

**Massachusetts Nonpoint Source Management Plan  
2000**

**Amendments to Volumes I and III  
Addition of Volume V  
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PREPARED FOR:  
US ENVIRONMENTAL PROTECTION AGENCY  
REGION 1

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The Massachusetts Department of Environmental Protection (MassDEP) hereby amends the Clean Water Act State Revolving Fund Regulations (the “Clean Water Act SRF Regulations”), 310 CMR 44.00, the regulations that set forth its authority to select, approve and regulate water pollution abatement projects receiving financial assistance from the State Revolving Fund (SRF). The Clean Water Act SRF Regulations at 310 CMR 44.04 detail the types of projects eligible for financing from the SRF. The Clean Water Act SRF Regulations, 310 CMR 44.04(d), provide for the financing of nonpoint source (NPS) pollution mitigation projects, as outlined in the State’s Nonpoint Source Management Plan. The Clean Water Act SRF Regulations, 310 CMR 44.03, give examples of such projects including projects to repair, replace and upgrade subsurface sewage disposal systems, landfill capping and closure, remediation of underground storage tanks, erosion control and the control of stormwater runoff. Previously, both the Massachusetts Nonpoint Source Management Plan and the Clean Water Act SRF Regulations omitted projects to abate certain significant nonpoint sources of pollutants to the waters of the Commonwealth such as projects to abate pollutants from brownfields and projects to address atmospheric deposition from power plants. As more fully set forth below, MassDEP hereby amends the Massachusetts Nonpoint Source Management Plan to include projects to address additional nonpoint sources of pollutants. MassDEP also amends the Massachusetts Nonpoint Source Management Plan to make it clear that land acquisition, and pollution prevention projects, and projects to control stormwater runoff that are required by the NPDES Phase I and Phase II Program are included in the plan. MassDEP also expands the list of nonpoint source pollutant abatement projects eligible for funding from the Drinking Water SRF. MassDEP’s proposed amendments apply to three locations within the Plan:

- A. Amendment to Volume 1, Strategic Summary of the current Plan: Reference #2, (p. 59) describes the Clean Water Act State Revolving Fund and its possible application toward nonpoint source projects. The following language is added to the existing Summary:

**Clean Water Act State Revolving Funds (CWSRF) can be directed toward a wide range of water quality projects addressing nonpoint source pollution, including wetlands, estuaries, and watershed projects. NPS projects that may be eligible for CWSRF funding include abatement of polluted runoff, control of stormwater runoff, correction of groundwater contamination, and remediation of impaired waters to meet water quality standards. Brownfields mitigation to correct or prevent water quality problems caused by nonpoint source pollution may also be eligible for CWSRF funding.**

The following expanded description of example projects in place of the previous Examples:

- **Projects to mitigate nonpoint sources of pollutants arising in connection with the construction of eligible projects, including abatement of nonpoint source pollutants associated with construction of new wastewater treatment facilities, upgrades of existing facilities, and combined sewer overflow and sanitary sewer overflow abatement projects;**
- **brownfields projects including excavation and disposal of underground storage tanks, excavation removal and disposal of contaminated soil or sediment, capping or abandonment of wells, and Phase I, II, and III assessments;**
- **pollution prevention to proactively address potential sources of NPS such as soil erosion;**

- **green energy generation for treatment facilities to reduce atmospheric deposition;**
- **NPS abatement projects such as landfill capping and community programs for upgrading septic systems (Title 5);**
- **Development and implementation of protective bylaws, regulations, and ordinances;**
- **NPS remediation to treat stormwater runoff from agriculture, development, forestry, mining, and other land uses; and**
- **estuaries projects for assessment and management of polluted runoff to ensure healthy ecosystems.**

B. Amendment to Volume 1, Strategic Summary of the current Plan: Reference #3(pg 60) describes the Drinking Water State Revolving Fund (DWSRF). As with Reference #2, this page is amended by adding the following language as the last sentence of the Summary:

The DWSRF may also be used for contaminant cleanup and removal, source water assessment and protection activities, nonpoint source monitoring and remediation, and restoration of resource areas.

and by providing the following expanded description of example projects in place of the previous Examples:

- **Projects to mitigate nonpoint sources of pollutants arising in connection with the construction of drinking water projects including new and upgraded drinking water treatment facilities, projects to replace contaminated sources, water treatment or storage facilities, the consolidation or restructuring of water systems, projects to provide treatment or effective alternatives to treatment for compliance with regulated health standards, such as the surface water treatment rule;**
- **installation or replacement of transmission or distribution systems;**
- **removal of leaking underground storage tanks and/or failing septic systems;**
- **landfill monitoring wells or upgrades;**
- **purchase of property or development rights to protect watersheds;**
- **agricultural best management practices;**
- **development and implementation of protective bylaws, regulations, and ordinances; and**
- **outreach and education to build community support for protective activities.**

- C. Amendment to Volume III: Section 2, State Revolving Fund, (p 141), discusses the intended and proposed use of the SRF for NPS projects. This section is amended by added the following Proposed Use(s):

### **3. Brownfields redevelopment**

Many areas across the country that were once used for industrial and commercial purposes have been abandoned or are under-used. Some are environmentally contaminated or are perceived to be contaminated. Currently, financial resources to encourage cleanup and re-use of these brownfields sites are limited. Clean Water Act State Revolving Funds can be used to correct or prevent water quality problems from these sites.

A program can be developed to encourage the abatement and control of polluted runoff from brownfields sites. In addition, correction of groundwater contamination and remediation of petroleum and other contaminants from sites may be fundable under the CWSRF. Excavation and disposal of underground storage tanks; construction of wetlands; capping and abandoning of wells; excavation, removal, and disposal of contaminated soil or sediments; and Phase I, II, and III assessments are also eligible NPS mitigation work under the CWSRF.

### **4. Land purchase**

Protection of watersheds and riparian corridors is critical to help ensure good quality drinking water and healthy ecosystems. SRF funds can be used to help communities establish control over activities in watersheds and source water protection areas through the acquisition of easements or the outright purchase of land. In addition, SRF funds can be used to develop and implement local bylaws and regulations that will establish setbacks and prevent activities that could be harmful to drinking water quality.

A program could be developed to encourage the adoption of watershed and riparian corridor protection measures based on water quality protection priorities. Funds would be made available for acquisition of easements, conservation restrictions, or outright purchase of critical areas. Such a program would advocate for the local adoption of nonpoint source prevention and mitigation and be supplemented by technical assistance and outreach activities to build local support for the program.

### **5. Green energy generation**

Atmospheric deposition of pollutants, including nitrogen and sulfur compounds, mercury, and many other pollutants, has widespread and severe water quality and public health impacts. The sources of atmospheric pollution include fuel combustion from automobiles, power plants, wood burning, industrial processes, and diesel powered vehicles such as buses and trucks. Treatment plants (POTWs) are also among the types of facilities that typically generate electricity through combustion processes.

Atmospheric deposition is considered to be a nonpoint source pollutant. The generation of renewable energy avoids the introduction of air pollutants that are caused when fossil fuels are burned to produce electricity. A program will be developed to encourage the construction and use of alternative and renewable energy sources as a component of major rehabilitation or construction of a POTW using CWSRF funding. Technologies to be encouraged include wind, solar, and hydropower generation as ways to reduce the release of combustion byproducts into the atmosphere.

## **6. Stormwater Best Management Practices**

Stormwater runoff is a universal conveyor of nonpoint source pollutants. Contaminated stormwater from roads and highways, agricultural activity, lawns, dog parks, and many other sources often carries its pollutant load into the nearest resource area, resulting in water quality impairment. Under Phase I and II of the NPDES permit program, many cities and towns are required to address and remediate these stormwater sources, with scant funding available to assist their efforts. In Massachusetts, s. 319 funds have traditionally been the main source of funds for stormwater mitigation work. However, 319 funds cannot be used to do work required under Phase I or Phase II.

CWSRF loans can be used for funding the capital costs for developing and implementing municipal storm water programs as required by an NPDES permit. A program can be developed to encourage municipalities to use CWSRF funds to implement Phase I and II NPDES permit requirements. This can include the costs for design, construction, and implementation of erosion and sediment control and stormwater BMPs, and development of a stormwater management program.

### **Further, MassDEP amends the Massachusetts Nonpoint Source Management Plan by incorporating the Massachusetts Watershed-Based Plan as Volume V.**

#### **Purpose**

The purpose of the Massachusetts Watershed-Based Plan (WBP) is to organize information about nonpoint source pollution in Massachusetts's watersheds, and present it in a format that will enhance the development and implementation of projects that will restore water quality and beneficial uses in the Commonwealth. The WBP follows EPA's recommended format and is presented consistent with Massachusetts's twenty-seven major planning basins.

#### **Background**

On October 23, 2003, EPA issued new guidelines promoting the use of Section 319 funding for developing and implementing Watershed-Based Plans to protect unimpaired waters and restore impaired waters (**Nonpoint Source Program and Grants Guidelines for States and Territories** [Oct. 23, 2003], available at <http://www.epa.gov/owow/nps/cwact.html> ). Watershed-Based Plans to restore impaired waters are required for all projects implemented with s.319 incremental dollars, and are recommended for all watershed projects, whether they are designed to protect unimpaired waters, restore impaired waters, or both. The October 23, 2003 Guidance listed nine components required to be included in Watershed-Based Plans to restore waters impaired by nonpoint source pollution.

#### **The Massachusetts Watershed-Based Plan**

Massachusetts has responded to EPA's requirement by developing a statewide WBP following EPA's required format. The WBP organizes information contained in existing documents and resources, supplemented by modeled predictions of NPS pollutants in some subwatersheds based on land use. Information is presented for each of Massachusetts's twenty-seven major planning basins, further delineated into Hydrologic Unit Code (HUC) 12 digit watersheds. The WBP is presented as a map-based web site with links to references and supporting documents that will guide the user to comprehensive information about each subwatershed and basin. The WBP can be seen at <http://public.dep.state.ma.us/Watershed/Intro.aspx>