

NINE ELEMENT WATERSHED MANAGEMENT PLANS



Department of
Environmental
Conservation

An Introduction

What is a 9E Plan?

A Nine Element Watershed Management (9E) Plan is a type of clean water plan that details a community's water quality concerns and a strategy to address these concerns. 9E Plans are developed by people who live and work within the watershed with support from local and state agencies. The nine minimum elements are intended to ensure that the contributing causes and sources of nonpoint source pollution are identified, that key stakeholders are involved in the planning process, and that restoration and protection strategies are identified that will address the water quality concerns.



Riparian forest buffers are a best management practice used to reduce water pollution

What are the Nine Key Elements?

The New York State Department of Environmental Conservation (DEC) has adopted the U.S. Environmental Protection Agency's (EPA) nine-element framework for developing watershed-based plans. Plans must include all elements to be approvable by DEC.

- A. Identify and quantify sources of pollution in the watershed
- B. Identify the water quality target or goal and pollution reductions needed to achieve the goal
- C. Identify the best management practices (BMPs) that will help to achieve reductions needed to meet the water quality goal/target
- D. Describe the financial and technical assistance needed to implement the BMPs identified in Element C
- E. Describe the stakeholder outreach, explain how their input was incorporated, and include the role of stakeholders in implementing the plan
- F. Estimate a schedule to implement the BMPs identified in the plan
- G. Describe the milestones and estimated timeframes for BMP implementation
- H. Identify the criteria that will be used to assess water quality improvement as the plan is implemented
- I. Describe the monitoring plan to collect water quality data that will be used to measure improvements using the criteria described in Element H

KEY POINTS

Nine Element Watershed Management Plans:

- Causes and sources of nonpoint source pollution are identified
- Key stakeholders are involved in the planning process
- Restoration and protection strategies are identified
- DEC approves 9E plans and should be involved in the planning process

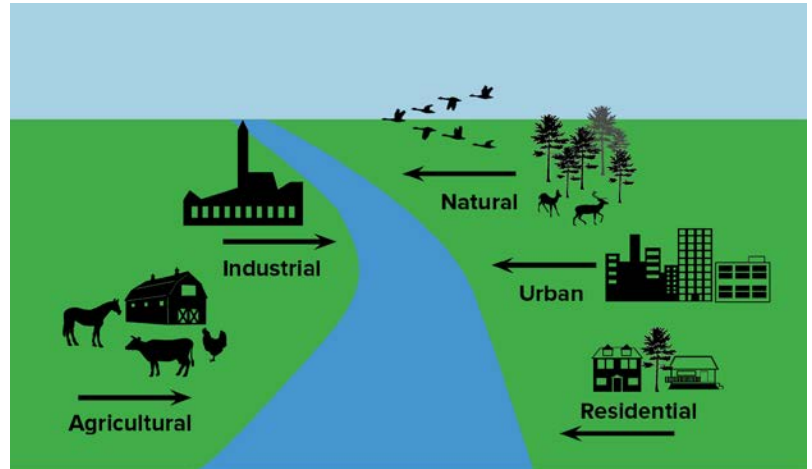
Why and When are Nine Element Plans Used?

DEC encourages (but does not require) watershed communities to develop 9E Plans to protect or restore a waterbody, especially when nonpoint sources of pollution (i.e., agriculture runoff, septic systems) are the primary threat in the watershed. The strength of the 9E plan is the stakeholder involvement during plan development and the comprehensive implementation plan that includes identification of financial assistance, a schedule with milestones, and the evaluation of progress. Although all nine elements must be included in the plan, each watershed community can address them in the way that best meets its goals. People who decide to develop a plan to improve or protect community water resources should contact DEC for advice and information before getting started.

Information Needed to Create a Nine Element Watershed Plan

Information is collected for the entire watershed and includes:

- Watershed area, topography and geology
- Waterbody characteristics (e.g., depth and size)
- Land use data (e.g., forest, developed, pasture, wetland)
- Water quality sampling results
- Description of potential sources of pollution (e.g., residential septic systems, wastewater treatment plants)
- Annual rainfall data



There are many possible sources of pollution in a watershed.

Implementing the Plan

The completed watershed plan describes the actions needed to accomplish the community's protection and restoration goals and a schedule for implementing them. For example, it may include recommendations to improve agricultural practices, repair or replace septic systems, sewer a community of homes, or conduct aquatic plant management.

Financial assistance is usually needed to complete the work. Having a DEC-approved 9E Plan improves eligibility for state and federal funding programs.

Online Resources

- Clean Water Plans: www.dec.ny.gov/chemical/23835.html
- Nine Element Watershed Plans: www.dec.ny.gov/chemical/103264.html
- Best Management Practices (BMPs): www.dec.ny.gov/chemical/96777.html

CONTACT INFORMATION

Division of Water—Bureau of Water Resource Management

New York State Department of Environmental Conservation

625 Broadway, Albany, NY 12233

P: (518) 402-8086

www.dec.ny.gov