

Enabling Source Water Protection: Aligning State Land Use and Water Protection Programs

Summary of Recommendations

The *Enabling Source Water Protection Project* was created to help states protect their ground and surface sources of drinking water by improving coordination between their source water protection program, clean water programs, and programs and policies that shape land development and land use. Four non-governmental organizations have collaborated on this project with support from a cooperative agreement with the U.S. EPA's Office of Ground Water and Drinking Water. Since 2007, The Trust for Public Land, the Smart Growth Leadership Institute (SGLI), River Network, and the Association of State Drinking Water Administrators have worked together to develop recommendations tailored to the interests and needs of eight states selected through a competitive application process. Project teams have completed work in New Hampshire, Maine, Ohio, Oregon, Utah, North Carolina, and Missouri, and SGLI is continuing work in New York.

The following recommendations have been compiled from final reports for seven states. They are organized here by topic, illustrating both the common themes that emerged across these diverse states as well as the wide range of approaches available to address these common concerns. More detail on each of these recommendations and the context are available in the final reports for each state, available on the project website, www.landuseandwater.org/states.htm.

GIS Tools and Analysis

Maine

- Streamline statewide GIS databases and develop protocols for collecting, analyzing, uploading, and managing data to provide a one-stop center for state, local and regional governments, and to reduce duplication of efforts and funding.

New Hampshire

- Expand and enhance New Hampshire's on-line geographic information resources to support local planning needs.

Oregon

- For specific watershed, create a GIS-based tool to identify healthy lands most important for conservation of water quality as well as impaired lands where restoration efforts will protect water quality.
- Use resulting landscape analysis tool to highlight opportunities for:
 - Voluntary land conservation and restoration—Land conservation specialists can review the maps and reach out to landowners to see if they are willing to sell or donate land that can be managed for water quality benefits and habitat

conservation. Technical service providers can review the maps and offer landowners resources to help them employ best management practices on their lands.

- Guidance for land use regulations—The GIS tool can inform local government planning and zoning decisions so that they better protect drinking water sources.
- Prioritize pollution control efforts—The tool can be used to prioritize places to improve existing pollution controls and management practices to address risks to public health through drinking water, recreation and fish consumption.
- Minimize risks from natural disasters—Data layers showing the flood zone and vulnerable soils identify some of the lands most vulnerable to natural disasters. Their locations may be useful to decision makers who identify priority areas, and plan for prevention, treatment needs, mitigation and/or alternative water sources.
- Track water quality improvements—With some added features, the GIS tool's land use information, together with DEQ's existing monitoring data, could be used to track implementation and effectiveness of best management practices (BMPs) for source water protection, and point towards potential improvements.

Utah

- Share information about locations of source water protection areas and potential source water quality impacts. Develop a GIS application to assist other agencies in flagging activities in sensitive source water areas.

Develop New or Enhance Existing Funding

Maine

- Increase funding for drinking water source protection through the creation of a dedicated funding program.
- Enhance existing Current Use Tax Program to include landscapes important for protection of drinking water sources.

New Hampshire

- Expand eligibility for the Water Supply Land Protection Grant Program.

North Carolina

- Improve access to relevant state and federal funding programs.
- Promote the development of local funding for source water protection.
- Work with partners to enhance Clean Water State Revolving Loan Fund support of drinking water protection, green infrastructure, water and other environmentally innovative activities.

Ohio

- Re-orient existing funding programs to support balanced growth. Create a new fund for planning and retrofit of local “Main Streets.”

Missouri

- Create a “Water Resources Protection Fund” linked to *Our Missouri Waters* that helps local entities, both nonprofit and governmental, to better access financial resources to protect water quality from future degradation.
- Increase the potential that plans created under the Missouri Source Water Protection Planning Guidelines will qualify for nonpoint source program funding for implementation.
- Refine source water protection planning and implementation grants under the Drinking Water State Revolving Loan Fund.
- Expand the use of the Clean Water State Revolving Loan Fund to protect watersheds through land conservation.
- Encourage the use of Supplemental Environmental Projects stemming from enforcement actions to support watershed protection activities.
- Target portions of the Soil and Water Conservation Cost Share Program toward preventing water quality degradation.

Improve Support from Clean Water Act and Other Programs

New Hampshire

- Revise surface water quality standards and protections, and groundwater classification to better protect drinking water sources as well as other high-quality waters.

North Carolina

- Work with partners to enhance Clean Water State Revolving Loan Fund support of drinking water protection, green infrastructure, water and other environmentally innovative activities.
- Review permitting procedures in source water areas.
- Improve anti-degradation protection in source water areas.
- Enhance use of stormwater controls to protect source water.

Ohio

- Streamline existing permitting and planning programs as an incentive for participation in and implementation of Balanced Growth plans.
- Develop new models and guidance for communities with failing septic systems.

Oregon

- Use GIS tool to target land conservation, best management practices, pollution control mechanisms, natural disaster prevention and mitigation, and track water quality improvements.

Missouri

- Increase the potential that plans created under the Missouri Source Water Protection Planning Guidelines will qualify for nonpoint source program funding for implementation.

- Utilize base funds from the Clean Water Act Section 319 Program to support source water protection planning and implementation, even where the waters are not impaired.
- Utilize incremental 319 funds to support implementation of approved source water protection plans (developed under the Missouri Source Water Protection Plan Guidelines (MOSWPP)) by designating source water protection a “uniquely high-priority State need.”
- Create source water protection planning guidelines that will assist watershed groups in developing combined plans that meet source water requirements and also qualify as Watershed-Based Plans under 319, known as the MOSWPP-Alternate approach.
- Expand the use of the Clean Water State Revolving Loan Fund to protect watersheds through land conservation.
- Encourage the use of Supplemental Environmental Projects stemming from enforcement actions to support watershed protection activities.
- Target portions of the Soil and Water Conservation Cost Share Program toward preventing water quality degradation.

Utah

- Educate state partners about source water protection issues, needs and programs through the development of flyers and presentations. Create an interagency working group.
- Share information on source water protection areas and potential water quality impacts. Develop a GIS application to assist other agencies in flagging activities in sensitive source water areas.
- Work with other DEQ Divisions to develop source water protection components of water quality permitting programs. Review the use of CWA 401 Certification to ensure that the state does not miss opportunities to protect source waters.

Enhance Drinking Water Program Guidelines

Maine

- Develop overarching guidelines for compatible recreational opportunities on land and in waters critical to drinking water source protection.

Missouri

- Amend the Missouri Source Water Protection Planning Guidelines to assist watershed groups in developing combined plans that meet source water requirements and also qualify as Watershed-Based Plans under 319.

Improve Outreach and Coordination Mechanisms

North Carolina

- Enhance the NC SWP Program website to promote the involvement of local government, watershed groups and land conservation organizations in source water protection.

- Establish new outreach/coordination mechanisms such as a state "Source Water Collaborative."
- Establish or support existing awards programs to encourage source water protection actions on the part of water suppliers, land developers and local governments.

Support and Coordinate with Local Planning Activities

Ohio

- Support Balanced Growth Planning and Implementation
 - Maintain flexible, collaborative relationship between state staff and local planning partnerships.
 - Expand best local land use practices assistance to support incorporation of best practices into local comprehensive plans and land use ordinances.
 - Provide future growth projections
 - Reward implementation through funding and special incentives available only to those who adopt Balanced Growth Plans.
 - Streamline planning and permitting requirements to facilitate development in Priority Development Areas.

Oregon

- Encourage the use of the GIS tool to support zoning decisions and land conservation actions.

Shoreline Protection Acts

- NE, ME, MA, WA MN, WI all have shoreline protection acts that could serve as models state/local government collaboration on protection of drinking water sources. Although the development of a shoreline protection act was not included in any of the final recommendations for the demonstration states, the project team did assemble information on these acts.

Incorporate Source Water Protection in Economic Strategies

Maine

- Incorporate drinking water source protection among the assets considered for the Quality of Place Investments Strategy, an economic development strategy focused on identifying, preserving and reinforcing Maine's natural, cultural, economic and human assets.

Ohio

- Pilot "Balanced Economic Growth Strategies" in Balanced Growth communities.
- Create a Smart Site Program to facilitate economic development