



# **EFFECTIVENESS MONITORING INSERT (Question R16 in the Watershed Restoration Grant Application)**

Revised  
**October 2009**

OWEB's Mission  
To help create and maintain healthy watersheds and natural habitats  
that support thriving communities and strong economies.

## **GENERAL INSTRUCTIONS**

1. You are requesting more than \$3,500 in OWEB funds to support Effectiveness Monitoring activities.
2. Please read the "Instructions for Completing Effectiveness Monitoring Insert" before beginning your application.
3. Use 8½" x 11" single-sided, unstapled pages. Avoid color and detail that will not photocopy clearly.
4. Complete the sections, answering Section III on separate 8½" x 11" **single-sided**, single-spaced, **unstapled** pages. All pages should be numbered. Complete any required forms and attachments.
5. The Effectiveness Monitoring Insert **must be submitted** along with the Restoration Grant Application it supports.

A down-loadable electronic application form and instructions may be obtained from  
[www.Oregon.gov/OWEB](http://www.Oregon.gov/OWEB)

## **SUBMISSION OF GRANT APPLICATIONS**

Grant applications may be submitted to OWEB by hard copy via mail or delivery to our Salem office.  
No faxes or e-mails will be accepted. To learn about the next deadline and review date, visit our  
website at the address shown above.

### **OREGON WATERSHED ENHANCEMENT BOARD**

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## Section I

### EFFECTIVENESS MONITORING PROJECT INFORMATION

Complete questions 1 - 4.

1. Is the project a part of an existing monitoring plan/strategy for the watershed?

Yes       No

If Yes, provide name and date of the plan and reference sites(s) or elements of the plan related to the project and describe how the effectiveness monitoring supports an existing monitoring plan or strategy for monitoring.

2. Report the stream miles and/or acres that will be monitored or assessed under this monitoring application.

3. Identify the parameters that will be measured. Check all that apply.

<input type="checkbox"/> Adult fish presence/absence/abundance/distribution survey(s)	<input type="checkbox"/> Riparian vegetation
<input type="checkbox"/> Juvenile fish presence/absence/abundance/distribution survey(s)	<input type="checkbox"/> Spawning surveys
<input type="checkbox"/> Instream habitat surveys	<input type="checkbox"/> Upland vegetation
<input type="checkbox"/> Macroinvertebrates	<input type="checkbox"/> Water quality
<input type="checkbox"/> Noxious weeds	<input type="checkbox"/> Water quantity
<input type="checkbox"/> Other:	

If you checked Water Quality above, exactly which parameters will you be monitoring? Check all that apply.

<input type="checkbox"/> Bacteria	<input type="checkbox"/> pH	<input type="checkbox"/> Temperature
<input type="checkbox"/> Dissolved Oxygen	<input type="checkbox"/> Pesticides	<input type="checkbox"/> Toxics
<input type="checkbox"/> Nitrates	<input type="checkbox"/> Phosphorus	<input type="checkbox"/> Turbidity
<input type="checkbox"/> Heavy Metals (name):	<input type="checkbox"/> Nutrients (name):	
<input type="checkbox"/> Other (explain):		

If you checked Riparian or Upland Vegetation above, exactly which parameters will you be monitoring? Check all that apply.

<input type="checkbox"/> Canopy cover	<input type="checkbox"/> Invasive species presence/absence	<input type="checkbox"/> Plant survival
<input type="checkbox"/> Percent cover	<input type="checkbox"/> Other (explain):	

4. What is the format in which the data will be stored? Check all that apply.

<input type="checkbox"/> Spreadsheet	<input type="checkbox"/> Database	<input type="checkbox"/> GIS layers
<input type="checkbox"/> Other (name):		

## Section II

# EFFECTIVENESS MONITORING ACTIVITY INFORMATION

These essay questions and their answers are designed to step you and reviewers through a logical process from understanding and identifying the problem to measuring for success. **Refer to the Instructions for clarification and helpful examples.**

You may use the application form to respond to the questions, using additional sheets of paper as necessary **OR** answer the questions on separate pages. Be sure to include the question numbers and text of the questions before you begin typing your answers to assist the reviewers in evaluating your application. Please use 8½" x 11" paper. All pages must be single spaced, single-sided, numbered and unbound except for sets of maps/photos/designs (see Page 3 of the application instructions). Use a 12 pt type size to answer the questions and a 10-pt type size for the tables. Use bullets where appropriate. Use **bold face** and *italics* for emphasis only. If the project involves multiple sites, be specific for each.

- EM1** What are the project's Effectiveness Monitoring objectives? The Effectiveness Monitoring activities must be directly related to your proposed restoration project. Tie the Effectiveness Monitoring objectives to the watershed restoration project objectives. Provide a specific hypothesis or monitoring question.
- EM2** What are you proposing to do? Supply sufficient detail to match the Effectiveness Monitoring component's complexity and technical difficulty so that its technical viability can be evaluated.
- EM3** Describe in detail and provide the citation for the protocols that will be used.
- EM4** Describe in detail the sampling design used to choose your sampling locations.
- EM5** Select your monitoring design from the list below and place a check mark next to it.
- Before After Control Impact - A control site is evaluated over the same time period as the treatment site, thus the study is replicated in both time and space.
- Before After - Data are collected both before and after treatment, so the study is replicated in time, not space.
- Stratified Random - Dividing the population to be sampled into two or more subgroups before choosing what will be sampled.
- Random Allocation of Treatment - Sites are randomly selected and each site has an equal chance of being selected.
- Available Sites - Sites are being sampled solely based on what is available to be sampled.

\_\_\_ Census - All units are sampled

\_\_\_ Other: Explain.

**EM6** Describe how the information to be gathered augments existing available data.

**EM7** Describe the quality control/quality assurance program for the project and who will be collecting your data.

**EM8** What is the proposed schedule for the Effectiveness Monitoring activities? Include information on the sampling frequency and the duration of the monitoring proposed.

**EM9** Describe the data analysis process. Include the timeline for analysis, **who will be responsible for the data analysis and report writing**, who will be doing the analysis, who will review it (peer reviewers), where it will be stored, who will receive the information and the format to be used.

**EM10** If activities will take place on other lands not identified under the restoration application (cite section/question #). Provide a detailed description of project location, including location(s) where monitoring will occur. Also, provide geographic coordinates and or river miles whenever possible.

**If your restoration project is funded,  
you will be required to submit any water quality data to  
DEQ's Volunteer Monitoring database  
<http://www.deq.state.or.us/lab/wqm/volmonitoring.htm>  
and any fish habitat and distribution data to  
ODFW's Natural Resource Information Management Program  
<https://nrimp.dfw.state.or.us/DataClearinghouse/>**

**Section III**  
**EFFECTIVENESS MONITORING BUDGET**  
**PLACEHOLDER**

**An Excel budget is now available and will calculate your totals and round the totals to the nearest dollar. The Word budget document without the calculation feature is also available. Download the Excel or Word budget document at:**

**[www.oregon.gov/OWEB/GRANTS/grant\\_app\\_materials.shtml#Forms\\_Materials\\_by\\_Type](http://www.oregon.gov/OWEB/GRANTS/grant_app_materials.shtml#Forms_Materials_by_Type)**

- **Complete the budget**
- **Check your budget numbers**
- **Make sure the match for Effectiveness Monitoring is included on your budget page**
- **Print a copy of the budget**
- **Insert the budget copy here**
- **Remove this placeholder page**

## EFFECTIVENESS MONITORING INSERT CHECKLIST

**Instructions:** Use this form as an important cross-check to ensure that your Effectiveness Monitoring Insert for the Watershed Restoration Grant Application is complete. An incomplete application will jeopardize your application's review. **DO NOT RETURN THIS CHECKLIST WITH YOUR APPLICATION.**

### General

- I am requesting more than \$3,500 in funds from OWEB for Effectiveness Monitoring.
- The Effectiveness Monitoring Insert is on 8 ½ x 11" paper.
- The Effectiveness Monitoring Insert is single-sided and single-spaced.
- The Effectiveness Monitoring Insert attachments (if there are any) are not stapled or bound (see check box immediately below).
- Where color photo(s) or map(s) are provided, I have included 20 copies. If there were several maps, photos or designs, etc., I have taken one copy of each map, photo or design and assembled them to be one complete set, and stapled them together (no other documents or attachments are stapled). I have 20 sets for distribution to OWEB reviewers.
- A copy of the completed Sections I, II and III have replaced the Question R16 placeholder in the Watershed Restoration Grant Application.
- I have filled out the EM Dollar Value Column on the Match Funding Form (Attachment A) in the Watershed Restoration Grant Application.

### Section I – Effectiveness Monitoring Project Information

- All questions in this section have been answered.

### Section II – Effectiveness Monitoring Activity Information

- All questions in this section have been answered.

### Section III – Budget Page

- I have read the application instructions for completing the budget page.
- I have downloaded the Excel or Word budget, completed and checked my calculations.
- Columns A and B have been completed, where appropriate.
- Fiscal Administration does not exceed 10% of the OWEB subtotal (subtotal row, Column E).
- The totals shown in the last row (BUDGET TOTAL) add up and are accurately reflected in Section I of the application.
- I have copied the budget page, inserted it as Section III in the Effectiveness Monitoring Insert and removed the placeholder page.