Fact Sheet
Source Water Assessment and Protection (SWAP) Program
West Virginia Department of Health and Human Resources
Bureau for Public Health

In 1996, Congress required all states to develop and implement program elements to protect the sources for all public water supplies by adopting Amendments to the Safe Drinking Water Act. In West Virginia, the Department of Health and Human Resources (DHHR) is developing the Source Water Assessment and Protection (SWAP) program. It was developed with input from other government agencies, private agencies, and public interests. The DHHR, Bureau for Public Health (BPH) is responsible for ensuring that source water assessments are completed for all of West Virginia’s public water systems. West Virginia’s goal is to assess all sources serving public water supply systems in the next several years.

How are sources being assessed?
A source water assessment provides information about the potential contaminant threats to public drinking water sources. Each source water assessment will:

► Determine where water used for public drinking water supplies comes from (delineate the source areas);
► Inventory potential sources of contamination that may impact public drinking water sources (contaminant source inventory); and
► Assess the likelihood of a source water area becoming contaminated (susceptibility analysis).

This information will be used as a building block in developing and implementing a voluntary community source water protection management plan as a barrier to drinking water contamination. The SWAP program will provide information to direct local and state efforts to protect public drinking water sources. This information will help the State to provide more effective public water systems oversight.

The SWAP Program will seek to:

► Maximize the use of existing information;
► Emphasize the use of a statewide geographic information system (GIS);
► Emphasize state and local partnerships; and
► Provide recommendations for future improvements and protection efforts.

How will the SWAP Program help the public?
A vulnerable or contaminated drinking water source puts a community at a disadvantage in planning and building future capacity for economic growth. SWAP assessments will help to continue or to enhance the following:

► Development of a source water management protection plan;
► Identification or knowledge of water quality issues that help maintain clean, safe drinking water and increase community awareness and participation;
► Allow preventive actions to be designed and implemented before the water system becomes contaminated by identifying contamination threats to water supplies and enhance emergency response;
► Provide information that may lead to improvements in raw water quality and reduced treatment costs; and
► Prioritization and coordination of actions by federal and state agencies to better protect public health and safety.

How will the SWAP Program apply to Wellhead Protection (WHP) Program?
Wellhead protection, required under Section 1428 of the federal Safe Drinking Water Act, was established to protect public ground water sources from contamination, and forms the cornerstone of the SWAP program. Wellhead protection involves many aspects of the SWAP program, including the delineation of the recharge area contributing water and the development of potential source water contaminant inventory. The ultimate goal is the development of a community-based drinking water source protection program. Elements of a comprehensive WHP program include the following:
Formation of a steering committee; 
Public participation; 
Area delineation; 
Development of management approaches; and 
Contingency planning.

Many communities across West Virginia have initiated a local WHP program for protection of local drinking water supplies. These same elements will be promoted for source water protection of surface water sources.

Does "Managing the SWAP/WHP" mean telling people what they can do and cannot do on their property?

To a certain extent yes; however, ground and surface water belongs to the general public in West Virginia and protection is in everyone's best interest. Everyone drinks water and the community's economic viability may depend on having a safe drinking water supply. Further, the management strategies are not designed to necessarily preclude activities in the protection area; rather they are designed to take advantage of common sense and prudent practices to reduce the risk of water contamination. There are certain facilities that you would not want in your wellhead protection area (WHPA), e.g. landfills or large-scale chemical storage. There is no reason why industry cannot be within the WHPA, as long as practices are in place that will minimize the risk of contamination to the aquifer. Importantly, the management plan is developed locally, and is therefore tailored to the community's own needs and risks.

Even though preventive actions are taken, accidents and emergencies may occur. If contingency plans are in place, the risk to surface and ground water as a result of accidents or emergencies can be minimized.

In addition, WHPAs should be delineated and potential contaminant source inventories should be conducted for all possible future well sites. Considering this information, new well sites can then be chosen so that the risk of contamination is minimized.

If our system purchases all our water from another public water supply, do we need to participate in the SWAP program?

No, however you may wish to contact your supplier and encourage them to participate.

Consumer Confidence Reports (CCR)

Beginning in 1999, community water suppliers are to provide an annual Consumer Confidence Report (CCR) to each customer. This includes the following information, in addition to other requirements:

- The drinking water source type, commonly used name and location;
- Availability of the source water assessment and how to obtain it; and
- A brief summary of the system’s susceptibility to potential sources of contamination.

Even if a water supplier has not received a source water assessment, they are encouraged to include any readily available information about potential sources of contamination in their report. The CCR will assist the public in making personal health-based decisions regarding their drinking water consumption.

In Summary

Source water protection programs are an integral element of communities overall public trust to deliver a safe potable drinking water supply to the citizens at minimal cost. SWAP also involves community residents in a cooperative effort affording public participation and distribution of information regarding their water supply.

How can I get more information?

If you would like to obtain more information about source water assessment or wellhead protection programs, please contact:

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1 Davis Square
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March 19, 2008