council) will hold meetings of its 110th Scientific and Statistical Committee (SSC), Joint Advisory Panel, Pelagic and International Standing Committee, Executive and Budget Standing Committee, and 154th Council to take actions on fishery management issues in the Western Pacific Region.

DATES: The meetings will be held June 19 through June 28, 2012. See **SUPPLEMENTARY INFORMATION** for specific dates, times and agendas of the meetings. All meetings will be held in Honolulu.

ADDRESSES: The 110th SSC, Pelagic and International Standing Committee, Executive and Budget Standing Committee and Joint Advisory Panel meetings will be held at the Council office, 1164 Bishop Street, Honolulu, HI 96813; telephone: (808) 522–8220. The 154th Council meeting will be held at the Laniakea YWCA–Fuller Hall, 1040 Richards Street, Honolulu, HI 96813; telephone: (808) 538–7061. The Fishers Forum will be held at the Harbor View Center, 1129 North Nimitz Hwy (Pier 38), Honolulu, HI; telephone: (808) 983–1200.

FOR FURTHER INFORMATION CONTACT: Kitty M. Simonds, Executive Director; telephone: (808) 522–8220.

SUPPLEMENTARY INFORMATION: The SSC will meet on June 19–21, 2012, between 8:30 a.m. and 5 p.m.; the Council's Joint Advisory Panel will meet on June 23, 2012 and June 25, 2012 between 9 a.m. and 5 p.m.; Pelagic and International Standing Committee will meet on June 25, 2012, from 10 a.m. to 12 noon; Executive and Budget Standing Committee will meet on June 25, 2012, between 12:30 p.m. and 3 p.m.; the 154th Council will meet on June 26–28, 2012. The 154th Council meeting will be held between 9 a.m. and 5:30 p.m. on June 26, 2012, between 8:30 a.m. and 5:30 p.m. on June 27, 2012, and between 8:30 a.m. and 4 p.m. on June 28, 2012. A Fishers Forum will be held in association with the 154th Council Meeting between 6 p.m. and 9 p.m. on Wednesday June 27, 2012.

In addition to the agenda items listed here, the SSC and Council will hear recommendations from Council advisory groups. Public comment periods will be provided throughout the agendas. The order in which agenda items are addressed may change. The meetings will run as late as necessary to complete scheduled business.

Schedule and Agenda for 110th SSC Meeting

8:30 a.m.–5 p.m., Tuesday, June 19, 2012

1. Introductions
2. Approval of Draft Agenda and Assignment of Rapporteurs
3. Status of the 109th SSC Meeting Recommendations
4. Report from the National Marine Fisheries Service Pacific Islands Fisheries Science Center Director
5. Program Planning
   - A. NMFS Science Plan
   - B. Cooperative Research Priorities
   - C. Fishery Data Collection Improvement Proposal
   - D. Territorial Essential Fish Habitat/ Habitat Areas of Particular Concern (EFH/HAPC) review
   - E. Archipelagic Plan Team Report and Recommendations
   - F. National Bycatch Report update
   - G. Status of Stocks Report
   - H. Potential Revision of National Standard 1 Guidelines
   - I. Hawaii Plan Team Meeting Report and Recommendations
   - J. Council Coordination Committee (CCC) Meeting Report
   - K. Data Principles Meeting
   - L. Public Comment
   - M. SSC Discussion and Recommendations
6. Insular Fisheries
   - A. Territory Bottomfish Stock Assessments
   - B. Bottomfish Restricted Fishing Area (BRFA) Review
   - C. Acoustic Survey of Maui Bottomfish
   - D. Action Items
   - 1. Setting Acceptable Biological Catch (ABC) for Main Hawaiian Islands (MHI) Deep Seven Bottomfish
   - 2. Hawaii Bottomfish EFH and HAPC
   - E. Hawaii Plan Team Report
   - F. Public Comment
   - G. SSC Discussion and Recommendations

8:30 a.m.–5 p.m., Wednesday, June 20, 2012

7. Pelagic Fisheries
   - A. Action Item
   - 1. Amendment Options for Marianas Purse Seine Area Closure
   - B. American Samoa and Hawaii Longline Quarterly Reports
   - C. Post-Release Mortality of Marlins and Other Pelagic Fish
   - 1. Methods to Estimate Post-Release Mortality
   - 2. Post-Release Mortality in Striped and Blue Marlin
   - D. International Fisheries Meetings
   - 1. Eighth Regular Session of the Western and Central Pacific Fisheries Commission (WCPFC 8)
   - 2. Inter-American Tropical Tuna Commission (IATTC) General Advisory Committee (GAC) and Scientific Sub-committee (SAC) meetings
   - E. Pelagic Plan Team Report
   - F. Public Comment
   - G. SSC Discussion and Recommendations
8. Protected Species
   - A. Update on Endangered Species Act (ESA) and Marine Mammal Protection Act (MMPA) Actions
   - 1. Report on NMFS Pacific Islands Regional Office (PIRO) Actions
   - 2. CCC Jeopardy Panel
   - B. Status Review Report of 82 Candidate Coral Species Petitioned Under the ESA
   - C. Marker Fish and Weak Hooks
   - D. Sea Turtle Advisory Committee Report and Recommendations
   - E. Public Comment
   - F. SSC Discussion and Recommendations

8:30 a.m.–5 p.m. Thursday, June 21, 2012

9. Other Business
   - A. 111th SSC Meeting
10. Summary of SSC Recommendations to the Council