



# Aquifer Protection Area Program Fact Sheet



## What is the purpose of the Aquifer Protection Program?

In Connecticut, approximately one-third of the population relies on ground water for their drinking supply. Since the late 1970's, numerous public and private wells have been found to be contaminated by various pollutants from land use activities. Aquifers, geologic formations able to yield water to wells, cannot be considered naturally protected.

At particular risk are "stratified drift" (sand and gravel) aquifers supplying our larger public water supply wells. Despite current protection efforts many types of land uses continue to threaten ground water quality. To address this problem, Connecticut established the Aquifer Protection Area Program (C.G.S. 22a-354a et. sec.). The purpose of the program is to identify critical water supply aquifer areas and to protect them from pollution by managing land use.

## What is an Aquifer Protection Area?

Aquifer Protection Areas are being designated around all existing wells in stratified drift used by water systems serving over 1000 people. The "aquifer protection area" is the critical portion of the aquifer which provides water to the well (sometimes referred to as a "wellhead protection area"). 127 active well fields (wells or groups of wells) in the state will have protection areas around them. Activities which might contaminate ground water in these areas will be regulated.



## How are these areas identified?

Aquifer Protection Areas are identified by DEP and mapped by water companies that own the wells. Water companies usually hire a ground water consultant to do the mapping which must follow DEP regulations. DEP must review and approve the mapping.

The Aquifer Protection Area includes the well field and areas of contribution and recharge. The size of the area can vary from tens of acres to hundreds of acres depending on the well yield and aquifer materials. Once mapped and approved the aquifer protection areas must be adopted by towns.

Aquifer Protection Areas have been identified in 78 towns. Additional protection areas may be designated for sites of future wells.

## How will the protected areas be regulated?

Aquifer protection responsibilities will be shared by the state, the municipality, and the water company.

**STATE** - In addition to overall program implementation, DEP has or continues to:

- Established state land use control regulations and standards;
- Approve aquifer protection areas and local regulations;
- Oversee municipal aquifer protection agencies and provide training and technical assistance;
- Regulate facilities that hold discharge permits or RCRA permits, and state and federal facilities; and
- Provide for education about ground water protection.

**MUNICIPALITIES** – Responsibilities include the following:

- Authorize an existing board or agency to serve as the local Aquifer Protection Agency;
- Adopt local Aquifer Protection Area regulations consistent with state regulations;
- Delineate Aquifer Protection Areas on the town zoning map; and
- Regulate land use activity within the Aquifer protection Areas by registering existing regulated activities, issuing permits for new regulated activities and inspecting regulated facilities.

**WATER COMPANIES** – Besides mapping, the water companies continue to:

- Inspect Aquifer Protection Areas;
- Assist towns with their aquifer protection programs; and
- Plan for land acquisition around well fields.

## Did you know?

It only takes a small quantity of some substances to contaminate millions of gallons of groundwater. For instance, only a few ounces of perchloroethylene (a degreasing solvent often used to clean metal parts) can render millions of gallons of water unsafe to drink based on federal standards.

## How will businesses be affected?

Land uses and activities that can contaminate ground water quality will be regulated in protected areas. Generally, these are activities which use, store, handle or dispose of hazardous materials and other potential ground water contaminants. There are 28 regulated activities defined in the regulations. New land use activities of these types will be prohibited from locating in aquifer protection areas.

Businesses conducting regulated activities which are already in existence in aquifer protection areas need to register their land use activity and follow best management practices designed to minimize the possibility of a release. This may include implementing new procedures and/or installing new containment equipment. Registered businesses may expand their existing activities, and may apply for a permit to add new regulated activities to their facilities.

Many state and local government operations such as highway maintenance garages, road salt storage, airports, and waste disposal areas will be regulated. Workshops and laboratories in schools and other institutions will also have to follow best management practices.



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## How will the general public be affected?

Homeowners may be affected by restrictions on home occupations that use hazardous materials. Residents in protected areas will be educated about the risk to ground water quality from pesticides and fertilizers, improper septic system use, and hazardous cleaning and maintenance materials such as paints, paint thinner and automotive fluids.

## The Rewards . . . .

Clean water is vital for our very survival. Until recently, people assumed that it would always be plentiful in Connecticut. The events of the past few decades have shown that ground water, like surface water, is increasingly at risk from our chemical-dependent society. The aquifer protection area program requires a major commitment from state and local government, business, water companies, and individual residents, but the reward of clean drinking water for now and the future is well worth the trouble.

## Where can I get more information?

The Connecticut Department of Environmental Protection  
Bureau of Water Protection and Land Reuse  
Aquifer Protection Area Program  
79 Elm Street  
Hartford, CT 06106-5127  
(860) 424-3020  
[www.ct.gov/dep/aquiferprotection](http://www.ct.gov/dep/aquiferprotection)



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### Towns with Aquifer Protection Areas

Avon	Danbury	Madison	Plainville	Stamford
Beacon Falls	Darien	Manchester	Plymouth	Stonington
Berlin	Derby	Mansfield	Portland	Thomaston
Bethany	East Lyme	Meriden	Prospect	Thompson
Bethel	East Windsor	Middletown	Putnam	Tolland
Bethlehem	Enfield	Naugatuck	Ridgefield	Vernon
Bolton	Essex	New Britain	Rocky Hill	Wallingford
Bristol	Farmington	New Hartford	Salisbury	Watertown
Brooklyn	Glastonbury	New Milford	Seymour	Westbrook
Burlington	Goshen	Newtown	Shelton	Weston
Canton	Griswold	North Canaan	Simsbury	Westport
Cheshire	Guilford	North Haven	Somers	Willington
Clinton	Hamden	Norwalk	Southbury	Wilton
Colchester	Killingly	Old Saybrook	Southington	Woodbury
Coventry	Ledyard	Oxford	Sprague	
Cromwell	Litchfield	Plainfield	Stafford	

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