Program Background

New York Rural Water Association’s federally-funded Source Water Protection Technical Assistance Program provides free technical assistance with the development and implementation of local source water protection plans. Source water is surface water or groundwater that is used for drinking water. This water could be supplied by a public water supply system or individual (residential) water supply wells. New York Rural Water Association (NYRWA) has provided technical assistance to rural communities and small water systems regarding source water protection since 1995. Source water protection plans developed through our program are compatible with New York State’s new Drinking Water Source Protection Program (DWSP2) initiative.

Source Water Protection Planning

A Source Water Protection Plan is a local process designed to prevent the deterioration of water resources used for drinking water. A source water protection plan involves the following:

- Forming a planning team;
- Defining the water supply resources to be protected;
- Identifying potential threats to the quality and quantity of drinking water resources;
- Recommending and implementing measures to reduce threats to drinking water resources; and
- Planning for the future, including continued carrying out of the plan.

NYRWA’s Source Water Protection Specialist seeks the guidance and input of local individuals during the planning process to ensure that the completed source water protection plan reflects the needs and desires of the local community. People on this planning team commonly include community employees as well as individuals on community boards, commissions, and councils with an interest in protecting water resources.

Technical Assistance Provided

NYRWA’s Source Water Protection Specialist organizes and facilitates a source water protection workshop meeting within the local community. Representatives from various local, county, and regional entities are invited, along with the planning team. The purpose of this initial meeting is to inform the entities of the protection effort, discuss local water supply issues, determine if people have information or data that can be utilized, and talk about the preventative measures that each entity may be willing to implement.
NYRWA will help to map and delineate the drinking water resources of the community. Since groundwater is the primary source of drinking water for most small or rural communities in New York, NYRWA compiles data on public and private water wells, and maps unconsolidated and bedrock aquifers at a detailed 1:24,000 scale that is useful for local planning. The likely areas supplying water to public water supply wells will also be mapped, as well as watersheds for any surface water utilized for drinking water. NYRWA utilizes Geographic Information System (GIS) and Global Positioning System (GPS) mapping technology.

NYRWA assists with an inventory of potential sources of contamination. This includes a review of information from source water assessments, an analysis of land use from real property data, and a compilation of facilities that are regulated by state and federal agencies.

NYRWA and the local planning team help design realistic management strategies to protect local water resources. The community and/or water systems then implement these protection strategies that could include non-regulatory measures such as public education, acquisition of land or easements, inter-municipal cooperation, monitoring, and/or encouragement of best management practices. Protection strategies could also include regulatory tools such as zoning, site plan review, subdivision regulations, other municipal local law(s), and/or New York's State Environmental Quality Review Act (SEQR). All source water protection plans developed with the assistance of NYRWA have a goal of having an agricultural component and must involve some form of public education.

Finally, it is critical for communities and water systems to plan for the future. NYRWA helps to identify future hazards that could threaten local water resources as well as plan for future water supply needs. This step commonly includes: identifying areas that are threatened by future development, delineating water resources that may be suitable for public water sources, and developing a contingency plan to ensure that there are alternative water supplies in the event of contamination, drought, or other disruption event.

About NYRWA’s Source Water Protection Specialist

Steven Winkley has served with NYRWA since 1995. Steve has a M.S. in Hydrogeology from Syracuse University and a B.S. in Geology from Rensselaer Polytechnic Institute. He has over 25 years of experience in the field of water supply development and protection and is a New York State Licensed Professional Geologist.

About the New York Rural Water Association

New York Rural Water Association (NYRWA) is a not-for-profit organization founded in 1979 with the goal of helping rural/smaller water and wastewater systems provide safe drinking water and protect the environment at an affordable cost to the user. NYRWA does this primarily through no cost on-site technical assistance and training.

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