

SOURCE PROTECTION ACTIVE IMPLEMENTATION

Listed below are some activities a water system can perform to provide an active source water protection program. There are actions a water system can proactively take to effectively manage potential sources of contamination to their water sources. These activities generally fall into three broad categories. Enacting one measure from each category below makes for a better balanced protection program/strategy than by enacting just one measure over-all.

The top ranking actions, or Gold Category, are generally the most lasting and effective protection measures to implement:

1. Purchase land or land use easements (i.e., development rights) within the Source Protection Area (SPA) to have control over land use activities in sensitive areas. (for example: use the state DWSRF loan set-asides for land purchase, fund a targeted land purchase or development rights acquisition account).
2. Actively work with the town to make zoning district changes to decrease risks in their Source Protection Area (for example: change development density in SPA, locate industrial and commercial development zones outside of SPA, place municipal septic treatment facilities outside of the water supplies' prime groundwater aquifer recharge area).
3. Actively work with the town to incorporate zoning overlays for source protection areas (for example: prohibit certain activities within a Groundwater Class II area, SPA Zone 2 and/or Zone 3).
4. Actively work with the town to reclassify Source Protection Areas to Class II Groundwater areas (this pertains to municipal water systems primarily and is for both existing SPA and likely proposed new SPA). Other Agency programs restrict or prohibit certain activities in Class I and Class II groundwater areas. It also raises public awareness of the groundwater resource and groundwater protection by recognizing its importance at an elevated level of designation. Drinking Water and Groundwater Protection Division (DWGWPD) staff are available to assist you through this process.

The middle ranking actions, or Silver Category, are smaller scale actions to enhance protection:

5. Incorporate into the Source Protection Plan the bedrock and surficial materials base maps derived from the State Geologic Maps, specific to the SPA, and discuss how they relate to specific source protection activities. This can be the basis for reevaluating risk assessments and determining more effective protection activities, or assigning zoning districts.
6. Describe in detail the enhanced surveillance activities the water system will take, including frequency (for example: visiting with the owner/manager of high and moderate risk potential sources of contamination bi-yearly, walk or drive the SPA to observe what is happening every other week). Incorporate any changes found into the SPP.
7. Coordinate with Drinking Water and Groundwater Protection Division (DWGWPD) staff, depending on their workload, to accompanying water system personnel on a "windshield survey" or walk through the SPA to help identify unrecognized Potential

Sources of Contamination (PSOC) or reevaluate existing ones, and understand their significance if the contaminants are released into the recharge area. This activity complements the next activity and ideally would be done together.

8. Coordinate with DWGWPD staff, depending on their workload, to assist in priority ranking the identified risks in the SPA (as High, Medium, or Low) to improve targeting the water system's protection activities. This could be done in conjunction with discussing the geologic surficial materials/bedrock type maps, the topography, the concentration/volume of contaminant, etc.).

The next ranking actions, or Bronze Category, are primarily educational in nature:

9. The water system will provide educational opportunities and activities to improve source protection understanding for people residing in the SPA (for example: school presentations, meetings for residents to raise their source protection awareness, explain the utility of a SPA to the planning commissions).
10. Water system personnel will attend specific source protection training opportunities that are presented at various trainings and meetings (for example: Vermont Rural Water Association (VRWA) annual meeting, as a component of Operator Training) (VRWA is a partner with the Division in Operator Training and Source Protection) to become more educated and aware of source protection issues and strategies to implement in the water system's next SPP update.
11. The water system will draft specific letters targeting the identified potential contaminants and send them to those land owners in the Source Protection Area (for example: targeted letters to specific land uses, provide more explanation regarding the relationship of land use activity and groundwater flow/recharge to the water supply).
12. The water system will develop other deterrent measures to contamination or vandalism that will be installed or implemented (for example: signage, fencing, volunteer activities for education, surveillance).

There may be other effective activities that water systems may be able to engage in, based on their local issues and water shed specifics, such as partnering with other entities to achieve similar goals.

For more specifics and assistance, contact Laura Ranker, Source Water Protection Specialist at (802)-585-9478 or at laura.ranker@vermont.gov.

This fact sheet and related environmental information are available electronically at www.dec.vermont.gov/water

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