# Appendices

## Appendix I

## Minimum Reporting Requirements For Section 319 National Monitoring Program Projects

The United States Environmental Protection Agency (USEPA) has developed the NonPoint Source Management System (NPSMS) software to support the required annual reporting of water quality and implementation data for Section 319 National Monitoring Program projects (USEPA, 1991). The software tracks nonpoint source control measure implementation with respect to the pollutants causing the water quality problem.

Currently, NPSMS can accept and track the following information (USEPA, 1991):

#### Management Area Description:

- State, USEPA Region, and lead agency.
- Watershed management area description (management area name, management area identification, participating agencies, area description narrative).
- 305(b) waterbody name and identification.
- Designated use support for the waterbody.
- Major pollutants causing water quality problems in waterbody and relative source contributions from point, nonpoint, and background sources.

#### Best Management Practices (BMPs) and Nonpoint Source Pollution Control Measures:

- Best management practices (BMP name, reporting units, indication whether the life of the practice is annual or multi-year).
- Land treatment implementation goals for management area.
- Pollutant sources causing impaired uses that are controlled by each BMP. Each control practice must be linked directly to the control of one or more sources of pollutants causing impaired uses.

#### **Funding Information:**

• Annual contributions from each funding source and use of funding for each management area.

#### Water Quality Monitoring Plan:

- Choice of monitoring approach (chemical/physical or biological/habitat).
- Monitoring design and monitoring station identification (paired watersheds, upstream-downstream, reference site for biological/habitat monitoring, single downstream station). The paired watershed approach is recommended; the single downstream station is discouraged.
- Drainage area and land use for each water quality monitoring station.
- Delineation of monitoring year, seasons, and monitoring program duration.
- Parameters measured (parameter name; indication if the parameter is a covariate; STORET, BIOSTORET, or 305(b) Waterbody System code; reporting units).
- Quartile values for chemical/physical parameters. Quartile values are established cutoffs based on historical or first-year data for each season and monitoring station.
- Maximum potential and reasonable attainment scores for biological monitoring parameters. Indices scores that correspond to full, threatened, and partial use supports are required.
- Monitoring frequency. Chemical/physical monitoring, with associated covariates, must be performed with at least 20 evenly-spaced grab samples in each season. Fishery surveys must be performed at least one to three times per year. Benthic macroinvertebrates must be performed at least once per season, with at least one to three replicates or composites per sample. Habitat monitoring and bioassays must be performed at least once per season.

#### Annual Reporting:

- The NPSMS software is used to report annual summary information. The raw chemical/physical and biological/habitat data are required to be entered into STORET and BIOSTORET, respectively.
- Annual chemical/physical and covariates. The frequency count for each quartile is reported for each monitoring station, season, and parameter.
- Annual biological/habitat and covariates. The scores for each monitoring station and season are reported.
- Implementation tracking in the watershed and/or subwatersheds that constitute the drainage areas for each monitoring station. Implementation reported corresponds to active practices in the reporting year and includes practices with a one-year life span and practices previously installed and still being maintained.

### REFERENCES

USEPA. 1991. *Watershed Monitoring and Reporting for Section 319 National Monitoring Program Projects*. Assessment and Watershed Protection Division, Office of Wetlands, Oceans, and Watersheds, USEPA, Washington, D.C.