

**GROUNDWATER SOURCE PROTECTION AREAS**  
**Non-Transient Non-Community (NTNC) Water Systems**

Public water systems are required to develop Source Protection Areas (SPAs) and plans to protect their drinking water sources. A **Groundwater SPA** is the land area beneath which groundwater flows to a well, spring, or infiltration gallery. A contaminant released to the land surface or subsurface in a Groundwater SPA would be reasonably likely to move toward, and reach, the drinking water source.

Most NTNC water systems determine the Groundwater SPA using the fixed-radius-circle calculation method, which is described in the document entitled "Protecting Public Water Sources in Vermont" dated February 1997. This method estimates a circular Source Protection Area centered on a well. The radius of the calculated circle is based on the maximum amount of water permitted for withdrawal from the well over a specified period.

The public water system develops a Source Protection Plan based on the approved SPA. Implementing the plan generally involves cooperation with landowners within the SPA to help protect groundwater under their land from contamination. The water system does not have authority to control land uses on any land within the SPA unless they own the land or have specific legal agreements with the landowner. Some towns have local ordinances with overlay districts that correspond with the SPAs for public water supply sources.

If you own land or live within a SPA, protecting groundwater takes on extra importance. This is because everything you spill on the land or dump down your septic system may ultimately come out of someone's drinking water tap. Examples of things you can do to protect groundwater are not disposing of hazardous wastes, such as oil, pesticides, and fertilizers, on your property and routinely pumping out your septic tank.

Some state rules, such as those administered by the Department of Environmental Conservation's Drinking Water & Groundwater Protection and Waste Management Divisions, may restrict activities within SPAs. Specifically, new landfills and sludge disposal sites are prohibited within Groundwater SPAs. In addition, proposed new septic systems within some SPAs require an extra level of permit review to ensure they will not adversely impact the public drinking water source. The Agency of Agriculture considers public drinking water source protection in its pesticide application permits. Public drinking water source protection is also factored into Act 250 and Section 248 decisions.

This fact sheet and related environmental information are available electronically at:

[www.dec.vermont.gov/water](http://www.dec.vermont.gov/water)

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