

Source Water Protection (SWP) in Virginia

Raven Jarvis
VDH - Office of Drinking Water
Source Water Protection Program Specialist

raven.Jarvis@vdh.virginia.gov



Graphic Source: U.S. EPA SWP Website

Housekeeping

- Please keep your microphone muted and camera off
- This session will be recorded.
- We will send you a link to the recording and handouts within a week after the webinar.
- Zoom In/Out on Slides: Use the +/- buttons at the top of the screen to zoom in or out on the slides for better visibility.
- All questions will be handled via the chat function:
 - Look for the thought bubble in the bottom right of your screen.
 - Send any questions to “Everyone”



Source Water Protection (SWP)

Why protect source water?

- Protect Public Health
- Build Community Trust
- Prevent Costs to the Waterworks and the Locality
- Reduce Water Treatment Costs



From Assessment to Protection

SWA = **S**ource **W**ater **A**ssessment

SWPP = **S**ource **W**ater **P**rotection **P**lan

SWPP Implementation = Putting Protection Plans Into Action



VDH's role in Source Water Protection

VDH must report and provide to EPA:

- Mapped source water assessment (SWAs)
- Number of public water systems (PWS) with completed assessments
- Most threatening and prevalent significant potential sources of contamination (PSCs)
- Percent of community water systems (CWS) with protection strategies in place being implemented
- Percent of community water systems (CWS) with protection strategies substantially implemented and the change in that number over time
- State source water protection activities

Strategy in Place

VDH Source Water Protection Program Definitions

Protection Strategy In-Place (SIP): Defined as a document or set of documents established by or for a community waterworks that addresses the following four source water protection elements:

1. A delineation of the source assessment area (for surface based systems, this is the watershed; for groundwater based systems this may be the fixed radius method or a more technically defensible delineation of a well's recharge area)
2. Inventory of major potential sources of contamination (PSCs) within their source(s) delineation(s)
3. Recommended actions to eliminate/reduce the risks of impact by PSCs
4. Contingency plan to address contamination events

Examples of SIP include, but are not limited to:

- Source Water Protection Plan (SWPP) developed through one of VDH's assistance programs or other means
- Source Water Assessment Report (SWAR) issued after January 1, 2015
- Local or Regional Water Supply Plans submitted to the Virginia Department of Environmental Quality (9VAC25-780) when protection strategies are specifically referenced
- Any combination of programs or ordinances focused on watershed or wellhead protection (e.g ., environmentally oriented or citizen groups, stormwater best management practices (BMPs), agricultural BMPs, etc.)

Waterworks are encouraged to contact the VDH while developing or updating a SIP. VDH can provide technical assistance to support the efforts.

Substantial Implementation (SI)

Scenario 1

Community wells in the coastal plain may be deemed as having a Strategy In Place and Substantial Implementation status when the well is constructed pursuant to the Virginia Waterworks Regulations and supporting documentation exists.

This type of Substantial Implementation status does not expire unless there is evidence that well structure or aquifer has been compromised.

Substantial Implementation

Scenario 2

Community sources not meeting criteria under SI Scenario 1 may obtain Substantial Implementation status when:

a. A SIP is developed. *This is a one-time achievement applicable only for the first approved SIP.*

OR

b. A SIP is updated when it is more than 3 years old. *This cannot be the implementation action for two consecutive 3-year intervals.*

OR

c. One SIP recommendation or other protection/contingency measure is executed

What does Substantial Implementation look like?

- Evaluation and Revision
 - We recommend every 3 years, identify **gaps** and shortcomings as well as changes in source water protection **threats and priorities**

What is the Source Water Protection Plan Process?

1. Develop a local advisory committee.
2. Educate the advisory committee
3. Review the source water assessment plan to identify key issues and challenges to developing and implementing a source water protection plan.
4. Identify and review source water protection options with the advisory committee.
5. Develop a source water protection plan with the advisory committee.
6. Develop a plan for implementing the source water protection plan.

How Waterworks Can Protect Source Water

1. Locate collaboration opportunities
2. Form a Local Advisory Committee
3. Request Source Water Assessment information
4. Collect additional information
5. Develop a source water protection plan
6. Implement the source water protection plan
7. Review and update the source water protection plan

Direct Technical Assistance

ODW can provide:

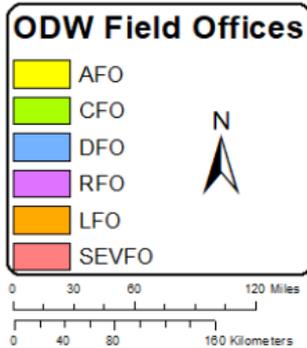
- General guidance
- Updated Source Water Assessments
- Source Water Protection Plan Forms
- Public education materials
- Funding information

The image shows the cover page of a 'Source Water Protection Plan' form. At the top, the title 'Source Water Protection Plan' is underlined. To the right of the title is a bracketed placeholder for a date, '[Date]'. Below the title, there are three lines of placeholder text: 'For [Waterworks Name]', '[PWSID #]', and '[Location]'. Further down, it says 'Prepared by:' followed by a bracketed placeholder for a contractor logo, '[Contractor Logo, if appropriate]'. In the lower half of the page, there is a logo for the Virginia Department of Health (VDH) with the text 'Funded by: VIRGINIA DEPARTMENT OF HEALTH' and 'Protecting You and Your Environment'. Below this is the website 'www.vdh.virginia.gov' and the logo for the 'Office of Drinking Water' with the tagline 'Safe Drinking Water for a Healthy Virginia'. At the bottom center, it says 'Page 1 of 23'.

<https://www.vdh.virginia.gov/drinking-water/source-water-programs/source-water-protection-program/>

Source Water Assessments (SWA)

To request a copy of your SWA, contact your ODW Field Office



Office of Drinking Water

www.vdh.virginia.gov/odw

Central Office

109 Governor Street, 6th Floor
 Richmond, VA 23219
 Phone: (804) 864-7500
 Fax: (804) 864-7521
 Email: Dwayne.Roadcap@vdh.virginia.gov

Culpeper Field Office (CFO)

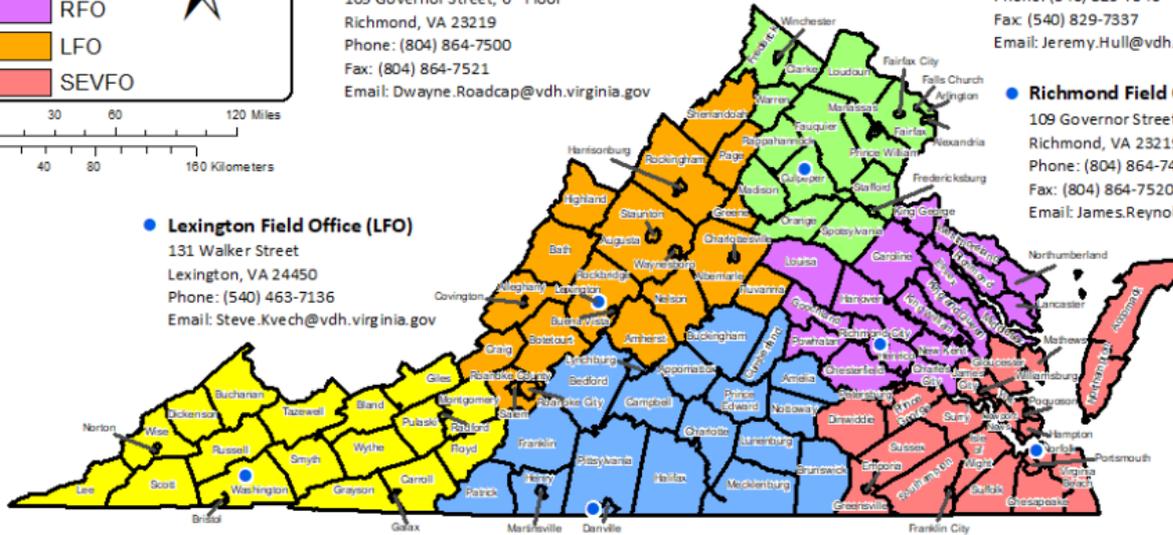
400 South Main Street – 2nd Floor
 Culpeper, VA 22701-3318
 Phone: (540) 829-7340
 Fax: (540) 829-7337
 Email: Jeremy.Hull@vdh.virginia.gov

Richmond Field Office (RFO)

109 Governor Street, 6th Floor
 Richmond, VA 23219
 Phone: (804) 864-7409
 Fax: (804) 864-7520
 Email: James.Reynolds@vdh.virginia.gov

Lexington Field Office (LFO)

131 Walker Street
 Lexington, VA 24450
 Phone: (540) 463-7136
 Email: Steve.Kvech@vdh.virginia.gov



Abingdon Field Office (AFO)

407 East main Street, Suite 2
 Abingdon, VA 24210
 Phone: (276) 525-6148
 Fax: (276) 676-5659
 Email: David.Dawson@vdh.virginia.gov

Danville Field Office (DFO)

211 Nor Dan Drive, Suite 1040
 Danville, VA 24540
 Phone: (434) 836-8416
 Fax: (434) 836-8424
 Email: Ray.Weiland@vdh.virginia.gov

Southeast Virginia Field Office (SEVFO)

830 Southampton Avenue, Room 2058
 Norfolk, VA 23510
 Phone: (757) 683-2000
 Fax: (757) 683-2007
 Email: Daniel.Horne@vdh.virginia.gov



The mission of the Office of Drinking Water is to protect public health by ensuring that all people in Virginia have access to an adequate supply of affordable, safe drinking water that meets federal and state drinking water standards.

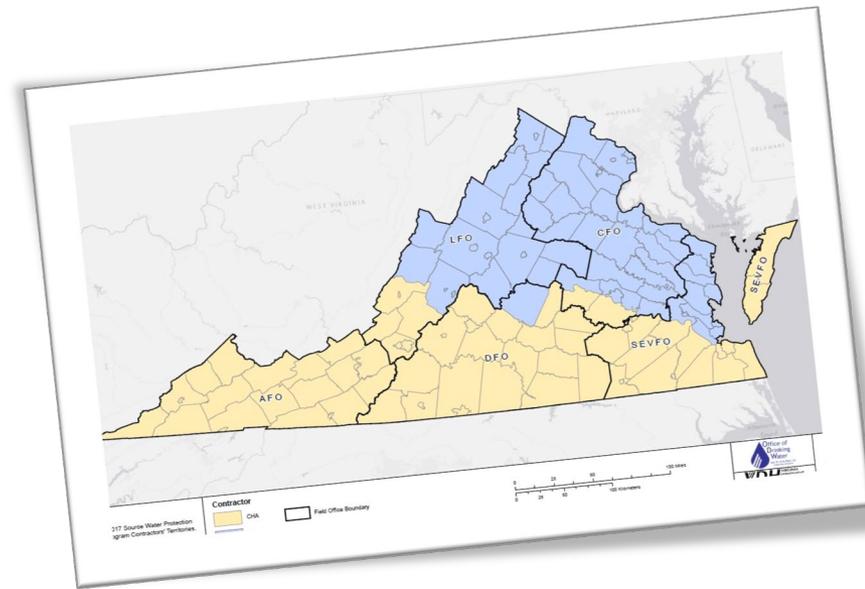


<https://www.vdh.virginia.gov/drinking-water/contact-us/>



ODW Source Water Protection Assistance

- **SWP Contractors** (pop.<50,000): SWPP development and implementation assistance
- **Direct Technical Assistance** (pop.>50,000)
- **Source Water Protection Implementation Grants**
- **Grant writing assistance** to other programs.



Role of Contractor Vs. Waterworks

The SWP **Contractor's** role will be:

- Facilitate identification of the advisory committee;
- Participate in committee meetings;
- Provide education and technical support;
- Assist in the preparation of the source water protection plan, and;
- Provide guidance for the implementation of the program.

Role of Contractor Vs. Waterworks 2

The role of the **Waterworks** will be:

- Participate in the program development meetings;
- Assist in the development of the source water protection plan;
 - by providing any needed and available information;
 - by providing input on the plan development and implementation; and
- Implement the plan.

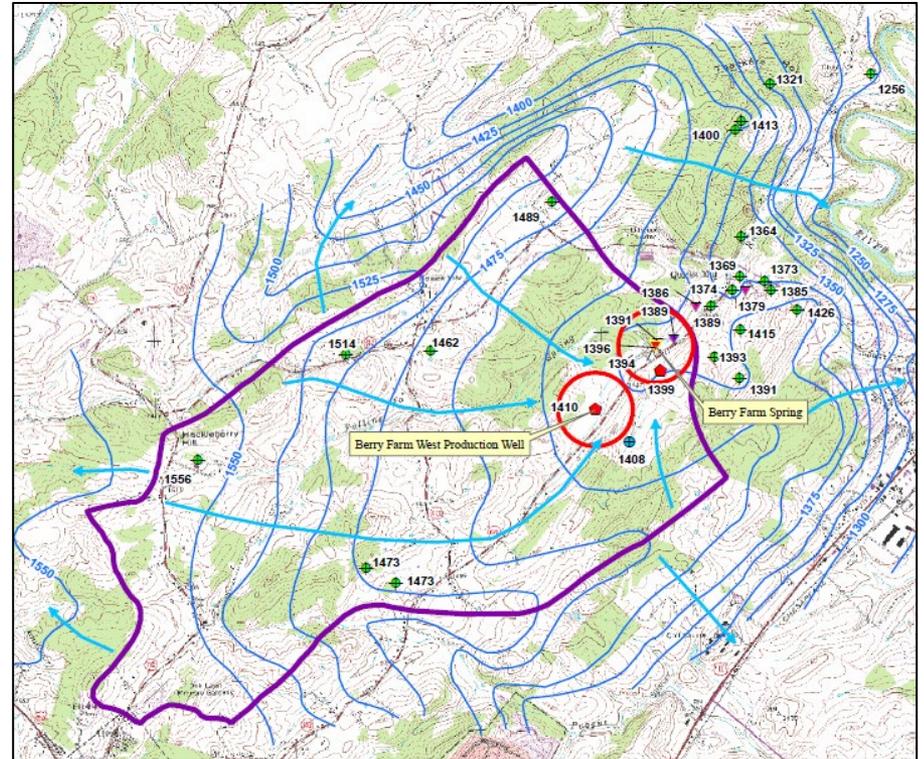
Virginia Department of Health's role will be to provide continued funding and support for source water protection activities

Source Water Protection Implementation Projects Grants

Funds implementation activities of community waterworks with:

- groundwater & surface water sources
- protection plans
- active advisory committees

[SWP Grant Application](#)



Eligible & Ineligible Activities for the Source Water Protection Grant Program:

Eligible activities:

1. Well abandonment.
2. Wellhead fencing.
3. Protection area delineation.
4. Educational outreach.
5. Emergency response planning.
6. Hazardous waste collection.
7. Advancing zoning ordinances.
8. Installation of security monitoring systems.
9. Sewer connection projects.
10. Installation of vegetative buffers.
11. Surface water intake protection.
12. Creation of public awareness campaigns.
13. Land acquisition for source protection.
14. Developing spill response protocols.
15. Inventory of potential contaminant sources.
16. Retrofitting stormwater systems.
17. Riparian zone restoration to reduce runoff pollution

Non eligible activities:

1. Routine operation and maintenance of water systems.
2. Regular monitoring and sampling activities.
3. Landscaping and beautification projects unrelated to water protection.
4. Purchase of vehicles or equipment not directly related to source protection.
5. General administrative costs not tied to specific projects.
6. Construction of new water treatment plants.
7. Ongoing staff salaries.
8. Routine system upgrades or replacements.
9. Laboratory equipment unrelated to source protection.
10. Building new recreational facilities.
11. Installation of non-water-related infrastructure.
12. Public park enhancements.

Summary

Who may apply to the SWP Grant?

Eligible applicants for Source water protection grants are a municipality or service authority owning or operating a groundwater/Surface water based community water system(s) and with a SIP and an active SWPC.

VDH-ODW may fund source water protection plans and the implementation of certain protection measures for waterworks who meet the following criteria:

- Classified as a Community waterworks,
- Serve less than 50,000 people, and
- Process water directly from a drinking water supply source

Who is not eligible?

Individuals, private for-profit firms, and unincorporated citizen groups are NOT eligible for grants under this program; municipalities or service authorities that are not operating a ground or surface water based community water system are NOT eligible for grants under this program.

Betty Green

Source Water Protection Specialist

Virginia Rural Water Association

2138 Sycamore Avenue

Buena Vista, VA 24416

540-261-7178

bgreen@vrwa.org



For further questions or information on source water protection assistance, contact:



Raven Jarvis
Special Projects Engineer

Any further questions please contact
Bob Edelman,
Robert.Edelman@vdh.virginia.gov