

Reporting BMPs and Load Reductions For Section 319 And Matching Centennial Projects

Water Quality Program
WA Department of Ecology

Why do we have to report?

- EPA requirement for all 319 grant recipients.
- Measure progress on achieving project milestones.
- Demonstrate improvements to water quality by reporting on nonpoint source pollutant load reductions.
- Ecology enters data from the forms into the EPA Grants Reporting and Tracking System Database (GRTS).

Why is reporting required for Centennial Projects?

- Ecology uses Centennial funded projects to meet EPA's 319 match requirements.
- EPA requires the same administrative conditions for matching projects.
- EPA wants to know how state funds are leveraged for nonpoint pollution reduction.
- Therefore, matching projects need to meet the 319 reporting requirements.

Load Reduction Reporting

- Use Ecology's Load Reduction Reporting Form to report Best Management Practices (BMPs) and pollutant load reductions.
- Reporting cycle: January-December
 - **Due annually on Jan 15**
- At project closeout, report any new BMPs installed (since last report period) and load reductions.

About Reporting BMPs

- Report all BMPs paid for by the grant, implemented in the recent calendar year.
- Pollutant load reductions are modeled using EPA's Spreadsheet Tool for Estimating Pollutant Loads (STEPL).
- Not all BMP types are found in STEPL, so they will not have associated load reduction estimates.
 - Report load reductions if you used another model or have real data.
 - Report the BMP regardless of load reduction capability.

Reporting BMPs

- The following BMPs are in the STEPL model and must have load reduction estimates reported:
 - Filter strips
 - Reduced Tillage Systems (Direct Seed)
 - Streambank stabilization and fencing
 - **Riparian buffer plantings should be reported as such
 - Waste Management Systems
 - Waste Storage Facilities
 - Streambank stabilization

Reporting BMPs

BMPs to report with no STEPL load reduction estimates:

- Comprehensive Nutrient Management Plan (CNMP) (units)
- Constructed Wetland (area)
- Heavy Use Area Protection (area and units)
- Invasive Species/Noxious Weed Control (length and area)
- Nutrient Management (area)
- Pet Waste Management (units)
- Residue and Tillage Management, No-Till/ Direct Seed (area)
- Spring Development (units)
- Stream Crossing – indicate type such as bridge, hardened crossing, etc. (units)
- Stream Habitat Improvement and Management (length and area)
- Tank/Trough (units)
- Tree/Shrub Establishment (length and area, stems optional)
- Watering Facility (units)
- Wetland Enhancement (area)
- Wetland Restoration (area)
- Windbreak/Shelterbelt Establishment (for livestock protection) (length)

Reporting Highlights

Report load reductions on a 12-digit HUC watershed scale.

Options to determine 12-digit HUCs:

- USGS National Hydrography Dataset (NHD)
- Google Earth
- ArcReader
- ArcGIS

Detailed instructions can be found on the web at

<http://www.ecy.wa.gov/programs/wq/funding/FundPrgms/NPres.html>

12-Digit HUCs: USGS NHD

- <http://viewer.nationalmap.gov/viewer/nhd.html?p=nhd>
- Select Hydrography (NHD) layer.
- Use Search field or just zoom in to project area.
- 12-digit HUCs appear when zoomed in enough (starts at 8-digit then to 12-digit).

USGS NHD Screen Shot

The screenshot displays the USGS National Hydrography Dataset (NHD) web interface. The top navigation bar includes the USGS logo, "The National Map NHD", a search bar, and options for "Download Data" and "Help". Below the navigation bar, there are tabs for "Overlays", "Selection", and "Cart", and a "Content" section with a "Reorder Layers" button. The main map area shows a shaded relief map of the United States with hydrographic features (rivers, streams, lakes) and watershed boundaries (HUC2-01 to HUC2-18). The map is overlaid with a grid of watershed units. The interface includes a toolbar with various map navigation tools and a "Base Data Layers" panel on the left. The "Base Data Layers" panel lists various data layers, including "Hydrography (NHD)", "US Topo Maps", "Geographic Names (GNIS)", "Structures", "Transportation", "Governmental Unit Boundaries", "Map Indices", "Land Cover (NLCD) 2001", "Land Cover (NLCD) 2006", "Contours - Small Scale", "Scanned Topo Maps", and "Reference Polygons". The "Hydrography (NHD)" layer is selected. The "Base Data Layers" panel also includes "Other Featured Data", "User Added Content", and "Favorites". The map area includes a scale bar (0 to 600 miles) and a cursor position display: "Cursor Position 24° 09' 10.547" N 110° 38' 46.409" W Scale 1:36,978,595". The bottom of the interface features a footer with "FAQ | Accessibility | FOIA | Privacy | Policies and Notices".

USGS The National Map NHD

Search [?] Download Data Clear Show Toolbox

Standard Advanced Annotation Active Tool: None (Map Navigation) [?]

Overlays Selection Cart

Content Reorder Layers

Base Data Layers

- Hydrography (NHD)
- US Topo Maps
- Geographic Names (GNIS)
- Structures
- Transportation
- Governmental Unit Boundaries
- Map Indices
- Land Cover (NLCD) 2001
- Land Cover (NLCD) 2006
- Contours - Small Scale
- Scanned Topo Maps
- Reference Polygons

NHD Base Base Map Imagery Blank

Shaded Relief

Seattle Portland Denver Fort Worth Jacksonville

HUC2-01 HUC2-02 HUC2-03 HUC2-04 HUC2-05 HUC2-06 HUC2-07 HUC2-08 HUC2-09 HUC2-10 HUC2-11 HUC2-12 HUC2-13 HUC2-14 HUC2-15 HUC2-16 HUC2-17 HUC2-18

San Diego

0 300 600mi

Cursor Position 24° 09' 10.547" N 110° 38' 46.409" W Scale 1:36,978,595

The National Map

FAQ | Accessibility | FOIA | Privacy | Policies and Notices

Watershed and Pollutant Information

- Required pollutants (when applicable): **phosphorus** (lbs/yr), **nitrogen** (lbs/yr), **sediment** (tons/yr).
 - These are estimated by the STEPL model, also BOD.
- Others: dissolved oxygen, exotic species, fecal coliform, herbicides, inorganics, temperature, other.
 - You can report measured or modeled reductions on other pollutants if you have them.
- Include WQ Assessment listing ID Number(s) from 303(d) List, if applicable.

Best Management Practices

- List each BMP installed individually and include:
 - Location in latitude and longitude
 - BMP type
 - Length in feet
 - Area in acres or square feet
 - Other units (if applicable)
 - Cost of BMP (Total Eligible Cost)
- Report on all BMPs installed even if there are no load reductions associated with them.

Legacy Projects (Outside of EAGL)

Microsoft Word Version of Load Reduction Reporting Form

Word Version of Load Reduction Reporting Form

- Make sure you use the most updated Word version that has been posted to the web
<http://www.ecy.wa.gov/biblio/ecy070285.html>
- Submit to Financial Manager and Project Manager as Word version via email.
- Additional information can be attached to the email when the form is submitted.

Completing the Form

Load Reduction Information

What model was used?

- STEPL is not the required model, but it is the provided model.
- If the reductions were calculated using a different model or from real monitoring data, please indicate on the form and provide an explanation.

Load Reduction Information

What type of Load Reduction Model did you use to calculate your reduction estimates? Typically the EPA's STEPL model found at [http://it.tetrattech-ffx.com/steplweb/models\\$docs.htm](http://it.tetrattech-ffx.com/steplweb/models$docs.htm) is used for Load Reduction estimates of nitrogen, phosphorous, and sediment.

Watershed 5
Watershed 6
Watershed 7
Watershed 8

- 1.
- 2.
- 3.

	Watershed 5	Watershed 6	Watershed 7	Watershed 8
12-Digit HUC(s):	█	█	█	█
Pollutant Type:	--Pollutant Choices-- Other? █	--Pollutant Choices-- Other? █	--Pollutant Choices-- Other? █	--Pollutant Choices-- Other? █
Reduction:	Reduction █	Reduction █	Reduction █	Reduction █
Pollutant Type:	--Pollutant Choices-- Other? █	--Pollutant Choices-- Other? █	--Pollutant Choices-- Other? █	--Pollutant Choices-- Other? █
Reduction:	Reduction █	Reduction █	Reduction █	Reduction █
Pollutant Type:	--Pollutant Choices-- Other? █	--Pollutant Choices-- Other? █	--Pollutant Choices-- Other? █	--Pollutant Choices-- Other? █
Reduction:	Reduction █	Reduction █	Reduction █	Reduction █
Pollutant Type:	--Pollutant Choices-- Other? █	--Pollutant Choices-- Other? █	--Pollutant Choices-- Other? █	--Pollutant Choices-- Other? █
Reduction:	Reduction █	Reduction █	Reduction █	Reduction █
WQ Assessment listing ID Number(s):	█	█	█	█

*Additional pages may be added if there are not enough columns provided to report load reductions for all affected watersheds.

BMPs Installed Page

CLEAN WATER ACT SECTION 319 GRANT Load Reductions Reporting Sheet

Best Management Practices Installed

Please complete the boxes below for each individual BMP installed in the past calendar year that was funded by this grant/contract. Each practice installed should be listed individually (by location/project site). If multiple practices were installed at a single project location, list each practice separately.

- Enter latitude and longitude of project site in decimals (example 47.323036, -121.871338).
- Enter the BMP Type using the list provided at the end of this document. If a BMP is not in the list, please specify the BMP type in the table.
- Provide the *length (in feet)* and *area (in acres or square feet)* that the BMP covers as well as any other measurements you would like to indicate.
- Enter the BMP cost for the practice that was funded by this grant/contract.

Attach additional sheets if needed.

	Latitude and Longitude	Best Management Practices Type (from list below)	Length in ft (required)	Area in acres or ft ² (required)	Other : specify amt and units	BMP Cost
1						
2						
3						
4						
5						
6						

Eligible BMP List

CLEAN WATER ACT SECTION 319 GRANT Load Reductions Reporting Sheet

Best Management Practices List

Definitions for most BMPs can be found at: <http://www.nrcs.usda.gov/technical/standards/nhcp.html>.

Description	Code
Channel Stabilization (length and area)	584
Channel Bank Vegetation (length and area)	322
Composting Facility (units)	317
Comprehensive Nutrient Management Plan (CNMP) (units)	100
Constructed Wetland (area)	656
Fence (length)	382
Filter Strip (length and area)	393
Heavy Use Area Protection (area and units)	561
Invasive Species/Noxious Weed Control (length and area)	
Natural Channel Restoration	
Nutrient Management (area)	590
Pet Waste Management (area and units)	
Residue and Tillage Management, No-Till/ Direct Seed (area)	329
Riparian Buffers - Vegetative (length and area)	
Riparian Forest Buffer (length and area)	391
Riparian Herbaceous Cover (length and area)	390
Roof Runoff Structure (units)	558
Spring Development (units)	574
Stream Crossing – indicate type such as bridge, hardened crossing, etc. (units)	578
Stream Habitat Improvement and Management (length and area)	395
Streambank & Shoreline Protection (length and area)	580
Tank/Trough (units)	
Tree/Shrub Establishment (length and area, stems optional)	612
Waste Facility Cover (units)	367
Waste Storage Facility (units)	313
Watering Facility (units)	614
Wetland Enhancement (area)	659
Wetland Restoration (area)	657
Windbreak/Shelterbelt Establishment (for livestock protection) (length)	380

Projects in EAGL (2015 and later)

Section 319 Annual Load Reduction Reporting Form

EAGL Load Reduction Form

Breadcrumb location in EAGL:
Application Menu

- View Forms
- Forms Menu
- Section 319 Annual Load Reduction Reporting














Application Menu - Forms

Please complete all required forms below.

Document Information: [WQC-2015-MSRF-00104](#)

[Details](#)

Forms

Status	Page Name	Note
Funding Program Guidelines		
	Contact Information	
	SFY 2015 Water Quality Combined Financial Assistance Guidelines	
	SFY 2015 Scoring Guidance	
Application Forms		
	General Information	
	Recipient Contacts	
	Location Information	
	Project Development, Local Support, and Past Performance	
	Readiness to Proceed	
	Refinance Form	
	Preconstruction Form	
	Section 319 Initial Data Reporting	
	Section 319 Annual Load Reduction Reporting	
	Uploads	


EAGL Load Reduction Form

- Form editable in “Agreement Active” and “Agreement in Closeout/Termination” statuses
 - Can be completed by Authorized Official or Recipient Project Manager roles.
- Fill out all required fields denoted with a red asterisk.
- If no BMPs installation occurred for the reporting year, fill out first three (*) required fields, save, then you are done.
 - * Reporting year, Model type, Did you install BMPs during the year?-No

EAGL Load Reduction Form

SECTION 319 ANNUAL LOAD REDUCTION REPORTING

Required fields are marked with an *
 When done, click the **SAVE** button
 When needing to add a new year's report, click the ADD button.

*Reporting Year 

Load Reduction Information






*What type of Load Reduction Model did you use to calculate your reduction estimates?
 (Typically the EPA's STEPL model – at Internet website [http://t.tetratech-ffx.com/steplweb/models\\$docs.htm](http://t.tetratech-ffx.com/steplweb/models$docs.htm) is used for Load Reduction estimates of nitrogen, phosphorous, and sediment)

*Did you install any BMPs during the year?
 Yes No

If yes, list each drainage area within the project by indicating the 12-digit HUC where BMPs were installed during the year. A 12-digit HUC GIS layer may be downloaded from <http://datagateway.nrcs.usda.gov/GDGOrder.aspx> Select, in the drop-down list, (in its corresponding HUC row) the pollutants and their corresponding load reduction estimates.






If the model you are using does not report on nitrogen, phosphorous, or sediment, indicate this using checkbox in the "Pollutant Type" column rather than entering a load reduction.

Load Reduction Table

*Watershed Number (12 digit HUC)	Pollutant Type #1	*Reduction Amount for #1	Pollutant Type #2	*Reduction Amount for #2	Pollutant Type #3	*Reduction Amount for #3	Pollutant Type #4	Reduction Amount for #4
<input type="text"/>	Nitrogen <input type="checkbox"/> Model does not report nitrogen	<input type="text"/> 	Phosphorus <input type="checkbox"/> Model does not report phosphorus	<input type="text"/> 	Sediment <input type="checkbox"/> Model does not report sediment	<input type="text"/> 	<input type="text"/> 	<input type="text"/> 

Implemented Best Management Practices

Definitions for most BMPs can be found at <http://www.nrcs.usda.gov/technical/standards/nhcp.html>

*Best Management Practice	*Latitude	*Longitude	*Length in ft	*Area in Acre
<input type="text"/> 	<input type="text"/> 	<input type="text"/> 	<input type="text"/> 	<input type="text"/> 

Need more help?

- These slides and other tools can be found on the Nonpoint Activity Project Resources website!

<http://www.ecy.wa.gov/programs/wq/funding/FundPrgms/NPres.html>

- Don't hesitate to ask us!

**Remember: Reports Due January 15 annually
and at project closeout**

Questions?

Alissa Ferrell

Section 319 Fund

Coordinator

alissa.ferrell@ecy.wa.gov

(360)407-6509

Sarah Zehner

Nonpoint and Stormwater

Financial Manager

sarah.zehner@ecy.wa.gov

(360)407-7196