

## Environmental Commission: Water Resources

Water is one of the most precious natural resources. Throughout the years Harding Township's policies have been developed to protect and preserve the environment that supports our water resources. In the Harding Township Master plan, the protection and preservation of water resources is identified in five of eleven goals of the plan including:

*GOAL 2: PROTECTION AND MAINTENANCE OF THE QUALITY AND QUANTITY OF SURFACE AND SUBSURFACE WATERS, INCLUDING STORMWATER MANAGEMENT AND WETLANDS PRESERVATION.*

*GOAL 4: MAINTENANCE OF HIGHEST STANDARDS OF ENVIRONMENTAL PLANNING.*

*GOAL 8: MAINTENANCE OF ON-SITE SANITARY WASTE DISPOSAL.*

*GOAL 9: PROTECTION AND MAINTENANCE OF POTABLE WATER SUPPLIES.*

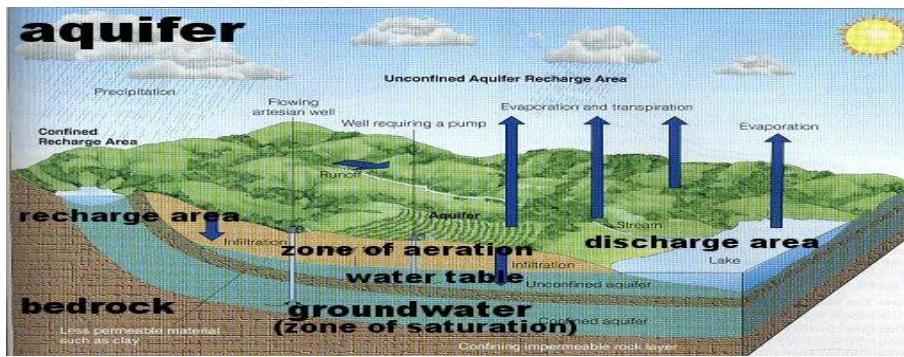
*GOAL 11: PROTECTION OF NATURAL RESOURCES AND ENVIRONMENTAL ASSETS THROUGH LAND USE AND DEVELOPMENT REGULATIONS.*

### **The Water Cycle:**

A major part of the water cycle is evaporation of water into the atmosphere, movement of the air mass containing water vapor over land, and precipitation over the land. This precipitation puts water into rivers and streams, which flow back to the oceans, and it replenishes groundwater by infiltration.

Underground water near the surface, called soil moisture, is taken up by plants through their root system, and a large part of it goes back into the air through the plant leaves by a process called transpiration. Some of the precipitation will "soak in" or infiltrate to replenish groundwater, and, if there is enough precipitation, some will become surface runoff to the nearest river, stream, or tributary.

Some of the water which evaporates from the ocean will go directly back into the ocean by precipitation. Water vapor also enters the atmosphere by evaporation from rivers, lake streams, and wet surfaces.



## Harding Township Drinking Water Sources

There are two sources of water in Harding Township. Most residents are served by private wells and a small portion of the township is served by the Southeast Morris County Municipal Utilities Authority (SMCMUA).

For Town residents served by the SMCMUA, a link to their website is here:

<http://www.smcmua.org/> To report service interruptions or other emergencies during normal business hours, please call Customer Service at 973-326-6880. Before or after business hours, emergencies may be reported to the Morris County Communications Center at 973-285-2900.

### The Regeneration of Harding Township's well water:

Harding Township is located in the New Jersey Planning Area 5 which is designated for environmentally sensitive planning areas. The town is also located almost entirely in the Great Swamp Watershed. Harding is an area of special State concern because its water resources are of exceptional sensitivity and importance. Township serves as the headwaters for major tributaries of the Passaic River. Out of Harding's total of 13,100 acres, 12,793 acres lie within the drainage basin of the Passaic River. All but 300 acres are located within the Great Swamp Watershed Basin and approximately 36 percent of the basin itself is located in Harding.

Residential wells are tested when they are first established and should be tested periodically by residents. It has been reported that Harding's water quality is excellent. This is, in part, attributed

to the use of 5 acre zoning and its support of “Open Space” initiatives. These policies limit the amount of run-off caused by development as well as the “strain on the underground aquifer” that would result from over development.

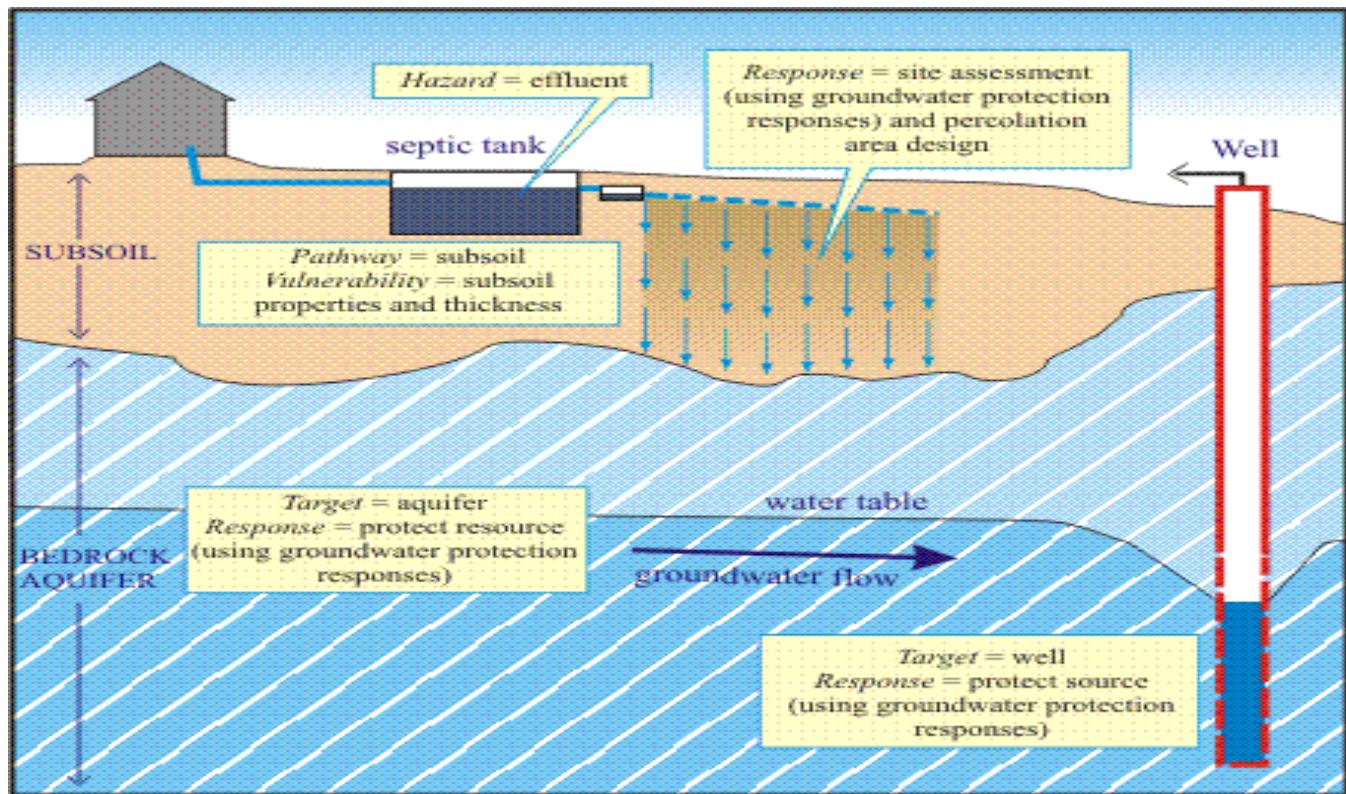
#### **Waste Water**

There are two types of sanitation/sewer treatment servicing Harding Township. There is a small section of the Town that serves by an operational sewer treatment plant. The section is located for the most part west of Interstate 287. The remainder of the Town uses private Septic systems. Below is a view of how your septic system works in treating the homes waste water and recharging the ground water.

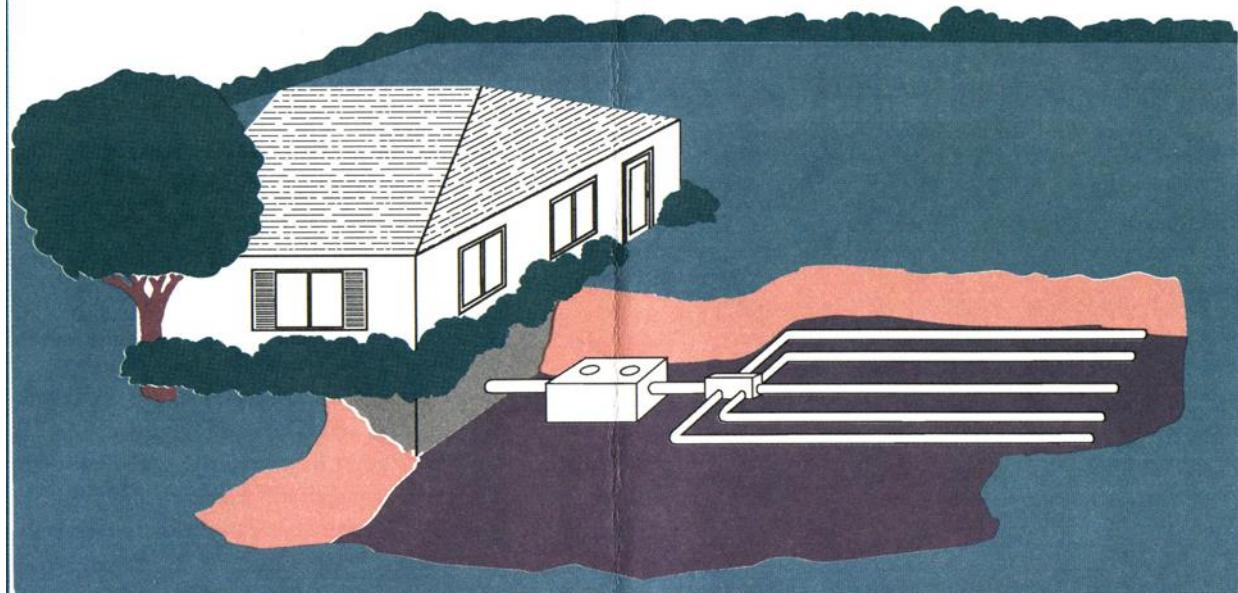
It is should be noted that there is bacteria that breaks down the solid waste into a liquid form. It is important to maintain a healthy bacteria colony in the system.

There are commercial products available to assure this. Simply adding a package of yeast (flushing it) once a month can be effective as well.

All Septic issues are under the jurisdiction of the Harding Township Board of Health. They are the subject matter experts on septic design, capacity, and approvals. The Board of Health also provides an excellent resource with the [Homeowner's Guide to Septic Systems](#)



*A Conventional  
Septic System*



# How Your System Works

A septic system has two basic working parts:

## Septic Tank

Wastewater flows from the house into the septic tank. Here heavy solids settle and are partially decomposed by bacteria to form sludge. Light solids and grease float to the top forming a scum layer.

## Soil Absorption Field

Partially treated wastewater is discharged from the septic tank through perforated pipes into an absorption field. Here, the water is further purified by filtration and decomposition by microorganisms in the soil. This is the last line of defense to prevent polluted water from entering lakes, streams, and groundwater.

