

ATTACHMENT F

POLLUTANT LOAD REDUCTION ESTIMATE REPORT

NYSDEC Water Quality Improvement Project program

The purpose of this report is to assess the effectiveness of the Nonpoint Source (NPS) Program and Best Management Practice (BMP) implementation projects in protecting waters of the state. The assessment will be based on estimates of pollutant load reductions achieved by a project, with emphasis on sediment, phosphorus and nitrogen. The report is also intended to support compliance with federal requirements for states to report estimates of pollutant load reductions accomplished by nonpoint source implementation projects.

Background

Best Management Practice (BMP) implementation projects intended to control sediments and/or nutrients (phosphorus and nitrogen) are required to provide estimates of the expected NPS pollutant load reductions. Estimates are to be provided in appropriate units (tons/year or pounds/year).

The New York State Department of Environmental Conservation (NYSDEC) does not require a specific methodology for developing estimates of NPS pollutant load reductions. Several existing models which have been used for this purpose are acceptable to NYSDEC, and other unlisted alternative methods may be used. However, NYSDEC does require that the method used to develop NPS pollutant load reductions be identified by the grantee. NYSDEC approval of alternative methodologies is not required, though such methods must be described.

Existing models which may be used by the grantee for estimating NPS pollutant load reductions are the Revised Universal Soil Loss Equation (RUSLE), and the EPA "Region 5 Model" (also referred to as STEPL, or the Spreadsheet Tool for Estimating Pollutant Load).

The Revised Universal Soil Loss Equation is described, with step-by-step instructions and examples, in the *New York State Standards and Specifications for Erosion and Sediment Control*, August 2005, in Appendix A. This manual is available at the following website (scroll through for Appendix A):

<ftp://ftp.dec.state.ny.us/dow/esc/bluebook.pdf>

An additional website describing improvements to RUSLE, known as RUSLE2, is located at:
http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm

The EPA Region 5 Model (STEPL) is described at the following website:

<http://it.tetrattech-ffx.com/stepl/>

Instructions

STEP 1 - Complete Table 1: List of Best Management Practice Sites and Estimation Methods Used

This table is intended to report estimates of sediment, phosphorus and nitrogen load reductions according to particular BMP types and BMP implementation sites. It is also intended to report the estimation method used. For each BMP implementation site, list a very brief description of the site and BMP practice, the estimation method used, and the estimated pollutant load reductions for sediment, phosphorus and nitrogen, as appropriate for the BMP type. If a project is implemented at more than one site, include an entry for each site. If an alternative methodology is used, describe that method in the block provided (use attachment, if necessary).

STEP 2 - Complete Table 2: Waterbody Pollutant Load Reduction Estimates

This table is intended to summarize information from multiple BMP implementation sites according to the waterbody or waterbodies expected to benefit from the project. The estimates developed for Table 1 should be tabulated according to waterbody name, and summarized in Table 2. Many projects will be addressing a single waterbody, and Table 2 will be a simple summary, listing the waterbody. If the project is directed at more than one waterbody, then report the expected load reductions for each waterbody.

STEP 3 - Complete Table 3: Wetlands, Streambanks, Shoreline Protected/Restored

This table is intended to present supplementary environmental benefit information for wetland, streambank and shoreline restoration and protection projects. The appropriate lineal distance or areal information planned for the life of the project should be reported in Table 3.

STEP 4 - Complete Narrative on “Additional Environmental & Pollution Prevention Benefits”

This narrative is especially intended for BMP projects that may not be directly related to sediment or nutrient load reductions (e.g., salt storage projects) or which may have pollution prevention benefits that may not be reasonably or adequately represented by estimates in Tables 1-3 (e.g., septic tank pumpout projects, street debris collection, etc.). A narrative summary is requested for all projects. The narrative may be a qualitative description and may be used to provide an enhanced summary of a project’s benefits. If quantitative estimates are included in the narrative, reporting annual rates or annual totals is recommended.

STEP 5 - Complete Information on Person(s) Developing Pollutant Load Reduction Estimates

This information is requested if any further clarification is needed.

TABLE 1. List of Best Management Practice Sites and Estimation Methods Used

Site ID (Name)	Brief Description of BMP Practice	Estimation Method Used*	Sediment Reduction (tons/yr.)	Phosphorus Reduction (lbs./yr.)	Nitrogen Reduction (lbs./yr.)
Jones Rd.	EXAMPLE Stabilize 500 feet of road drainage ditch	R5	12.7	1.4	N/A
Totals:					

Notes:

***Pollutant Load Reduction Estimation Methods**

1. RUSLE: Refer to Appendix A of *New York State Standards and Specifications for Erosion and Sediment Control*, August 2005, at <ftp://ftp.dec.state.ny.us/dow/esc/bluebook.pdf> or the website describing improved RUSLE2 at http://fargo.nserl.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm
2. Region 5 Model - R5 (STEPL): Refer to EPA website: <http://it.tetrattech-ffx.com/stepl> . Go to the Region 5 Load Estimation Users Manual, “Michigan Method”
3. **If an alternative methodology is used, describe the method in the following space. Use attachment if necessary.**

TABLE 2. Waterbody Pollutant Load Reduction Estimates

Water Body Name	Sediment (tons/yr.)	Phosphorus (lbs./yr.)	Nitrogen (lbs./yr.)
Project Totals			

TABLE 3. Wetlands, Streambanks, Shoreline Protected/Restored

Resource	Planned acres	Planned lineal feet
Wetlands restored		not applicable
Wetlands created		not applicable
Streambank /shoreline protected	not applicable	
Stream channel stabilized	not applicable	

NARRATIVE: Additional Environmental & Pollution Prevention Benefits of Project (see instructions, use attachment if necessary):

Contact Information for Person(s) developing Pollutant Load Reduction Estimates (Name / Affiliation / Phone / E-mail):

Contract Number: # _____