

Source Water Protection Unit

The Connecticut Department of Public Health Drinking Water Section created a dedicated functional unit to implement policies and enforce statutes and regulations pertaining specifically to the protection of the sources of public drinking water. The Source Water Protection Unit (SWP) is responsible for the purity and adequacy of Connecticut’s approximately 4,000 surface and ground water drinking water supply sources.

The SWP Unit maintains a Strategic Plan for the Implementation of Drinking Water Source Protection in Connecticut. The program elements coordinate, manage, and regulate source protection through the enhancement and oversight of existing source protection laws and regulations, integration with water supply planning, education of local land use officials, and involvement with stakeholders on a continuous basis. This Strategic Plan has two main objectives:

1. Revise and enforce existing public health laws, with an emphasis on education and training, involvement of stakeholders and creation of linkages to all relevant programs in order to effectively and efficiently implement the comprehensive drinking water source protection strategic work plan;
2. Maintain minimized risk to public health for 100 percent of source water areas for community water systems (both surface and groundwater) by substantial implementation of the source water protection actions listed in the Strategic Plan, as well as full application of the federal Ground Water Rule and other laws that are in place to prevent contamination and protect water quality and therefore public health.

Water System Data (as of September, 2012):

System Type	Community	Nontransient Noncommunity	Transient Noncommunity	Groundwater	Surface Water
Number of Systems	556	582	1,454	2,513	79
Population Served	2,714,190	113,320	59,373	429,705	2,447,846

State Definition of Substantial Implementation of the Source Water Protection Program:

The SWP Unit considers substantial implementation as being achieved when all public water systems are in compliance with the objectives in the Strategic Plan. This includes activities and tasks such as:

- implementing continually revised statutes and regulations for source water protection (including the provisions of the federal Groundwater Rule);
- reviewing/approving proposed sources of water supply and proposed sales and proposed changes to the use of water company owned land,
- reviewing/approving permit applications for monitored recreational activities on water company;
- coordinating the process of conducting annual watershed inspections and annual submission of watershed survey reports;
- using and improving the Geographical Information System (GIS) application and database to optimize source assessment and protection;
- working with local, regional and state partnerships on Environmental Impact Review promoting the usage and understanding of source water protection concepts and best management practices to enhance drinking water source protection; .
- working with many diverse groups to enhance drinking water source protection and provide useful educational materials;
- researching and preparing for emerging threats and risks to public water supply sources, and
- working to develop and utilize consistent policies for the use of pesticides and herbicides in public drinking water sources of supply.

Case Studies:

Statutes and Regulations: In 2011, several statutory changes, initiated by the SWP Unit, were passed that: emphasize the importance of maintaining Connecticut’s most pristine water bodies for public drinking water use, and strengthen the authority to deny proposed public water supply sources in locations threatened by pollution.

Source Water Area Inspections: In 2013, the SWP Unit worked with a property owner, a water utility, USDA/NRCS and a local health department to develop a manure management plan for a property with historical deficiencies. The SWP Unit ultimately issued a permit for the manure management structure and BMPs that will ensure a minimized risk to the public water supply for years to come. The permit was issued pursuant to Connecticut’s ‘Sanitation of Watersheds’ regulations.

Outreach: The SWP Unit, along with the EPA and US Geological Survey held a stakeholder workshop in October, 2010 to address local source water protection issues. Topics included: cyanotoxins, low impact development and new techniques for water quality protection and management. The SWP Unit has begun an effort to disseminate information on the Drinking Water Section website regarding drinking water supply impacts due to Cyanobacteria, Harmful Algal Blooms (HAB’s) and invasive freshwater alga. The SWP Unit participated in a watershed inspector training held in April 2013 to assist personnel of water utilities who annually inspect properties within drinking water watersheds for risks to public water supplies. An additional training is scheduled for spring 2014.

Pesticides and Herbicides: In 2012, the SWP Unit, Department of Public Health toxicologists, and members of CT Department of Energy and Environmental Protection's Water Quality Program, Pesticide Division executed a Memorandum of Agreement that updated the permitting requirements for introducing aquatic pesticides into waters tributary to drinking water supplies.

Stakeholder Involvement: The SWP Unit meets bimonthly with the Connecticut section of the American Water Works Association, Source Water Protection Committee to discuss topics of mutual interest ranging from federal regulations, state statute revisions, local issues. This committee works to develop guidance documents for the annual watershed inspections required by DPH; educational materials for residences and businesses located in public water supply watersheds and sharing information on training events. The SWP Unit also collaborates on a regional and national level (e.g. New England Interstate Water Pollution Control Commission, Ground Water Protection Council, etc.) to ensure that the most effective policies and laws are enacted in Connecticut.

State Policies: The SWP Unit reviewed and offered comments to the State's Office of Policy and Management on the draft State of Connecticut Conservation and Development Policies Plan 2013-2018. One of the key policy recommendations to protect sources of public drinking water that was included in the draft is "utilize an integrated watershed management approach to ensure that high quality existing and potential sources of public drinking water are maintained for human consumption." Projects receiving over \$200,000 in state funding must be consistent with the policies in the Plan.

For more information, please see the link below for Connecticut's Source Water Protection Unit:

www.ct.gov/publicdrinkingwater