

Living in a Public Water Supply Watershed

Protecting the Watershed and Your Backyard

Both surface and groundwater sources are vulnerable to potential contamination from non-point source pollution (NPS), which unlike pollution from industrial and sewage treatment plants, comes from widely distributed sources such as highways, large parking areas or land that is prone to erosion. Non-point pollution is caused by rainfall or snowmelt moving over and through the ground. As the runoff travels through a drinking water source area, it picks up and carries away natural and human-made pollutants, which are deposited into lakes, rivers, wetlands, coastal waters, and underground sources of drinking water. Non-point source pollutant categories include:

- Sediment from improperly managed construction sites, crop and forestlands, eroding stream banks and urban runoff;
- Fertilizers, herbicides, and insecticides from their use on agricultural lands and residential areas;
- Bacteria and nutrients from livestock, pet wastes, faulty septic systems and urban runoff;
- Oil, grease, and toxic chemicals from spills, releases, urban runoff and impervious surfaces and;
- Airborne pollutants from industrial and urban fallout.

Potential sources of non-point pollutants include agriculture and forestry operations, grazing, septic systems, recreational boating, urban and residential runoff, construction, physical changes to stream channels, and habitat degradation. Careless or uninformed household and yard management also contributes to non-point pollution problems. Non-point pollution is widespread because it can occur any time activities disturb the land or water.

The most common non-point pollutants are sediment and nutrients that wash into water bodies from agricultural land, construction sites, small and medium-sized animal feeding operations, and other areas of disturbance, including your backyard. Other common non-point pollutants include pesticides, pathogens (bacteria and viruses), salts, oil, grease, toxic chemicals, and heavy metals. Unsafe drinking water, destroyed habitat, fish kills, and many other severe environmental and human health problems can result from non-point pollutants. When non-point pollution occurs in the watershed of a public drinking water supply it may give rise to a number of conditions that can threaten the quality and quantity of drinking water and impact public health. Proactive pollution prevention of drinking water sources is Connecticut's first line of defense in providing safe drinking water.

The Department of Public Health Drinking Water Section (DWS) completed assessments of all public drinking water sources to identify and inventory potential sources of contamination that could adversely impact drinking water quality and safety. To view assessment reports and learn more about Connecticut's source water

assessment program, visit our website at: <http://www.ct.gov/dph>

Public drinking water systems, local government and public health officials will be able to use the assessment reports to plan and direct drinking water source protection activities including: protective zoning regulations, land acquisition in critical source water areas, and the implementation of best management practices for the control of non-point pollution and the safe handling, storage and disposal of hazardous materials. If you live on or near a watershed of a public drinking water supply reservoir you should know where the watershed boundaries are located and follow the watershed protection guidelines listed below. Sensible backyard housekeeping and maintenance will help protect the watershed and your family's well from unnecessary pollution.

How to Protect the Watershed and Your Family's Well

Control Stormwater Runoff

- Keep litter, pet wastes, leaves, and debris out of the road and away from storm drains--these outlets drain directly to lake, streams, rivers, wetlands, and Long Island Sound.
- Apply lawn and garden chemicals sparingly and according to directions.
- Dispose of used oil, antifreeze, paints, and other household chemicals properly, not in storm drains or behind the stone wall. Support your Town's efforts to establish a program for collecting household hazardous wastes.
- Clean up spilled brake fluid, oil, grease, antifreeze, and fuel. Do not hose them into the street where they can eventually reach local streams and lakes or contaminate groundwater.
- Control soil erosion on your property by planting ground cover and stabilizing erosion-prone areas.

If You Have a Septic System

- Pump out and inspect your septic system regularly. (Pumping out every three to five years is recommended for a three-bedroom house with a 1,000-gallon tank; smaller tanks should be pumped more often.)
- Do not use septic system additives. There is no scientific evidence that biological or chemical additives aid decomposition in septic tanks; some additives may in fact be detrimental to the septic system or contaminate ground water.
- Do not divert gutters, storm drains or basement pumps into septic systems.
- Avoid or reduce the use of your garbage disposal because they add unnecessary solids to your septic system and can also increase the frequency your tank needs to be pumped.
- Don't use your toilet as a trash can! Excess solids may clog your drainfield and necessitate more frequent pumping or costly repairs.

When You Landscape or Garden

- Select plants that have low requirements for water, fertilizers, and pesticides.
- Cultivate plants that discourage pests. Minimize grassed areas that require high maintenance.
- Preserve existing trees, and plant trees and shrubs to help prevent erosion and promote infiltration of water into the soil.

- Use landscaping techniques such as grass swales (low areas in the lawn) or porous walkways to increase infiltration and decrease runoff.
- Leave lawn clippings on your lawn so that nutrients in the clippings are recycled and less yard waste goes to landfills.
- If you use a professional lawn care service, select a company that employs trained technicians and follows practices designed to minimize the use of fertilizers and pesticides.
- Compost your yard trimmings. Compost is a valuable soil conditioner that gradually releases nutrients to your lawn and garden. Compost retains moisture in the soil and helps conserve water.
- Spread mulch on bare ground to help prevent erosion and runoff.
- Do not apply pesticides or fertilizers before or during rain due to the strong likelihood of runoff.

If You Have a Farm, Garden or Horses in Your Back Yard

- Manage animal waste to minimize contamination of surface water and ground water.
- Reduce soil erosion by using best management practices to eliminate runoff around the barn and pasture or in your garden.
- Protect drinking water by using less pesticides and fertilizers.
- Dispose of pesticides, containers, and tank wastes in an approved manner.

If You Have Your Property Logged

- Make certain that proper logging and erosion control practices are used by ensuring proper construction, maintenance, and closure of logging roads and skid trails.