PROTECTING HURLEY'S WATER RESOURCES

A RESIDENT'S GUIDE TO PROTECTION AND PRESERVATION

Keeping our water fresh, clean, and plentiful for now and in the future is a major concern of Hurley citizens. In 2003, the Town of Hurley Conservation Advisory Council (CAC) initiated a study of water resources, with particular emphasis on aquifer protection. The study included a survey of existing well data, analysis of maps documenting wetlands, soils, bedrock, surface geological features, and sites of potential soil and groundwater contamination. Protecting our water resources is not just a job for the government. This guide will point to a few ways in which each of us can help with this very important undertaking.

What Do We Mean By Water Resources?

Surface waters are the waters in Hurley that we can all see; Ashokan Reservoir, Esopus Creek, Kenozia Lake, Mill Creek, Twin Lakes, Preymaker Brook and its waterfalls.

Groundwater is water beneath the earth's surface contained in saturated soil and bedrock, derived mostly from precipitation. When rain falls it seeps into the ground and is collected in aquifers, which are natural underground holding tanks. The water is then returned to us when it is withdrawn from our wells.

Wetlands are transitional areas between surface and groundwater. Wetlands are important because they provide groundwater recharge, discharge, flood control, wildlife habitat, opportunities for passive recreation and scenic vistas. Most of Hurley's wetlands are on top of low permeability soils, so water infiltrates slowly, if at all.

Contamination

It is easy for our waters to become contaminated. Faulty septic systems, road salts, leaking underground fuel tanks, improperly used pesticides and fertilizers have all contributed to problems within our town.

What the Town is Doing

A hydrogeologist hired by the CAC to study Hurley's water, noted areas worthy of further study and recommended areas for monitoring. The following recommendations were made to help develop our water resource protection plan:

1. Long range planning for new water supplies. Three areas have been suggested; West Hurley, the wetlands in the vicinity of Stony Creek and an area in the Onondaga Limestone outcrop, along Hurley's southern border.

2. Identification of areas with potential soil and/or groundwater contamination such as old gas stations, industrial complexes, etc.

3. Monitoring of wells in carbonate bedrock. Solubility of limestone in these areas can create sinkholes, which may lead to structural failure and potential groundwater contamination.

4. Monitoring and reduction of road salt, especially in the Esopus flood plain.

What Happens When an Aquifer is Contaminated?

Wells and other water systems cannot be used, sometimes for decades. Contamination is often recognized only after water users have been exposed to health risks. This is especially true in times of heavy rainfall when septic systems may release bacteria into the groundwater. The cost of cleaning up polluted water supplies is usually extremely high.