

## Do you know the difference between a Source Water Assessment and a Source Water Protection Plan?

The 1996 amendments to the federal Safe Drinking Water Act required states to perform an assessment of all public water systems. An assessment is a study and NOT a Source Water Protection Plan. The Source Water Assessment tells the water system where their raw water comes from and what Potential Sources of Contamination are located in the area from where the water comes from.

The assessments were performed by several different groups. The engineering firm of Spotts, Stevens and McCoy performed the assessments for 175 of the larger surface water systems, Penn State University did the assessments for groundwater systems under 3,300 in population, DEP regional offices performed assessments for groundwater systems over 3,300 in population. Philadelphia Water assessed intakes on the Schuylkill and Lower Delaware Rivers, the Susquehanna River Basin Commission assessed the water systems with intakes on the lower Susquehanna River and the Interstate Commission on the Potomac River assessed the 2 intakes in the Potomac River basin. Most PWS should have already received their assessments with the small groundwater systems in the state getting theirs in 2007.

**The Source Water Assessment and Protection (SWAP) Program was established as a result of the Safe Drinking Water Act reauthorization in 1996. Each state was required to assess every drinking water source under their authorization. For Pennsylvania, this means approximately 14,000 sources.**

The assessments provide basic information about the water system. Information concerning the water system itself, information on local land use, about the geology, topography and soils in the area. It provides a delineation to determine the recharge area of the well(s) for groundwater sources or determines the watershed supplying water to a surface water source. The assessments also performed a database search to determine the Potential Sources of Contamination in the water source's recharge area. These Potential Contamination Sources were then rated as a high, medium or low risk to the water source.

The assessment is a starting point. Using the assessment, the water system can then start to develop a plan to protect the water sources from contamination. A Source Water Protection Plan, no matter if it is to protect a groundwater source or a surface water source, needs to contain the following items:

- 1) The plan should be developed by a committee that represents the Community (water system/public officials/business/industry/residents/emergency response)
- 2) The recharge area of the wells or the watershed for the surface water source needs to be determined (delineated). A watershed delineation is much easier to determine than a well's groundwater delineation. Streams supplying water to a surface water source can be traced to their origins. Determining the direction of groundwater flow is more difficult. A 1/2 mile radius is a default delineation for a well or the system can have a hydrogeologist do a more refined delineation based on the well and geology of the area.
- 3) A comprehensive inventory of Potential Sources of Contamination needs to be performed. The Source Water Assessment contaminant inventory was a database search and no actual field inventory work was performed. A field inventory may locate many Potential Sources of Contamination not found in a database search such as small auto repair shops, small manufacturing facilities, abandoned fuel tanks, etc. that were overlooked or possibly put into service since the database was established.

- 4) Once potential contaminants are identified, the committee needs to develop management practices that will address the Potential Sources of Contamination. These could include but are not limited to activities such as developing public education/school programs, revising Emergency Response Plans to address contamination events, posting of Spill Response signage along roads and highways, or development of regulatory measures to control activities that could pose a threat to the water source(s)
- 5) Contingency Plans need to be developed. If a drinking water source becomes contaminated and cannot be used, provisions for an alternate water supply must be described such as arrangements for bulk water hauling, interconnection with neighboring systems or emergency water sources.
- 6) Plans for new water source(s) including potential sites, existing land use in potential water source areas, plans on how to obtain access, rights to potential water source areas, and how the areas will be protected should also be included in the Source Water Protection Plan.

The Source Water Assessments provide the groundwork for the Source Water Protection Plan. If you have questions on your assessment or on developing a Source Water Protection Plan give PRWA a call and we'll be happy to help.

## Interested in Source Water Protection for your system? Have Questions?

Fill in the basic information about your system below and return it to the PRWA office to the attention of our Source Water Protection staff. Thanks!

System Name: \_\_\_\_\_

Contact Name: \_\_\_\_\_ PWSID# \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ Population Served: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Sources of water (surface, ground, GUDI): \_\_\_\_\_

\_\_\_\_\_

Concerns or threats to your system: \_\_\_\_\_

\_\_\_\_\_

Other Comments: \_\_\_\_\_

\_\_\_\_\_

Add me to the mailing list for this newsletter