Source Water Protection



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Source water protection maintains, safeguards, and improves the quality and quantity of your system's drinking water source. Washington citizens get their drinking water from either groundwater or surface water. Most public drinking water sources are in or near communities where land-use activities could potentially contaminate the water. State law establishes requirements for source water protection that emphasize preventing contamination and loss of supply (WAC 246-290-135). Prevention is far less costly than responding to problems after they occur.

The source water protection area is the watershed or drainage basin surrounding a drinking water source. It's important to protect and manage this area to ensure safe and reliable drinking water over the long term. If not carefully protected, all drinking water sources are at some risk of contamination and loss of supply.

The state Department of Health Office of Drinking Water administers the state's Source Water Protection Program. Public water systems are responsible for working with local governments and regulatory agencies to develop and implement their own local source water protection programs.

Source Water Protection Plans

State drinking water rules require Group A water systems to include a Source Water Protection Plan in their Water System Plan or Small Water System Management Program (WAC 246-290-135). The checklist on page 4 summarizes the required program components. You can use it as a tool to develop your own plan. For more detail about how to complete your Source Water Protection Plan, see the <u>Wellhead Protection Program Guidance Document 331-018 (PDF)</u> and Chapter 1.5 of the <u>Small Water System Management Program Guide 331-134 (PDF)</u>.*

The key components of a source water protection program:

- 1. Complete a Susceptibility Assessment Form for each water source.
- 2. Delineate (or define) your source water protection area and create a map.
- 3. Secure a sanitary control area around each water source.
- 4. Conduct a contaminant source inventory.
- 5. Notify regulatory agencies, local governments, landowners, and facility operators about potential contaminant sources.
- 6. Develop a contingency plan to provide water if the source becomes unavailable.
- 7. Develop and implement other protective actions as needed.

Source Water Protection Requirements

Susceptibility Assessment Forms

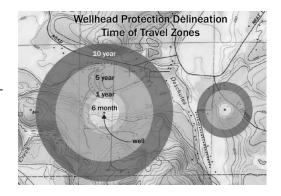
Most Group A water systems have Susceptibility Assessment Forms for each of their drinking water sources on file at our regional office. If you haven't completed a Susceptibility Assessment Form, contact our regional office for assistance. This form is the first step in source water protection because it helps you determine the contamination risk of your water source. Make sure your Source Water Protection Plan includes a completed Susceptibility Assessment Form for each of your sources. Update your forms every five years.

Delineation Of Source Water Protection Areas

Most Group A water systems already delineated their source water protection areas. You can view yours in our Source3 Water Assessment Program Mapping Tool, or <u>SWAP database</u>. Turn on the appropriate layers, check the information for accuracy, and print the map. If you haven't delineated your protection areas, you can begin with a calculated fixed radius method. For help,

see pages 20–34 of the <u>Wellhead Protection Program</u> Guidance Document 331-018 (PDF).*

Your map should show all sources, sanitary control areas, and well head protection zones in your source water protection area. Mark the 6-month and the 1-, 5-, and 10-year time-of-travel zones for wells, and watershed control areas for surface sources. The map should show your source water protection area in relation to other geographic features such as cities, towns, rivers, lakes, and roads.



Secure a Sanitary Control Area or Watershed Control Area

All Group A water systems must maintain a sanitary control area around each groundwater source to protect it from contamination. You must have legal authority over your sanitary control area. The sanitary control area must have a radius of 100 feet for wells, and 200 feet for springs or surface water intakes. See <u>Sanitary Control Area Protection 331-453 (PDF)</u> and <u>Covenants for Public Water Supply Protection 331-048 (PDF)</u>.* You should include copies of documents such as deeds, declarative or restrictive covenants, or written agreements in this section of your plan.

Conduct a Potential Contaminant Inventory

Survey your source protection area to identify past, present, and future land-use activities that may pose a contamination threat to your source(s). Start with our SWAP database, which shows the location of many facilities. Then drive or walk around the area and note any concerns. A list of what to look for is on Page 37 of the <u>Wellhead Protection Program Guidance Document 331-018 (PDF)</u>.* Your county or city planning department also has information about land uses and facility locations.

Regulatory Agencies, Local Governments, Landowners, and Facility Operators

Notify appropriate entities about the location of your source water protection area. Federal, state, and local agencies decide where to allow certain land uses, activities, or facilities. Write letters to regulatory agencies, local emergency responders, and local governments with authority over land use decisions to inform them that activities or businesses they regulate occur within your source water protection area.

Landowners and facilities that operate possible contaminant sources might alter their practices if they know the location of your source water protection area. So, notify them in writing that their activities are in your source water protection area and encourage them to protect your drinking water supply.

Sample letters are in the <u>Wellhead Protection Program Guidance Document 331-018 (PDF)</u>.* Both groundwater and surface water systems can use these samples. Focus on activities in the sixmonth and one-year time of travel zones first.

Develop a Contingency Plan

All Group A water systems must have a contingency plan to provide water if the supply source becomes temporarily or permanently unavailable. Completing an emergency response plan satisfies this requirement. Be sure to explain what you'll do if you need to replace your source(s) due to contamination or loss of supply. Describe your coordination with local emergency responders and include the results of your susceptibility assessment and contaminant inventory findings. See the *Emergency Response Planning Guide for Public Drinking Water Systems* 331-211 (PDF).*

Develop and Implement Other Protective Actions as Needed

Many water systems choose to carry out other protective actions such as a public education campaign or working with local governments to develop source water protection ordinances. For ideas, see page 46 of the *Wellhead Protection Program Guidance Document* 331-018 (PDF).*

Resources

*The publications cited in this document are online in our publications database.

For more help, call our regional office:

Northwest Region: 253-395-6750

Southwest Region: 360-236-3030

Eastern Region: 509-329-2100

For links and other helpful information, visit our <u>Drinking Water homepage</u>.

Source Water Protection Program

Identify completed steps and target completion dates for remaining tasks.

Completed	Task	Completion Date
	Step 1: Complete a susceptibility assessment form for each source and submit it to our regional office.	
	Step 2: Create a map showing all sources, sanitary control areas, and source water protection areas. Include the 6-month, and 1-, 5-, and 10-year time of travel zones. Attach a copy.	
	Step 3: Secure control of your sanitary control area or watershed control area. Attach a copy of your legal documentation.	
	Step 4: Conduct a survey to identify contaminant sources in your source water protection area and develop a contaminant inventory list. Attach a copy.	
	Step 5: Send letters to landowners and facility operators in your inventory area, regulatory agencies, local governments with land use decision authority, and emergency responders. Attach a sample of each letter.	
	Step 6: Develop a contingency plan to provide an alternate source of potable water as part of your emergency response plan.	
	Continuous: Update your contaminant inventory list every two years and resend notification letters as needed.	Ongoing



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